INLS 520: Organization of Information Spring 2021

Basic information

Section 001 Date and time: Tuesdays, 2:00 p.m. to 4:45 p.m. (via Zoom)

Instructor information

Instructor: Melanie Feinberg *E-mail:* mfeinber@unc.edu *Office hours:* Thursdays from 2:30 p.m. to 3:30 p.m. (via Zoom) Anyone can come to office hours to discuss anything, for any reason, 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 INLS 520, we examine fundamental concepts of organizing systems. These concepts transcend particular implementations or professional contexts. INLS 520 will help you to understand, use, explain, create, assess, and interrogate any organizing system. You will be able to use what you learn in INLS 520 in all your classes at SILS, and in all information professions—and throughout your daily life as well.

Organizing systems attempt to make an unruly, messy, and ambiguous world appear systematic and orderly—**but they fail, every time.** For INLS 520, this means that easy answers are impossible, and you cannot find refuge in following rules. Some of you may find this to be disquieting. Ultimately, however, I hope that you will also find inspiration in this state of affairs. The data that we create with our organizing systems will always be somewhat terrible, but we likewise have the power to shape and change it, in ways both large and small.

Learning objectives

At the end of this course, you will *understand*:

- Elements 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 complex integration of organizing systems 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 and implement an organizing system.
- Explain how organizing systems work.
- Critically interrogate how organizing systems present the world around us.

Flexibility in uncertain times

The continuing COVID-19 pandemic has affected everyone. We are all operating under a multitude of stressors. I have attempted to adjust the course in a way that I think will be manageable. But if we need to change things around as the semester proceeds, we can. *If, at any time during the semester, your personal circumstances require accommodation, do not hesitate to ask for whatever you need.*

Course structure

This is a remote synchronous course. Class sessions will take place once per week, over Zoom.

The course is divided into 14 units. Each unit will begin after our class session and continue until the following class session.

Each unit will incorporate a variety of activities: readings, lectures, discussions, games, work on one of your three class projects. You will perform most of the work for each unit before we meet on Zoom.

Material for each unit will have its own Lessons page in Sakai. All the activities for the unit will be documented on its page. When the new unit begins, access the unit page on Sakai and follow the instructions.

When a unit is over, its page be available in Sakai through the Previous Units tab, so that you can refer to it throughout the semester.

The Semester Calendar (below) provides an overview of each unit.

Class sessions

Class sessions will primarily involve participatory activities: discussions, games, questions and answers, project work. (Lectures will be prerecorded; we will not have formal lectures during our class sessions.)

To ensure that our sessions run smoothly, preparatory materials will be included as part of the unit. For example, if we have a game, there will usually be an individual part for you to complete before the class session, and then we will continue with a group part together. Discussion questions will be available in advance, so that you are ready to talk about them. There shouldn't be any surprises.

Some of our work in class sessions will take place in groups: in discussion groups and in project groups. At our first class session, we will talk about how you would prefer these groups to work. Some options include:

- 1. One consistent group for everything: all discussions, games, and project work.
- 2. Two consistent groups: one group for discussions and games, and a different group for project work.
- 3. A consistent group for project work, and different discussion groups each class session.
- 4. Different groups for each session.

We will also talk about your preferences for my involvement in discussion: whether I visit discussion groups, and how I do so, if I do.

Asking for help

One of the disadvantages of online courses is that it is difficult for me to know when you are confused, and information organization can be very confusing. Unfortunately, this means that you will often need to ask for help when you don't understand something about course content, expectations, or logistics. Each unit will have its own set of discussion forums for this purpose. Please know that it is not a sign of weakness or stupidity to be confused. Rather, questions indicate an engaged mind. All questions are welcome.

There will also be time during class Zoom sessions to ask questions, both of me and of your classmates. We will experiment with different modalities for this, such as anonymous polls.

To consult with me privately, send an e-mail, either to discuss your matter or to set up an individual meeting via Zoom to discuss it. Private consultations are best for anything to do with your personal situation: for example, to request an extension on a project.

No busy work policy

No one wants to do boring things for no reason, including me! From my perspective, everything that we do in this class has a purpose that requires thinking. If anything seems like busy work, I probably haven't articulated the purpose well. Be sure to ask for help, so that I can better explain what the task is supposed to achieve.

Assessment

Assessment for this course is based on four equal components:

- Descriptive schema project.
- Taxonomy project.
- Organizing system explanation project.
- Participation.

Complete instructions for each project, including deliverables and criteria for success, appear in at the end of this syllabus. Due dates and submission details appear in the next syllabus section.

For each project, you will receive feedback that provides my sense of the project's strengths, as well as its opportunities for improvement. My assessment will be based around each project's criteria for success, as listed in each project's detailed instructions.

If, in my judgment, a project does not, for any reason, satisfy the success criteria to a minimum level of proficiency—perhaps you misunderstood the instructions, or a component was missing—I will inform you of the problem, and you will be invited to resubmit the project. (You are likewise welcome to revise and resubmit a project that does meet minimum standards, should you wish to address any of the opportunities for improvement.)

Participation standards

Synthesizing our discussion from our first class session, components of excellent participation include:

- Being prepared for synchronous class sessions.
- Demonstrating engagement and attention.
- Participating actively in mutual learning.
- Exhibiting patience, compassion, and respect for others (grace for your neighbor).
- Showing interest in others' ideas, experiences, and values.
- Taking responsibility for our mutual mastery of the course material.

Actions that contribute to excellent participation include:

- Getting through the materials for each unit (readings, lectures, activities) before class.
- Attending class.
- Putting forth honest effort to contribute to class discussions.
- Using active listening techniques during class, so that, even when muted in Zoom, it's clear that you are paying attention (for instance, gestures, reaction emojis, chat).
- In both small-group and whole-group discussion, ensuring that everyone has the opportunity to contribute (don't dominate the conversation, but make sure to participate also!).
- Taking advantage of alternate modalities (in Zoom, chat and breakout rooms; forums in Sakai) to participate.

- Acknowledging and encouraging the contributions of others; letting people know that you want to hear them (for instance, in responding to classmates, asking for clarification and expansion, referencing what others have said, learning each others' names).
- Taking responsibility to ask questions or get help when necessary.
- Embracing creativity in finding ways to collaborate and explore ideas in different modalities.
- Approaching disagreement respectfully—but not ignoring disagreement, either; working to understand it.
- Providing constructive and useful feedback for project peer reviews.

Participation will primarily be assessed through self-reflection. You will submit both a mid-term and final self-assessment that considers your participation against the criteria for excellence that we define as a class. Instructions for participation self-assessments appear at the end of this syllabus.

Late work

Late work causes problems, both in this class and in professional environments. When you turn something in late, you affect other people whose work is dependent on your own. In this class, late work makes it more difficult for me to organize my time effectively. It also makes the course more difficult for you, because we will move on to the next project immediately, and begin working on the next project as part of our class activities. So I want you to do your best to turn in projects on time. That said, I will accept late work, because it is more important for you to complete a project to your best ability than it is to rush to meet a deadline, and we all occasionally encounter scheduling difficulties. However, I would like as much advance notice as possible of your intent to turn in a project late. You don't need to be anxious about this; just send me an e-mail that briefly explains your circumstances and proposes a reasonable due date for you.

Grades

In uncertain times, we all need to avoid unnecessary anxiety. In this spirit, nothing in this course will be "graded" in the sense of assigning a score, although all your work will be assessed, with the opportunity to improve it, as described above.

Final course grades for graduate students

- All graduate students who complete all four course components to minimum proficiency standards will receive a P.
- If you are unable to complete one course component to minimum proficiency standards, you will receive an L.
- If you are unable to complete two or more course components to minimum proficiency standards, you will receive an F.

Final course grades for undergraduate students

All undergraduate students will submit a semester self-assessment that makes a case for the final grade they should receive.

As a baseline, all undergraduates who complete all four course components to minimum proficiency standards will receive a B.

In your self-assessment, you will propose a grade for yourself against this baseline. (I will reserve the right to change your proposed grade if you do not have sufficient evidence—e.g., from your project feedback, and from your participation self-assessments—to support it.) Instructions for undergraduate self-assessments will be distributed towards the end of the semester.

Due dates and submission details

Course componentDue dateProject 1: Descriptive schemaTuesday, March 2Midterm participation self-assessmentTuesday, March 9Project 2: TaxonomyTuesday, April 6Project 3: Organizing system explanationThursday, May 13, at noon (The scheduled time of the
final exam, as per UNC policy)Final participation self-assessmentThursday, May 13, at noon

All assignments should be submitted as a PDF document in the Assignments area of Sakai.

Please name your file "*<your last name>* INLS 520 *<course component>*" (e.g., Hernandez INLS 520 schema, Zhao INLS 520 taxonomy). *Remember to also include your name in the document itself.*

Citations

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.

If you are referring to a reading that was assigned for class, you need only make an in-text reference to the source; you do not need to include a full citation in a reference list. (In other words, you just need to say something like "A monist perspective on taxonomy, according to Ereshefsky..."; you do not need to include a subsequent citation for Ereshefsky's book.)

If you are referring to a source that we have not read in class, then you *do* need to include the full citation in a reference list. (In other words, you need an in-text reference such as "Montoya and Morrison (2019) discuss this phenomenon in the context of archeological data...," and you also need a full citation to the article in a reference list at the end of your project.) There is *no* requirement to include sources that we have not used in class, but sometimes people want to do this.

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).

Presentation

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.

Policies

Respectful class environment

An organizing system expresses a particular, partial perspective on the world, and is, by nature, exclusionary. There is no unbiased organizing system. Sometimes, organizing systems are designed to reinforce dominant narratives. Other times, organizing systems are designed to subvert dominant narratives. Likewise, sometimes, organizing systems are more transparent about their goals and assumptions, and sometimes organizing systems obscure their goals and assumptions. These design choices can lead to disparate effects for different groups of people.

It is one of the guiding principles of this class that, in order to design and implement organizing systems responsibly, we need to directly engage with these aspects of organizing systems. We may, therefore, discuss topics that may be challenging or uncomfortable, and upon which we may well disagree.

Accordingly, we must endeavor to maintain an atmosphere of respect, care, and empathy for each other. I will do my best to ensure that our class time is safe for everyone, and I expect you to do your best to ensure this as well.

Inclusive learning

I want everyone to do well in this class. If there are aspects of this course that prevent you from learning or exclude you, please let me know. We'll work together on strategies to meet your needs and satisfy the requirements of the course.

The University of North Carolina at Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in barriers to fully accessing University courses, programs and activities.

Accommodations are determined through the Office of Accessibility Resources and Service (ARS) for individuals with documented qualifying disabilities in accordance with applicable state and federal laws. See the ARS Web site (ars.unc.edu) for details.

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" or "Professor Feinberg" if that is more comfortable for you.

Attendance

Attendance standards will be determined by the criteria for excellent participation that we define as a class.

However, note that peer review is a required component of the three course projects. If you miss a class session that includes time for peer review, it is your responsibility to coordinate with your project group to find a way to conduct peer review—for your project and for your group members' projects.

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 <u>honor code</u> is appropriately followed. (The <u>UNC Office of Student Conduct</u> provides a variety of honor code resources.)

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

Mental health resources

All students have access to counseling and other resources through Counseling and Psychological Services (CAPS). CAPS is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate services, whether for short or long-term needs. Go to their <u>caps.unc.edu</u> or visit their facilities on the third floor of the Campus Health Services building.

Basic needs

If you are navigating financial, health, or housing challenges that may have an impact on your ability to thrive at UNC, one resource is the Dean of Students, which also oversees the Dean's Emergency Fund: https://odos.unc.edu/student-support/student-emergency-fund

If you are struggling with food insecurity and you are in the Chapel Hill area, you can get assisstance through Carolina Cupboard, an on-campus food pantry: <u>http://carolinacupboard.web.unc.edu/</u>

Semester Calendar

This calendar is subject to modification as the semester proceeds.

For complete instructions for each unit, see its page in Sakai (posted when the unit begins).

Unit 1 Introduction			
Class on January 19			
Before class	In class		
 <i>Read</i> Syllabus <i>Listen</i> Lecture: What is information organization? 	 Welcome: introductions and check ins Orientation: syllabus overview and logistics Tour: what is where in Sakai Group decisions: describe what excellent participation means for us; develop ground rules for discussion; class roles (chat monitor, vibes watcher, discussion reporter) 		
Unit 2 Thinking about things, systematically Unit posted on January 19 Class on January 26			
Before class	In class		
 <i>Read</i> Kent Wilson Buckland <i>Listen</i> Lecture: What is a street? Lecture: Works, texts, and documents Lecture: Descriptive schema project overview 	 Checking in: confirm criteria for participation excellence and discussion ground rules Discussion: what is a street? Game: apple pie (group part) Q&A: descriptive schema project 		
<i>Do</i>Game: apple pie (individual part)			
Unit 3 Thinking about things, cognitively Unit posted on January 26 Class on February 2			
Before class	In class		
Read Lakoff Coyle Disambiguation handout (short)	 Discussion and demonstration: prototype effects Project knowledge: disambiguation and identifiers Project groups: checking in 		
 Listen Lecture: prototype effects Lecture: disambiguation and identifiers Do Demonstrations of prototype effects (individual part) Project work: select a set of things Unit 4 			
Thinking about things, culturally Unit posted on February 2			

Class on February 9			
Before class	In class		
Read Basso Zerubavel Attributes and values (handout) Gilliland Dublin Core Listen	 Discussion: culture, categorization, and conflict Game: attributes in action (group part) Project groups: checking in 		
 Lecture: Cognition and metaphor Lecture: Attributes and values 			
 <i>Do</i> Game: attributes in action (individual part) Project work: define your set of things and think about potential attributes and values 			
Unit 5 Thinking about things, scientifically Unit posted on February 9 Class on February 23 (wellness days on February 15-16)			
Before class	In class		
 <i>Read</i> Ereshefsky Notes on biological taxonomy (to help you with the Ereshefsky) 	 Game: Are they human? Discussion: species pluralists or species monists Project groups: peer review (use schemas to describe some sample things) 		
 Listen Lecture: species concepts Lecture: schema vs. taxonomy 			
 Project work: draft your schema and prepare for peer review 			
Unit 6 Thinking about things systematically, in practice Unit posted on February 23 Class on March 2			
Before class	In class		
<i>Read</i>Bowker and Star	 Discussion: grades as infrastructure Discussion: implementation scenarios Debrief: schema project 		
Lecture: implementing information infrastructure			
<i>Do</i>Project work: schema due on March 2			
Unit 7 Putting things together: For what purpose? (a traditional view) Unit posted on March 2 Class on March 9			
Before class	In class		
Read	Discussion: Paul Otlet and facts		

•	Rayward Classification basics (handout)	•	Game: taxonomy puzzles (group part) Questions: taxonomy project
Listen • • Do	Lecture: World peace through taxonomy Lecture: taxonomy basics Lecture: taxonomy project overview		
•	Game: taxonomy puzzles (individual part) Mid-way participation self-assessment		
Unit 8 Putting things together: On what basis? (a traditional view) Unit posted on March 9 Class on March 16 (university wellness days March 11-12)			
Before c	lass	In class	
Read • •	Mai Equivalence (handout)	• • •	Discussion: Understanding Mai Game: the perils of plurality (group part) Questions: equivalence relationships Project groups: checking in
Listen •	Lecture: Equivalence relationships		
Do •	Game: the perils of plurality (individual part) Project work: select a taxonomy option and decide on an audience and purpose; develop a list of potential classes		
Unit 9 Putting things together: On what basis? (alternate views) Unit posted on March 16 Class on March 23			
Before c	lass	In class	
Read •	Lee Hunter	• •	Discussion: understanding Lee Game: taxonomy puzzles redux (group part) Questions: faceted classification and faceted pavigation
Listen • •	Lecture: Breaking down the Seven Epitomes Lecture: Faceted classification and faceted navigation	•	Project groups: checking in
Do •	Game: Taxonomy puzzles redux (individual part) Project work: Arrange classes in taxonomic structure		
Unit 10 Putting things together: For what purpose? (an alternate view) Unit posted on March 23 Class on March 30			
Before c	lass	In class	
Read •	Clifford Cvetkovich	•	Discussion: four museums Discussion: two archives

•	Four museums (packet) Two archives (packet)	•	Project groups: peer review (explain someone else's taxonomy)
Liston			
Listen	Lecture: similar objects, different stories Video: one of the two archives		
Do •	Project work: Write your own taxonomy		
	explanation		
Unit 11 Putting things together automatically Unit posted on March 30			
Before of	class	In class	
Read •	Maron	•	Debrief: taxonomy project Game: training a machine learning algorithm (group part)
Listen •	Lecture: probabilistic information retrieval Lecture: explaining an organizing system project overview	•	Discussion: automatic vs. manual classificatory techniques Questions: explanation project and field work exercise for next week
Do •	Game: training a machine learning algorithm (individual part) Project work: taxonomy due April 6		
Unit 12 Another look at ambiguity: facts Unit posted on April 6			
Unit 12 Anothe Unit pos Class o	e r look at ambiguity: facts sted on April 6 n April 13		
Unit 12 Anothe Unit pos Class o Before o	e r look at ambiguity: facts sted on April 6 n April 13 c l ass	In class	
Unit 12 Anothe Unit pos Class o Before o Read	er look at ambiguity: facts ested on April 6 n April 13 elass Haider and Sundin	In class	Discussion: facts redux Game: description and interpretation (group part) Field work: explanation practice (group part)
Unit 12 Anothe Unit pos Class o Before o Read Listen	er look at ambiguity: facts sted on April 6 n April 13 class Haider and Sundin Lecture: Facts and opinions	In class • •	Discussion: facts redux Game: description and interpretation (group part) Field work: explanation practice (group part) Project groups: checking in
Unit 12 Anothe Unit pos Class o Before o Read Listen Do	er look at ambiguity: facts sted on April 6 n April 13 class Haider and Sundin Lecture: Facts and opinions Game: description and interpretation (individual part) Field work: explanation practice (individual part) Project work: select an project option and the systems that you will explain	In class • • •	Discussion: facts redux Game: description and interpretation (group part) Field work: explanation practice (group part) Project groups: checking in
Unit 12 Anothe Unit pos Class o Before o Read Listen Do Unit 13 Anothe Unit pos Class o	er look at ambiguity: facts sted on April 6 n April 13 class Haider and Sundin Lecture: Facts and opinions Game: description and interpretation (individual part) Field work: explanation practice (individual part) Project work: select an project option and the systems that you will explain er look at ambiguity: mushrooms sted on April 13 n April 20	In class • •	Discussion: facts redux Game: description and interpretation (group part) Field work: explanation practice (group part) Project groups: checking in
Unit 12 Anothe Unit pos Class o Before o Read Listen Do Unit 13 Anothe Unit pos Class o Before o	er look at ambiguity: facts sted on April 6 n April 13 class Haider and Sundin Lecture: Facts and opinions Game: description and interpretation (individual part) Field work: explanation practice (individual part) Project work: select an project option and the systems that you will explain er look at ambiguity: mushrooms sted on April 13 n April 20	In class • • •	Discussion: facts redux Game: description and interpretation (group part) Field work: explanation practice (group part) Project groups: checking in
Unit 12 Anothe Unit pos Class o Before o Read Listen Do Unit 13 Anothe Unit pos Class o Before o Read	er look at ambiguity: facts sted on April 6 n April 13 class Haider and Sundin Lecture: Facts and opinions Game: description and interpretation (individual part) Field work: explanation practice (individual part) Project work: select an project option and the systems that you will explain er look at ambiguity: mushrooms sted on April 13 n April 20 class Tsing	In class • • • • • •	Discussion: facts redux Game: description and interpretation (group part) Field work: explanation practice (group part) Project groups: checking in

<i>Do</i> •	Project work: explain and compare your selected systems				
Unit 14 Anothe	Unit 14 Another look at ambiguity: poetry				
Unit pos Class o	sted on April 20 n April 27				
Before of	lass	In class			
Read •	Doty	•	Quotefest still life Discussion: still life? Project groups: peer review (comment on each		
Listen •	Lecture: still life with data		others' drafts)		
Do •	Share your paper draft/read the paper drafts shared with you				

Descriptive Schema Project Details

Project overview

In this project, you will develop a logical structure and systematic protocol for describing a particular set of things—that is, for creating a dataset.

You will:

- *Define your set of things*. This includes:
 - Selecting a base option.
 - Narrowing down the base option and articulating a specific audience and purpose for your dataset.
 - Specifying the domain and scope of the dataset.
 - Clarifying how to distinguish one thing from another.
- *Outline a structure of attributes and associated values* to systematically describe your set of things.
- *Develop documentation that guides a data creator* in using the schema to describe actual things—that is, to create data about them.

To assess your schema and improve it, you will:

- Use the schema yourself to describe (create data for) five actual things.
- *Participate in a peer review,* where classmates use your schema to describe some sample things.
- *Summarize what you learned* from these assessments, describing any revisions that you made to the schema and its instructions.

Finally, you will:

• Write a short essay that reflects on your experience developing and assessing the schema.

Note that we are not concerned with technical implementation in this project; you are not designing a database.

Although this project may seem complicated, we will work through it together in class. You'll also be assigned to project groups, so that you can check in with classmates each week about your progress.

Step 1: selecting a base set of things

Select one of the following options for your project:

- 1. *Exceptional beings:* beings of supernatural or extraplanetary origin, or with extraordinary powers.
- 2. *Entertainment featuring the undead:* movies, television series, books, fan fiction, or other works featuring zombies, ghosts, vampires, and the like.
- 3. *Personal grooming products:* hair care, cosmetics, emollients, and other items used to clean, moisturize, color, trim, or otherwise maintain the body externally.
- 4. *Messaging apps:* Applications for sending text, images, or other communication digitally, via computers, tablets, phones, or other devices.
- 5. *Condiments:* Sauces, spices, or other flavor enhancers added to food after cooking, often at the table.
- 6. *Take-away dining establishments*: places that offer prepared dishes to eat at home.

It doesn't matter if everyone in the class selects the same base set of things. Your schemas will all be different.

Step 2: defining your set of things

Next, you'll refine and clarify the base option that you've selected, creating a precise, systematic definition for *your* set of things.

As a preliminary step, you'll want to narrow down your base option so that it's more clearly bounded and thus easier to understand. For example, you **might** define your set of things as:

- 1. Superheroes.
- 2. Zombie movies.
- 3. Natural hair care products.
- 4. E-mail clients for smartphones.
- 5. Prepared salsas (that is, salsas that you buy already prepared).
- 6. Vegan take-out in Chapel Hill.

You'll proceed by identifying an audience and purpose for a dataset that describes these things. The audience and purpose will motivate the attributes and values that you create later. For instance, here are a few different audiences and associated purposes for superheroes, each of which would motivate a different schema:

- Writers of fan-fiction researching potential slash pairings for future works.
- Aspiring comic-book artists seeking characters to "reboot."
- Halloween enthusiasts investigating costume ideas.

Finally, you'll define and clarify your set of things specifically enough so that potential data creators can answer the the following questions:

- What is actually being described? (This is the *domain* of the set of things.)
- Does data about *<this thing>* belong in this dataset? (This is the *scope* of the set of things.)
- How do I differentiate between two things? (This is how things in the set are *identifed*.)

For instance, let's consider vegan take-out in Chapel Hill. What is actually being described here? Is it an *establishment*, such as Chipotle, which may offer vegan options? Is it a specific *location*, such as the Chipotle on Franklin Street? Is it a *dish*, such as the Chipotle Sofritas burrito, which is available at some locations? Or is it a particular *meal* that someone ate at an actual place and time, such as a Sofritas burrito ordered at the Franklin Street Chipotle on November 18, 2020? You'll want to restrict your set to one kind of "thing"—in this case, establishment, location, dish, or meal—because different kinds of things have different kinds of data associated with them. Only a location, for instance, has hours of operation.

To continue with our example, let's say we are describing *dishes*. The chips at Chipotle are vegan. Would an order of chips be an appropriate member of the set of "vegan take-out dishes in Chapel Hill"? If our audience is health-conscious vegans seeking dinner options, then an order of chips is probably out of scope—not something that belongs in the dataset. We'd want to find some way to explain to potential data creators that burritos and bowls are in scope, but chips and a side of beans are not.

Finally, we need to think about how we distinguish between things. Some of this hinges on the domain that we have chosen, in particular on the *level of abstraction* that we have selected. Let's look at zombie movies for our example here. If we are describing zombie movies at the *work* level (we'll learn about works in Unit 2), then *Dawn of the Dead*, directed by George A. Romero, is *one thing*. Because there are other movies also titled *Dawn of the Dead* (remakes), the title is insufficient to uniquely identify each thing that we might describe. Accordingly, we might identify each "thing" in our set of zombie movies by the title *and* the director. But we might alternately describe zombie movies at the text level. In this case, each "cut" of *Dawn of the Dead*—the theatrical release, the extended cut, the Italian cut—would be *one thing* in our dataset. If we were describing "cuts" of zombie movies separately, then title and director are

insufficient to uniquely identify our things. Instead, we might identify things by the title, director, year of release, and duration in minutes. (Why might we choose to describe cuts separately? It would depend on the audience and purpose. Perhaps, for an audience of cinemaphile enthusiasts, distinctions between cuts are very important, and those distinctions are part of what we want to describe in our dataset.)

Step 3: Attributes and value parameters

You will specify a set of 10-15 attributes to define your things in support of your identified audience and purpose. For each attribute, you will set parameters for acceptable values and provide guidelines that show how values should be expressed.

This is your opportunity to be creative. There's no point in describing zombie movies in the same way that Netflix does, is there? Besides, most of the data already out there is kind of boring and not even very useful. So develop attributes that really facilitate the purpose for your audience. Maybe you get very specific about how zombies are portrayed in different movies, and you develop attributes for the speed of zombie locomotion, for their language and cognitive abilities, for their rapaciousness, for the zombie-specific details of their appearance, and so on.

We will learn more about attributes and values in Unit 4.

Step 4: Documentation

You will label and document each attribute in sufficient detail so that someone else can use your schema to create data.

This seems like the simplest part of the project, but it's actually the most difficult. Things have lots of variation, and it can be very challenging to figure out how to assign values in a reasonably consistent way. You will probably need to provide a lot more guidance that you initially expect.

Step 5: Assessment

Once you have documented your attributes, use the schema to describe five actual things (e.g., *Dawn of the Dead* or a Sofrito burrito). If there are cases where you are unable to satisfactorily describe something, use this as an opportunity to revise your design.

We will also have a peer review session in class, where your project group will also use your schema to describe 1-3 things. Depending on what your things are, your peer reviewers will likely not have access to the actual "things" (e.g., an actual copy of *Dawn of the Dead* to watch, or an actual Sofrito burrito to taste). So you will need to provide alternate sources of information that will enable your reviewers to generate data according to your schema, more or less. This is a common situation in data collection generally—the "thing" being described may not actually be in hand.

Step 6: Reflection

Finally, write a brief critical reflection about the process of designing the schema. The reflection is the most important part of the whole project—it's where you put together the practical experience of design with the concepts we've been learning about in class.

You have the freedom to focus your reflection in any way you like. For instance, you might discuss questions such as:

- How did designing the schema clarify or complicate any of the ideas we've been reading about in class?
- What does "good" mean when designing a dataset? How does a schema designer know if they've done a good job? What happens if a schema designer doesn't do a good job?
- What does "good" mean when creating data with a schema? How does a data creator know if they've done a good job? What happens if a data creator doesn't do a good job?

- What happens when data creators use your schema in a way that you didn't anticipate? Is this a problem?
- What is the relationship between design and implementation, regarding the creation of data?

But these are just *examples* of questions that you *might* discuss. You'll want to concentrate on a few issues of personal relevance—ideas that are meaningful to you. *Do not merely answer the questions here*.

Note that the purpose of the reflective essay is not to justify why your schema is awesome. Of course your schema 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. An introduction—a page or so—where you explain your set of things and the associated audience and purpose. You'll need to make sure that a potential data creator knows
 - a. What they are describing.
 - b. What is in and out of scope for the dataset.
 - c. How things are distinguished from each other.
- 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. A paragraph or two that explains what you learned from the two assessments: the self-assessment and the peer review.
- 4. Your critical reflection. This should be written in narrative form, as a cohesive paper of about 1000 words (3-4 pages).

Criteria for success

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 attributes effectively represent the selected things in the context of the audience and purpose, and the value space effectively represents the extent of the attributes.
- The documentation is sufficient to describe actual things accurately and comprehensively within the context of the selected purpose.
- The critical reflection uses 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).
- The critical reflection makes use of class readings, lectures, activities, and discussions to extend and refine its observations.
- All project components are complete and professionally presented: they follow a logical document structure, are clearly written, and use correct grammar and punctuation.

Taxonomy Project Details

Project overview

In the descriptive schema project, you defined multiple attributes to describe a set of things. For some attributes, you may have developed a controlled vocabulary of potential data values. For instance, if you were describing superheroes, you might have included an attribute for their superpowers, which you expressed as a controlled vocabulary. In doing so, you might have realized that the conceptual space of superpowers is really quite vast. There are many potential superpowers: some physical, some mental, some involving locomotion, some involving transformation, some involving enhanced sensory capabilities. If you were assigning superheroes to go on missions, you might want to have a better sense of how superpowers were related, so you could assemble a balanced team.

A *taxonomy* relates categories (or classes) according to hierarchical structure, in a progression from most general to most specific. We might create a taxonomy of superpowers according to how those powers manifest, separating physical powers from mental powers and separating physical powers according to what they operate upon. We might use this taxonomy to arrange superheroes according to their superpowers, so that we can better understand which superheroes might complement each other on a team.

In relation to the descriptive schema, then, *a taxonomy is a structure that relates the possible data values for a single attribute.*

If this is confusing, don't worry. We'll learn all about taxonomies and hierarchical structure in class.

In this project, you will:

- Develop a taxonomy of categories (classes) to relate and arrange some set of things.
- Write an explanation of your taxonomy that describes its structure and tells someone, in a general way, how to assign a specific thing (like the superhero Jessica Jones) to a class (like Strength).
- Write a short essay that reflects on your experience developing and assessing the taxonomy.

Step 1: Select a base option

Select one of the following options for your project:

- Exceptional beings by (pick one)
 - o Form
 - o Ability
 - o Origin
 - o Costume
 - o Accessories
 - Mortal beings by
 - Causes of death
- Personal grooming products by
 - o Function
- Physical exercises by
- Benefits
- Photographs by
 - Printing techniques
- Museums by
 - Function

Step 2: Develop your taxonomy

Once you have selected a base option, determine an audience and purpose for the taxonomy. You will probably want to narrow down the scope of the base, also: for instance, Greek mythological monsters by form, eye cosmetics by function, horses by causes of death, historical photographs by printing techniques.

We will learn about taxonomic structure as the semester proceeds, but here is one way to begin:

- 1. Take a few (5-10) instances—that is, actual things—and imagine how you would describe them according to the characteristic that your taxonomy was based on. For instance, for Greek mythological monsters by form, you would think of some actual monsters (instances) and describe their forms:
 - a. Medusa: humanoid woman with snakes for hair
 - b. Cerberus: three-headed dog
 - c. Hydra: reptilian sea creature
 - d. Chimera: mashup of snake, lion, and goat
- 2. For each description (data value) that you create, generalize it into a broader category. For instance:
 - a. Medusa: humanoids
 - b. Cerberus: land animals that resemble a real animal
 - c. Hydra: sea animals that don't resemble a real animal
 - d. Chimera: land animals that don't resemble a real animal
- 3. Continue generalizing these classes into broader classes, thinking about how everything relates. For instance, with our Greek monsters, we might realize that a humanoid is also a land animal that resembles a real animal. And so we might then think of these higher-level classes:
 - a. Monsters that resemble real beings
 - b. Monsters that don't resemble real beings
 - i. Monsters that are hybrids of multiple real beings
 - ii. Monsters that are completely fantastical
- 4. Continue to build out your emerging structure by taking it downwards, for example
 - a. Monsters that resemble real beings
 - i. Monsters that resemble land animals
 - 1. Humanoids
 - 2. Monsters that resemble non-human land animals
 - b. Fantastical monsters
 - i. Monsters that are hybrids of multiple real beings
 - ii. Monsters that are completely fantastical
- 5. See where this takes you. Can you think of a monster that wouldn't fit in one of the classes? How would you need to adapt the taxonomy to be able to assign that monster to a class?
- 6. As you proceed, ensure that your taxonomy follows good design practice for hierarchies. The child classes of each parent class should:
 - a. Relate to their parent by a single principle of division
 - b. Be jointly exhaustive
 - c. Be mutually exclusive
 - d. Be expressed at a similar level of abstraction

We'll talk about these principles as the semester proceeds, so don't worry if you don't understand them right now.

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; you can use outline features in a word-processing program as I've done above, or use pencil on a sheet of paper.

Step 3: Explain your taxonomy to a data creator

To enable someone else to use your taxonomy to assign a class to an actual thing (e.g., to take Medusa and assign her to a class in the taxonomy of Greek mythological monsters), you need to explain how the taxonomy works.

This explanation has two parts. In the first part, you will guide the reader through your diagram. At each level of the taxonomy, you will clarify the principle of division that relates the child classes to their parent. You will also explain what the classes are meant to include. For instance, if our taxonomy began like this:

Monsters from Greek mythology by form Monsters that resemble real beings Fantastical monsters

Then our explanation would clarify that the first principle of division involves similarity to actually existing organisms. The first class includes all monsters that bear a primary resemblance to a single earthly animal, even if the monster has some fantastical deviations (for instance, Cerberus and Medusa fit this definition). The second class includes all monsters that do not have a primary resemblance to a single earthly animal, either totally fantastical beings that are completely unlike any existing being (like the Hydra) or monsters that are fantastical combinations of multiple real animals (like the Chimera), so that the monster does not have a *primary* resemblance to an existing animal.

In the second part of the explanation, you will provide some general usage rules to clarify how confusing situations might be handled. For instance, you might think about these kinds of questions:

- Often, a general rule with taxonomies is that a thing should be placed in the most specific class possible. Is that the case with your taxonomy?
- Is it possible to assign one thing to two classes?
- If a thing seems to fall in between or outside the existing categories, where should it go?

To illustrate and supplement your usage rules, provide a few examples of class assignment (e.g., explain where Medusa would go in the taxonomy and why).

Step 4: Formative assessment

Once you have created and explained your taxonomy, take 5 or so actual things (e.g., five Greek monsters) and see how you would assign them to classes. If there are cases where your class assignment seems weird or unsatisfying, use this as an opportunity to revise your design.

We will also have a peer review session in class, where your project group will also attempt to assign 3-5 actual things to classes in your taxonomy. Just like with the schema peer review, you may need to provide sources of information that will enable your reviewers to understand the things (e.g., you might need to provide a description of your test monsters).

Step 5: Reflection

Finally, write a brief critical reflection about the whole process of designing the taxonomy. The reflection is the most important part of the whole thing—it's where you put together this practical experience with the concepts we've been learning about in class.

You have the freedom to focus your reflection in any way you like. For instance, you might discuss questions such as the following:

• How did designing the taxonomy clarify or complicate any of the ideas we've been reading about in class?

- What was different about designing and using a taxonomy as compared to designing and using a schema?
- What is the point of complicated data structures like taxonomies? What is the benefit of creating a taxonomy instead of a flat list of data values?
- What does "good" mean when designing a taxonomy? How does a taxonomy designer know if they've done a good job? What happens if a taxonomy designer doesn't do a good job?
- What does "good" mean when assigning an instance to a class? How does a data creator know if they've done a good job? What happens if a data creator doesn't do a good job?
- What happens when data creators use your taxonomy in a way that you didn't anticipate? Is this a problem?

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. Of course your taxnonomy 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.

Deliverables

Your final assignment should include:

- 1. An introductory paragraph or two that explains:
 - a. The things the taxonomy is used to arrange (e.g., monsters from Greek mythology)
 - b. The characteristic that the taxonomy is arranging those things by (e.g., form)
 - c. The audience and purpose for which a data creator would use this taxonomy to arrange the things (e.g., to enable scholars to characterize the ancient Greek imagination)
- 2. A diagram that displays all the classes in the taxonomy and shows their relationships.
- 3. Your taxonomy explanation.
- 4. A paragraph or two that explains what you learned from the two assessments: the self-assessment and the peer assessment.
- 5. Your critical reflection. This should be written in narrative form, as a cohesive paper of about 1000 words (3-4 pages).

Criteria for success

A successful taxonomy will exhibit these characteristics:

- The taxonomy includes an appropriate number of classes, arranged in well-formed hierarchical relationships, that follow best practices for taxonomy design.
- The classes represent the set of things well in the context of its identified audience and purpose.
- The explanation sufficiently documents the taxonomy's design rationale, so that a data creator could successfully assign instances to classes.
- 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).
- The critical reflection makes use of class readings, lectures, activities, and discussions to extend and refine its observations.
- All project components are complete and professionally presented: they follow a logical document structure, are clearly written, and use correct grammar and punctuation.

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. 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.

Step 1: select a base set of things

Most of the organizing systems that we use everyday—all of Netflix, an entire supermarket—are very large. It's impossible to explain such a large system in the scope of a single paper. Accordingly, we will focus on *one set of things* that appear within a larger organizing system.

Select one of the following options:

- 1. Cheese (at physical markets)
- 2. Oil (at physical markets)
- 3. "International" foods (at physical markets)
- 4. Furniture (at online retailers such as Crate and Barrel)
- 5. Sneakers (at online retailers such as Zappos)
- 6. Vitamins and herbal supplements (at online retailers or physical stores)
- 7. Hair care products (at online retailers or physical stores)
- 8. K-pop music (at a music service like Spotify)
- 9. Fan fiction from one fandom of your choice (at fan fiction sites such as Archive of Our Own)
- 10. Romance novels (at online retailers or physical bookstores)
- 11. Science fiction movies (at online streaming services such as Netflix)
- 12. Telenovelas (at online streaming services such as Netflix)

Step 2: select the organizing systems that you will investigate

For the base option that you have selected, you can select two or three of your own organizing systems to investigate. (There is not a particular advantage to comparing three systems rather than two. Two is fine. But you can compare three if you like.) For example, you might explain and compare the organization of cheese at the Whole Foods in Chapel Hill and the Food Lion in Carrboro, or you might compare the organization of oil at Li Ming's Global Mart in Durham and at the new Wegmans in Chapel Hill.

It can be helpful to select divergent organizing systems—for instance, organizing systems that seem to address different audiences or support slightly different purposes. The oil at Li Ming and Wegmans will have more differences, and thus provide more to compare, than the oil at Whole Foods and Wegmans. But sometimes a set of things appears in a very similar way across all organizing systems, and that's interesting also.

Step 3: for each organizing system, explain how the set of things is structured Your first task is 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 of the supermarket, or in the International section. Be sure to find all the places where your set of things is located.

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

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

Step 4: for each organizing system, interpret category structure

This is the fun part. What does the category structure that you've explained tell us about the set of things? In other words, based on how the things are selected, described, and arranged, how do we understand what those things are?

Here's an example.

Let's say my entity set is Noodles, and I'm looking at the Harris Teeter in Carrboro. 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.

Step 5: compare your organizing systems

To compare the 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.)

Step 6: write it all down

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.

Step 7: peer review

During the final week of class, you will read 1-2 draft papers from others in your project group.

In your peer review, you will answer 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's argument be strengthened?

You will give this feedback to the paper's author.

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.

Criteria for success

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 ground and extend your observations.
- The paper is professionally presented: it follows a logical document structure, is clearly written, and uses correct grammar and punctuation.

Participation self-assessments

To understand the intractable challenges of information organization, we need to share our different interpretations of organizing systems with each other. Accordingly, participation is a vital component of the course.

During our first class session, we will work together to identify how we, as a group, define excellent participation. I will subsequently update the syllabus to include these mutually defined criteria for success.

At the mid-way point of the semester, you will write an initial self-assessment of your participation, based on the criteria that we have defined. Your self-assessment will be a 1-2 page document that candidly and honestly describes what you feel that you have done well, and how you feel like you might need to improve. In this midterm assessment, you will articulate a set of goals for the second half of the semester—perhaps merely to continue as you have begun, but perhaps to enact some specific changes. You might also describe some strategies to help you fulfill those goals. For instance, if you have found it difficult to participate orally in discussions, you might resolve to say at least one thing per subsequent class. You will help yourself to achieve this goal by writing down notes for the weekly discussion questions, so that you don't have to think of something on the fly; you can merely refer to your written notes. (This is a strategy that I often use myself.) Note that your goals can include *not* doing things, as well as doing them. For instance, if you think you may have been talking too much in your discussion group, you can resolve to listen more, or solicit the opinions of others.

At the end of the semester, you will write a final participation self-assessment, where you again reflect on your participation with reference to our class-defined criteria for excellence. Once again, this will be a candid, honest, 1-2 page document. In this final self-assessment, you will also review your mid-term goals and your progress towards them.

For graduate students, please do not "grade" yourself for either self-assessment. Undergraduates may suggest a grade for yourself if you wish, but this is up to you.

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. 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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