

RESEARCH IN THE DIGITAL HUMANITIES

DigHT 315, Winter 2023
TTh 12:30-1:45pm, 1161 JFSB
<https://briancroxall.net/w23dh>

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Office Hours: Mondays, 11am-1pm; Thursdays, 9-10:30am; and [by appointment](#)

*** I reserve the right to modify this syllabus. And believe me, it'll get modified.**

Course Description

If you Google “[undergraduate research](#),” you get one thing, over and over again: students in lab coats. It’s an accepted part of training for students in the sciences to work as part of a team to learn something new. The students work under the direction of a faculty member, but it doesn’t change the fact that they are investigating something that the professor *does not yet know*.

What does undergraduate research in the humanities typically look like? Rather than hours in a lab, it involves hours in a library. Rather than working in a team, it generally means working on your own. And, in my experience, it tends to mean reading the work of other scholars—which the professor almost certainly knows already—on a subject and then synthesizing them to inform your interpretations of one text or another. There’s absolutely nothing wrong with this form of research; indeed, it prepares you for any number of different things one does IRL.

While situated firmly in the humanities, this course aspires to something different. We will work *together* to investigate something that *I do not yet know completely*: how long story arcs last in Charles Schulz’s daily comic strip, *Peanuts*. We will investigate this, as well as other questions that we collectively identify, using digital humanities methods, seeking to answer questions that other scholars have not yet considered. By the end of our course, we will collectively begin authoring a report on what we have learned. What’s more, we will all have more experience in humanities research, digital humanities methods, and working collaboratively.

Course Goals

- To strengthen your testimony of the gospel
- To make it possible for you to demonstrate an advanced level of knowledge in a chosen area (chosen by me, alas) and to conduct original research in that area
- To collaborate on research in a field that has traditionally privileged individual scholarship
- To improve your long-form writing
- To learn specific technologies for digital humanities research, including the command line, version control via GitHub, XML encoding according to TEI/CBML standards, the MALLET package, the Stylo package for R, the wordVectors package for R, and, possibly, Gephi
- To practice interpreting the results of computational text analysis

Texts

The **required** texts for this course are

- Charles Schulz, [*The Complete Peanuts: 1961-1962*](#) (ISBN: 978-1560976721)
- Charles Schulz, [*The Complete Peanuts: 1981-1982*](#) (ISBN: 978-1606994719)
- Scott McCloud, [*Understanding Comics: The Invisible Art*](#) (ISBN: 978-0060976255)

You are welcome to purchase these books from the [BYU Store](#); I've also provided links if you prefer to buy them on [Amazon](#). Whatever you do, be sure that you have your copy of the text by the assigned dates.

There are a number of texts that are only available from [Course Reserves](#) or online. **You *must* have a copy of these texts on the day we discuss them, whether a hard copy or a copy on a portable device.**

Assignments

Participation: While you will almost always have reading and other work to do outside of class, I firmly believe that most of the learning in this class happens via our collective conversation (see [D&C 88:122](#)). As such, you need to engage vigorously with the day's material, as well as with your peers and me.

DH Project Report: As a class, we will consider some of what goes into digital humanities research projects. You will choose two projects to investigate, to present to the class, and to discuss in a paper.

Daily Comics Discussion: For each day we read Schulz's work, you will choose two strips to draw our attention to. You will post discussion questions for these to Learning Suite and lead a discussion in class.

Peanuts Paper: You will write an essay, comparing and contrasting two volumes of *Peanuts*.

TEI Edition: Each of us will contribute to a digital edition of Schulz's strips, using XML according to the TEI and/or CBML standard(s). You will write a reflection on the assignment when it is completed.

Research Review: You will read a scholarly essay related to *Peanuts* and a second related to our classes research questions and give a presentation on what you learn from each.

Topic Modeling: Collectively, we will create several topic models of Schulz's work. You will contribute to a report on what you learn through the assignment.

Stylometry: Collectively, we will use stylometry on Schulz's work, contrasting the voices of the different characters to one another. You will contribute to a report on what you learn through the assignment.

Word Embedding: Collectively, we will explore a word embedding model of Schulz's work. You will contribute to a report on what you learn through the assignment.

Grades

Assignments will be worth the following points:

Participation: 125
DH Project Report: 100
Daily Comics Discussion: 100
Peanuts Paper: 125
TEI Edition: 250
Research Review: 75
Topic Modeling: 50
Stylometry: 50
Word Embedding: 50
Final Exam: 75

Grades will be calculated with this range:

899-875 B+ 874-825 B 824-800 B- etc.

Course Policies

Communication: The best time to get in touch with me is during my office hours. I consider this *your* time, and I encourage you to make use of it. During the Winter 2023 semester, my office hours are from 11am-1pm on Mondays and from 9-10:30am on Thursdays. I'm happy to make appointments at other times—just ask or schedule an appointment here: calendly.com/briancroxall. Given the current state of the world, I'm happy to meet in my office or on Zoom; just let me know your preference.

After office hours, the next best way to get in touch with me is by [sending me an email](#). I will do my best to respond within 24 hours, although I also try to take an email hiatus on the weekend.

Participation: This is a small class, and it *absolutely* depends on your active, collaborative, and engaged participation. You should come each day having carefully read and annotated assignments; be ready to discuss them with your colleagues. **Your active participation will be factored into your final grade.** If you're reluctant to speak up, please talk to me, and we'll figure out a way for you to participate.

Remote Attendance: You should not come to class if you are sick. On those days, you can participate in class via Zoom—as long as you [send a message](#) at least 30 minutes before the start of class. Attending via Zoom should *not* be something you do at a whim; it's only intended for keeping our community safe. With that said: one thing that I need to succeed at engaging students who are remote is the ability to see you. For this reason, if/when we are using Zoom, you are **required to participate via video**. Exceptions to this policy must be approved in advance of an individual class starting.

Late Assignments: Late work will not be accepted, except at my discretion and with a penalty.

Late Instructor: In the unlikely event that I am late to class, you should feel free to leave 15 minutes after its scheduled start. Don't count on this happening.

Final Exam: Our final is scheduled for **Tuesday, April 25 from 11am–2pm**. BYU policy forbids me from changing the final's time. Please add this date to your calendar now, so you don't miss it. And be sure you haven't planned to leave before it takes place.

Laptops: It will often be imperative for you to bring a laptop to class. Just don't get distracted.

Technical Snafus: This course relies heavily on access to computers, specific software, and the Internet. At some point during the semester, you WILL have a problem with technology. Start assignments early and save often. [Always keep a backup copy of your work saved somewhere secure.](#)

That said, you will be learning how to [do things with words](#) and computers. If things don't work with our more outré assignments, I will not hold that against you. (This has *definitely* happened before.) What's more, I'm more than happy to answer questions during class or in my office hours. Asking for help is not [a sign of weakness](#); it's a sign that you, like me, are learning.

Acknowledgments

Despite what you might think, professors don't know everything. This course is the product of my talking to and reading the work of colleagues. This version of DigHT 315 owes a particular debt to [Amy Schulz Johnson](#), who first approached BYU's [Office of Digital Humanities](#) about doing linguistic analysis of her father's work. Similarly, we would have much less to work with without the efforts of my ODH colleagues, [Jeremy Browne](#) and [Jesse Vincent](#). The former did the work to create the corpus of Schulz's work, and the latter loaded the corpus into [WordCruncher](#). As I was starting to plan the course, I also spoke with [Kerry Soper](#) who gave me some valuable insights into teaching comics. Most importantly, this year's course has been shaped by the experience I had piloting it with students in 2019—Cynthia Beck, Lindsay Boyden, Melina Galvez de Leon, and Talia Woffinden—and those who experienced the reboots in 2020—Hannah Johnson, Allison Lasswell, Drew Monteiro, and Kate Staker—and 2021—Maria Archibald, Jane Athay, Sarah Emmett, Ashlin Kaufman, Jenni Overy, Allie Rawlings.

The structure of this course riffs on those that I taught in [Winter 2018](#) and [2019](#). When designing that first course, I specifically consulted syllabi from [Ted Underwood](#) and [Natalie Houston](#). I first brainstormed the TEI assignment with my very good friend [Elli Mylonas](#), and she has continued to be a critical ally in the years since. I talked broadly about the overall structure of the course with [Mark Sample](#) and [Kathleen Fitzpatrick](#). [Lisa Rhody](#) has the best thoughts about topic modeling and suggested that I remember that GitHub exists. [Maciej Eder](#) and [Christof Schöch](#) kindly provided advice about stylometry. And special thanks to the students in the other iterations of this course (Winters 2018 and 2019), who proved that small, weird classes can have amazing outcomes.

BYU Policies

Honor Code In keeping with the principles of the BYU Honor Code, students are expected to be honest in all of their academic work. Academic honesty means, most fundamentally, that any work you present as your own must in fact be your own work and not that of another. Violations of this principle may result in a failing grade in the course and additional disciplinary action by the university. Students are also expected to adhere to the Dress and Grooming Standards. Adherence demonstrates respect for yourself and others and ensures an effective learning and working environment. It is the university's expectation, and every instructor's expectation in class, that each student will abide by all Honor Code standards. Please call the Honor Code Office at 801-422-2847 if you have questions about those standards.

Preventing & Responding to Sexual Misconduct Brigham Young University prohibits all forms of sexual harassment—including sexual assault, dating violence, domestic violence, and stalking on the basis of sex—by its personnel and students and in all its education programs or activities. University policy requires all faculty members to promptly report incidents of sexual harassment that come to their attention in any way and encourages reports by students who experience or become aware of sexual harassment. Incidents should be reported to the Title IX Coordinator at t9coordinator@byu.edu or 801-422-8692 or 1085 WSC. Reports may also be submitted online at <https://titleix.byu.edu/report> or 1-888-238-1062 (24-hours a day). BYU offers a number of resources and services for those affected by sexual harassment, including the university's confidential Sexual Assault Survivor Advocate. Additional

information about sexual harassment, the university's Sexual Harassment Policy, reporting requirements, and resources can be found in the University Catalog, by visiting <http://titleix.byu.edu>, or by contacting the university's Title IX Coordinator.

Student Disability Brigham Young University is committed to providing a working and learning atmosphere that reasonably accommodates qualified persons with disabilities. A disability is a physical or mental impairment that substantially limits one or more major life activities. Whether an impairment is substantially limiting depends on its nature and severity, its duration or expected duration, and its permanent or expected permanent or long-term impact. Examples include vision or hearing impairments, physical disabilities, chronic illnesses, emotional disorders (e.g., depression, anxiety), learning disorders, and attention disorders (e.g., ADHD). If you have a disability which impairs your ability to complete this course successfully, please contact the University Accessibility Center (UAC), 2170 WSC or 801-422-2767 to request a reasonable accommodation. The UAC can also assess students for learning, attention, and emotional concerns. If you feel you have been unlawfully discriminated against on the basis of disability, please contact the Equal Opportunity Office at 801-422-5895, eo_manager@byu.edu, or visit <https://hrs.byu.edu/equal-opportunity> for help.

Mental Health Mental health concerns and stressful life events can affect students' academic performance and quality of life. BYU Counseling and Psychological Services (CAPS, 1500 WSC, 801-422-3035, caps.byu.edu) provides individual, couples, and group counseling, as well as stress management services. These services are confidential and are provided by the university at no cost for full-time students. For general information please visit caps.byu.edu; for more immediate concerns please visit help.byu.edu.

BYU College of Humanities Statement on Inclusion We strive to cultivate mutual respect and empathy for all people, no matter their ethnic, racial, or cultural background, or sexual orientation. Elder M. Russell Ballard said at a BYU devotional in Feb. 2020: "Through discrimination, racism, sexism, and other social ills, we will often impose false identities on others that keep them and us from progressing. This can stop when we see all people as children of God. We consider every person divine in origin, nature, and potential. Each possesses seeds of divinity. And 'each is a beloved spirit [child] of heavenly parents.'"

The College of Humanities is attuned to the reality of an increasingly diverse Church membership. We aspire to better understand our own language and history and to use language to connect and heal rather than to divide and harm. We invite students, staff, and faculty to use their time in our college to strive toward conduct worthy of Christian discipleship, where we are "no more strangers and foreigners, but fellowcitizens with the saints, and of the household of God" (Ephesians 2:19).

Draw a
comic.

Schedule

Complete assigned reading **before** coming to class. Please keep in mind that reading assignments are subject to change. **The canonical version of the schedule is on the [class website](#).**

What are the Digital Humanists Doing?

- Jan. 10 T Introductions. Syllabus.
- Jan. 12 Th John Unsworth. "[Scholarly Primitives: what methods do humanities researchers have in common, and how might our tools reflect this?](#)" 13 May 2000. **Read for the question: what is a "scholarly primitive." Don't read the boxes at the end.**
Tom Scheinfeldt. "[Where's the Beef? Does Digital Humanities Have to Answer Questions?](#)" *Debates in the Digital Humanities*. 2012.
David Parry. "[The Digital Humanities or a Digital Humanism.](#)" *Debates in the Digital Humanities*. 2012. **Read just the final 8 paragraphs, starting with "I have become convinced over the last few years that Benjamin's..."**

- Jan. 17 T Miriam Posner. "[How Did They Make That? The Video!](#)" 17 April 2014.
Stephen Ramsay. "[Humane Computation.](#)" *Debates in the Digital Humanities 2016*.

Considering Comics

- Jan. 19 Th Charles M. Schulz. *The Complete Peanuts, 1950-1952*, [October – December 1950](#).
- Jan. 24 T Scott McCloud. *Understanding Comics*, chapter 1, pp 2-23.
David Michaelis. "[The Life and Times of Charles M. Schulz](#)" from *The Complete Peanuts, 1950-1952*.
- Jan. 26 Th Charles M. Schulz, *The Complete Peanuts, 1961-1962*, January - June 1961, pp 1-78.

Jan. 31 T **DH Project Presentations**

Feb. 2 Th **DH Project Presentations, continued**
McCloud, *Understanding Comics*, chapter 2, pp 24-59.

Feb. 7 T Schulz, *1961-1962*, July – December 1961, pp 78-157.
McCloud, *Understanding Comics*, chapter 3, pp 60-93.

Feb. 9 Th Schulz, *1961-1962*, January – June 1962, pp 158-234.
Christopher Pizzino. "[Gutter.](#)" *Keywords for Comic Studies* (2021).

enCoding Comics

Feb. 14 T Kevin S. Hawkins. "[Introduction to XML for Text.](#)" 11 Jan. 2015.
TEI by Example. "[Module 0: Introduction.](#)" **Just read sections [1](#), [3.1](#), and [8](#).**

Feb. 16 Th John A. Walsh. "[Comic Book Markup Language: An Introduction and Rationale.](#)"
Digital Humanities Quarterly 6.1 (2012).

Feb. 21 T **Monday schedule. No class.**

Feb. 23 Th Brian Croxall et al., "[Peanuts Encoding Editorial Decisions 2.0.](#)"

Feb. 28 T Schulz, *1961-1962*, July – December 1962, pp 235-314.

Computing Comics

- Mar. 2 Th Megan R. Brett. "[Topic Modeling: A Basic Introduction](#)." *Journal of Digital Humanities* 2.1 (2012).
Robert K. Nelson. "[Introduction](#)." *Mining the Dispatch*. Nov. 2020.
Ian Milligan and James Baker. "[Introduction to the Bash Command Line](#)." *Programming Historian*. 20 September 2014.
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- Mar. 7 T Ted Underwood. "[Topic modeling made just simple enough](#)." *The Stone and the Shell*. 7 April 2012. **Stop reading at "Where to go next."**
- Mar. 9 Th Charles M. Schulz. *The Complete Peanuts, 1981-1982*, January – June 1981, pp 1-78.
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- Mar. 14 T Schulz, *1981-1982*, July – December 1981, pp 79-157.
- Mar. 16 Th **Research Review presentations**
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- Mar. 21 T David I. Holmes and Judit Kardos. "[Who was the Author? An Introduction to Stylometry](#)." *Chance* 16.2 (2003). **Read for background. Don't sweat the details.**
Patrick Juola. "[How a Computer Program Helped Show J. K. Rowling write \[sic\] *A Cuckoo's Calling*](#)." *Scientific American*. 20 August 2013.
- Mar. 23 Th Matthew Roper et al. "[Stylometric Analyses of the Book of Mormon: A Short History](#)." *Journal of Book of Mormon Studies* 21.1 (2012).
Choose one of the following, depending on whether you want PCA explained via text or video. Again, you're trying to get the gist more than the details.
Linh Ngo. "[Principal component analysis explained simply](#)." *BioTuring's Blog*. 14 June 2018.
Josh Starmer. "[Principal Component Analysis \(PCA\), Step by step](#)." *StatQuest* (YouTube). 2 April 2018.
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- Mar. 28 T Schulz, *1981-1982*, January – June 1982, pp 157-234.
- Mar. 30 Th Schulz, *1981-1982*, July – December 1982, pp 235-313.
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- Apr. 4 T Juniper Johnson, with Julia Flanders and Sarah Connell. "[Introduction to Word Embedding Models](#)." *Women Writers Vector Toolkit*. 2021.
Ben Schmidt, "Gendered Language in Teacher Reviews," parts [1](#) and [2](#)
- Apr. 6 Th Ryan Heuser. "Word Vectors in the Eighteenth Century, Episode 2: Methods." *RyanHeuser.org*. 1 June 2016.
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- Apr. 11 T Word Embedding, TBD
- Apr. 13 Th Word Embedding, TBD
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- Apr. 18 T Franco Moretti. "[Network Theory, Plot Analysis](#)." *New Left Review* 68 (2011).
Ted Underwood. "[Digital Humanities as a Semi-Normal Thing](#)." *The Stone and the Shell*. 30 March 2017.
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- Apr. 25 T **Final Exam, 11:00 am - 2:00 pm**