



history of sensat

Spring 2020 | HIST 353  
9:25AM - 10:40AM TR HUM 118  
Dr. Lan Li [LL@rice.edu](mailto:LL@rice.edu)

**RICE HISTORY**  
**MEDICAL HUMANITIES**  
**COGNITIVE SCIENCES**



# HISTORIES OF SENSATION

Spring 2020, HIST 353  
9:25AM - 10:40AM TR HUM 118

Lan A. Li, [LL@rice.edu](mailto:LL@rice.edu)  
Office: HUM 307  
Hours: TUE 11am-1pm

## Course Description

This class offers a deep history of sensation. It opens a window into how scientists, philosophers, medical practitioners, and neurophysiologists developed theories of touching, tasting, smelling, hearing, and seeing. Students will learn about the history of using animal models to inform human sensation, as well as the medical consequences of sensations that failed to fit neat categories of sensing. From the science of sensing, we will also explore the politics of sensation. How did different standards of scientific practice articulate the relationship between the senses, the emotions, and sensible objective judgment? Whose senses did these standards include? Whose did they ignore?

The core reading for this class will derive from the history of medicine, history of science, science studies, disability studies, medical anthropology, as well as recent publications in the biosciences.

## Learning Outcomes

There are three learning outcomes in this course. 1) Students will learn how to contextualize historical ways of understanding sensation. From hearing loss to heroin addiction, students will explore how scientists mapped, tracked, and marked systems of sensation, theories of sensations, and pathologies of sensation. 2) Students will next learn how to compare historiographies of medicine and historical moments. We will look at a range of human and animal bodies, including jellyfish, mole rats, and hummingbirds, to explore the multiple kinds of systems that have come under study. 3) Finally, students will learn how to communicate these frameworks to a broader audience. They will be expected to closely read a primary source and translate it visually, in writing, and across digital media from a written essay into a public exhibit.

## Assignments

Students will write weekly responses that will be assessed based on their ability to summarize and analyze the readings. There are three main assignments in the course. The first assignment, “**Order**” requires students to write a 1500-word research paper contextualizing a primary source that “defines” a “typical” physiological system of sensation. The second assignment, “**Dis-order**” is a 2,500-word research paper that explores the history of atypical systems either through animal studies or through patient case histories. The third assignment “**Re-order**” is a 300-word creative composition either through sound, image, or smell that depicts a kind of sensation from the perspective of a non-typical human or animal organism.

## WEEKLY CALL & RESPOND

You will be assigned 20-30 pages of reading for each class. Reading responses are due at **5pm** on Canvas the day before every class. These are meant for you to raise questions about concepts that might be unfamiliar to you or ideas that you'd like to discuss further in class.

### **THURSDAY Call (10%)** *due every Wednesday*

Post a question. Consider the type of question you'd like to ask. Demonstrate close reading and an understanding of the author's argument. Offer a leadup to your question(s) to show where you are coming from and what's on your mind. What kinds of issues remain unresolved for you? Engage with **at least two** of the readings. Questions are limited to 200 words.

### **TUESDAY Respond (15%)** *due every Monday*

Give a response. Choose a question posted by your classmates and reply to it. Draw on ideas from the new readings to engage with broader themes in the course that deal with representations of the mind, representations of human bodies, the disembodiment of the senses, the anthropomorphizing of non-human models, and the dehumanization of individuals with atypical sensory processing. Have you offered an adequate reply? Engage with **at least one** new reading beyond the original question. Responses are limited to 250 words.

**Read before you come to class.** Readings provide a shared foundation for our discussions. The materials for this course include work by anthropologists, historians, cultural theorists and philosophers. Please bring the readings to class so that we can refer to specific passages in the texts. It is highly recommended that you start reading early for weeks with heavy reading loads. Recommended readings provide additional context and theorization related to the week's theme, but there is no expectation that you will read these texts during the term. If you have any concerns about the readings, please do not hesitate to come to office hours.

**Take notes** (in the margins or in a separate notebook) while you read, as well as in class, as this will help you process the materials. Some questions to consider while reading:

1. What are the conditions of production of this text? (historical, geographical, etc.)
2. What are the author's central arguments or main points?
3. What evidence does the author use to support their argument?
4. What ideas or authors are being argued against?
5. What assumptions does the author rely on to make their argument?
6. Do you find the author's argument convincing? Why or why not?
7. What surprised you about the reading? What did you learn?
8. What experiences in your life, or in your research, resonate with the reading?

## GRADING

Contribution	10%
Response: Tuesday	10%
Response: Thursday	15%
Assignment #1	20%
Assignment #2	20%
Assignment #3	25%

## **ABSENCE POLICIES**

In this course, all students are expected to attend all classes. Absences can be excused for illness, emergencies, or previously scheduled Rice events. Please let the instructor know in advance of the absence or as soon as possible immediately following the absence.

## **RICE HONOR CODE**

In this course, all students will be held to the standards of the Rice Honor Code, a code that you pledged to honor when you matriculated at this institution. If you are unfamiliar with the details of this code and how it is administered, you should consult the Honor System Handbook at <http://honor.rice.edu/honor-system-handbook/>. This handbook outlines the University's expectations for the integrity of your academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process.

## **LATE POLICY**

You are allowed a total of three days extension to be applied across the semester as you wish. For instance, you can use one day for each assignment, or three days for one assignment.

## **DISABILITY RESOURCE CENTER**

If you have a documented disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with the Disability Resource Center (Allen Center, Room 111 / [adarice@rice.edu](mailto:adarice@rice.edu) / x5841) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs.

## **SYLLABUS CHANGE POLICY**

This syllabus is only a guide for the course and is subject to change with advanced notice.

# COURSE SCHEDULE

## WEEK 1 introduction 🌱

Jan. 14 What It's Like to Read Lips <https://bit.ly/2R4eFus>

Jan. 16 Connor, Steven. (2006). "The Menagerie of the Senses"

Gagliano, M. et al. (2016). "Learning by Association in Plants." *Scientific Reports*

## WEEK 2 epistemology/aesthetics 🧠

Jan. 21 Daston, L., & Galison, P. (2010). "Mechanical Objectivity." *Objectivity*, 115-138.

Golgi, C. "The Neuron Doctrine: Theory and Facts" Nobel Lecture, Dec. 11, 1906

Jan. 23 Brendan Clarke, Chiara Ambrosio. (2018). "The nervous system and the anatomy of expression: Sir Charles Bell's anatomical watercolors." *Imagining the Brain*, 109-138.

Beaulieu, A. (2001). "Voxels in the brain: Neuroscience, informatics and changing notions of objectivity." *Social Studies of Science*, 31(5), 635-680.

## WEEK 3 representation/disability 🧠

### ASSIGNMENT #1 SELECT PRIMARY SOURCE

Jan. 28 MacLehose, William. (2018) "The pathological and the normal: Mapping the brain in medieval medicine." *Imagining the Brain*, 23-54.

Jan. 30 Kudlick, C. J. (2003). Disability History: Why We Need Another "Other." *The American Historical Review*, 108(3), 763-793.

Ginsburg, F., & Rapp, R. (2013). Disability Worlds. *Annual Review of Anthropology*, 42, 53-68.

## WEEK 4 seeing/smelling 🍷

Feb. 4 Jay, M. (1993). "The Noblest of Senses." *Downcast Eyes: The Denigration of Vision in Twentieth-Century French Thought*.

Al-Haytham, I., & Sabra, P. A. I. (1989). *The Optics of Ibn Al-Haytham: On Direct Vision*. Warburg Institute. (selections)

Feb. 6 Barwich, A.-S. (2018). "Measuring the World Olfaction as a Process Model of Perception."

Latour, B. (2016). "How to Talk About the Body? The Normative Dimension of Science Studies" *Body & Society*.

## WEEK 5 acu-therapeutics 🧠

### ASSIGNMENT #1 DUE

Feb. 11 Li, L. (2018). Pinpricks: Needling, numbness, and temporalities of pain. In *Imagining the Brain: Episodes in the History of Brain Research* (1st ed., Vol. 243, pp. 205-229).

Source analysis: "Acupuncture Anaesthesia in surgery for trigeminal neuralgia" (1973)

“Treatment of drug addiction by acupuncture and electrical stimulation” (1973)

“Inhibitory effect produced by stimulation of afferent nerves on responses of cat dorsolateral fasciculus fibres to nocuous stimulus.” (1974)

Feb. 13 NO CLASS

### WEEK 6 touching/tasting 🍷

Feb. 18 Jenner, M. S. R. (2010). “Tasting Lichfield, Touching China: Sir John Floyer’s Senses.” *The Historical Journal*, 53(3), 647–670.

Feb. 20 Todes, D. (2015). “Introduction” and “Favorite Dogs” *Ivan Pavlov*.

Source analysis: *Ivan Pavlov* “Conditioned reflexes: an investigation of the physiological activity of the cerebral cortex” (1927) <https://bit.ly/36QLj9Q>

### WEEK 7 seeking/being 🤖

#### ASSIGNMENT #2 ANNOTATED BIBLIOGRAPHY

Feb. 25 Scott, J. W. (1991). The Evidence of Experience. *Critical Inquiry*, 17(4), 773–797.

Murat Aydede. “Pain.” Stanford Encyclopedia of Philosophy.  
<https://plato.stanford.edu/entries/pain/>

Feb. 27 “Rehearsals for empathy” at Lawndale Art Center

### WEEK 8 pain/law 🔪

Mar. 3 Scarry, E. (1987). *The Body in Pain: The Making and Unmaking of the World*.

Izumi Nakayama. “Sounding Pain.” <https://bit.ly/36PRYAR>

Mar. 5 Tor Wager, “The Brain in Pain” <https://youtu.be/GNcTb4eirR0>

Amanda Pustilnik, “Law and Pain” <https://youtu.be/y3bTOqv6UJ8>

Greely, H. (2015). “Neuroscience, Mindreading, and the Courts: The Example of Pain.” *Journal of Health Care Law and Policy*, 18(2), 171.

### WEEK 9 hearing/deafness 🧑

Mar. 10 Céline Frigau Manning. “Musical States of Mind.” <https://bit.ly/2NmrUG0>

Helmreich, S., Roosth, S., & Friedner, M. (2015). “Underwater Music” & “Seashell Sound.” *Sounding the Limits of Life*.

Mar. 12 Helmreich, S., Roosth, S., & Friedner, M. (2015). “Sound Studies Meets Deaf Studies.” *Sounding the Limits of Life*.

Kim, Christine Sun. *The Enchanting Music of Sign Language*.  
<https://bit.ly/3a6H7EV>

Nasser, Latif. “Helen Keller and the Glove That Couldn’t Hear.” *The Atlantic*, September 19, 2014. <https://bit.ly/36RYR4K>

#### ASSIGNMENT #2 DUE

SPRING BREAK

## WEEK 10 vision/blindness

- Mar. 24 Crary, J. (1992). "Modernity and the Problem of the Observer." *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*. MIT Press.
- Rossi, M. (2019). "Pathologies of Perception: Benjamin Joy Jeffries and the Invention of Color Blindness." *The Republic of Color*.
- Mar. 26 M. Leona Godin. (2019, January 29). How Helen Keller's Vaudeville Stint Inspired Me as an Artist. Catapult. <https://bit.ly/2ThZzEB>
- M. Leona Godin. (2018, November 29). When People See Your Blindness as Superhuman, They Stop Seeing You as Human. Catapult. <https://bit.ly/37XfZWW>

## WEEK 11 cognition/imagination

### ASSIGNMENT #3 PROPOSAL

- Mar. 31 Li, G. "Thinking Organs." *Metaphors of the Mind*. <https://bit.ly/2FYsrdj>
- Yu, N. (2009). "Introduction: Heart, body, and mind." *The Chinese HEART in a Cognitive Perspective*. De Gruyter Mouton.
- Apr. 2 Wragge-Morley, A. (2018) "Imagining the Soul: Thomas Willis (1621-1675)," in *Imagining the Brain*, pp. 55-73.
- Wragge-Morley, A. "Alchemical Apparatuses." *Metaphors of the Mind*. <https://bit.ly/30igfx0>
- Julia Hyland-Bruno. "Bird Talk." *Metaphors of the Mind*. <https://bit.ly/2NoE7tN>

## WEEK 12 embodiment/cognition

### ASSIGNMENT #3 NARRATIVE DRAFT

- Apr. 7 Pressman, J. D. (1998). "A Stab in the Dark." *Last Resort: Psychosurgery and the Limits of Medicine*. Cambridge University Press.
- Donaldson, E. J. (2002). "The Corpus of the Madwoman." *NWSA Journal*, 14(3), 99-119.
- Apr. 9 Malafouris, L. (2019). "Thinking as 'Thinging': Psychology With Things. *Current Directions in Psychological Science*.
- Bernd Lindemann, Yoko Ogiwara, and Yuzo Ninomiya, "The Discovery of Umami," *Chemical Senses* 27, no. 9 (2002): 843-44, <https://bit.ly/384G4Ug>
- Resnick, B. (2019). The silent "sixth" sense. *Vox*. <https://bit.ly/3a89AKD>

## WEEK 13 remembering/forgetting

- Apr. 14 Buxton, H. (2018). Imperial Amnesia: Race, Trauma and Indian Troops in the First World War. *Past & Present*, 241(1), 221-258.
- Apr. 16 Canales, J. (2010). "The Measure of All Thoughts." *A Tenth of a Second: A History*. University of Chicago Press.
- Sacks, O. (2006). "The Lost Mariner." *The Man Who Mistook His Wife for a Hat*.

**WEEK 14 presenting** 🐟

Apr. 21 editing lab

Apr. 23 exhibitions

ASSIGNMENT #3 DUE