



# Library 100: Modes of Inquiry

## Neuroscience of Time

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Location  
Loras College

Science Hall 109  
MW 2:30 - 3:50PM  
Common Time: W - 11:00  
Fall 2017

### Psychology Program

**Instructor:** Jake Kurczek, PhD  
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**Launch Staff** Anne Spoden [anne.spoden@loras.edu](mailto:anne.spoden@loras.edu)

**Textbook:** Banaji, M.R. & Greenwald, A.G. (2013). *Blindspot: Hidden biases of good people*. New York: Delacorte Press.  
Additional journal articles and materials will be assigned as needed and posted to the course website

**Class Website:** You will be able to find PDFs of the lectures and discussions posted to the course website

### Section Description:

Time is unlike other types of perception, it is not directly available to any sensory organ but can only be understood through change. And yet despite its ephemeral nature, time is a dimension that has a significant impact upon a wide variety of psychological behavior. The intent of this course is to examine some of the ways in which this occurs. Time plays a major role in music, speech, body movements and other behaviors. How we understand and think about time also influences everyday behavior. We will explore neuroscientific and psychological aspects of time perception in order to reflect on and analyze different aspects of our lives. If we're up for it we'll even look into philosophy and physics to help color our understanding or misunderstanding of time.

### Modes of Inquiry Objectives

As a critical part of a student's First Year Experience at Loras College, the Modes of Inquiry Course seeks:

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- To regularly engage students in active learning experiences and provide the skills and resources needed to promote active learning outside of the classroom.
- To enable confident questioning and critique in a variety of contexts by enhancing students' critical thinking and reading skills.
- To provide information and resources on a variety of academic and social transition issues and engage students in critical discussion of these issues.
- To strengthen the academic skills necessary for students to pursue a liberal arts education and become life-long learners, particularly critical thinking and reading, and information literacy.
- To introduce students to, and have them be an active part of, quality advising and educational planning.

### **Modes of Inquiry Learning Outcomes**

Upon successful completion of the Modes of Inquiry course, students will:

- Be able to evaluate multiple perspectives, recognize bias and assess the quality and appropriateness of sources of information in the context of college level research, writing, and discussion about a specific topic.
- Be able to describe how individual and shared experiences influence decisions, interpretations, analysis, and evaluations made by themselves and others.
- Be able to formulate and justify a position on a topic using quality reasons and evidence and acknowledging alternate perspectives.

### **Modes of Inquiry Attendance Policy**

The Loras College dispositions of active learning and responsible contributing are at the core of the attendance policy in the Modes of Inquiry course. The Modes of Inquiry course strives to foster student curiosity and develop the skills necessary to seek answers and explore new ideas. Developing these skills requires student engagement and active participation. In addition, as members of a learning community we each have a responsibility to contribute our ideas and insights to support the learning of others. Active participation and responsible contributing cannot occur if a student fails to be present.

If a student has the equivalent of two weeks of absences (based on the number of course meetings per week), he/she will automatically receive a failing grade for the Modes of Inquiry course. Thus, a student in an MOI section that regularly meets two days per week will fail the course upon accumulating 4 absences. A student in an MOI section that regularly meets three days per week will fail the course upon accumulating 6 absences.

A student will accumulate an absence any time he/she fails to attend a scheduled course event. This includes Launch into Loras activities, class meetings, and required common time events.

#### College sponsored events

In accordance with the policies outlined in the Loras College bulletin, absences for college sponsored events will not be included in the accumulated absence total only when the student

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has met all of the responsibilities of the student as outlined in the Loras College Bulletin. For MOI students these responsibilities include the following:

1. Submit a copy of team/organization's schedule to instructors no later than the first week of class with all specific course conflicts highlighted.
2. Through oral and email notification, communicate with instructor(s) at least one week prior to each class scheduled to miss to coordinate how work will be made up and turned in. Students are expected to make up coursework missed (or an appropriate equivalent) by the original due date.
3. Forward all relevant changes to the schedule to instructors as soon as possible.
4. Submit all course syllabi and schedule of course commitments to coach/moderator as soon as possible.
5. It is a privilege to participate in college sponsored events. Students found to be intentionally abusing this policy will lose the opportunity to participate in college sponsored events.

#### Required Common Time Events

All MOI students are required to attend the following common time events:

All dates tentative – schedule is pending approval

- Last Day to add – 9/1
- Campus Fest –9/6
- Last Day to Drop w/o “W” – 9/15
- Common Speaker - 9/20
- Majors fair – 10/4
- Last Day to drop with “W” – 10/27
- Cultural Event - 11/1
- Registration – 11/8
- IPO 101 – Dates TBD - See eLearn

#### **Course Evaluation & Grading\***

Student evaluation will be based upon the following:

- **Ropes Course Response:** This assignment will ask students to apply their reading and class discussion of Blind Spot to their experience on the ropes course. The paper will be assigned at the end of the first week of classes and will be due at the end of the following week (9/8 – 9:00PM). Faculty will return feedback to students by the end of the 3<sup>rd</sup> week of classes. The final essay must be submitted to e-learn by 9:00PM on 9/25 and will be evaluated for originality via turnitin.com.
  - Now that your MOI course has completed the opening chapters of Blindspot, consider your experience on the ropes course during Launch into Loras. What types of bias or unintentional intolerance did you engage in or experience? What assumptions do you believe people had about you, did that impact your experience? Did your assumptions about others impact your behavior? Was there a difference in the presence of bias or unintentional intolerance at the

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beginning of the course versus the end? After learning about unconscious bias, what steps can you take to adjust your conscious behaviors?

- 3-5 Pages
- [APA format](#) (only content pages count towards limit)
- **Common Reading Exam:** This take home exam requires students to reflect upon the common reading text and course discussions. The exam will require that students cite examples from the text. All students will respond to a common prompt (approximately 600 words) and several section specific questions. The exam must be submitted to e-learn must be submitted to e-learn by 9:00PM on 10/4 and will be evaluated for originality via turnitin.com.
- **Information Literacy Activities:** All MOI students will participate in several activities related to information literacy: an initial information literacy assessment, a virtual tour, a quiz, and a library information session. Participation and completion of all information literacy tasks is required.
- **Loras Information Literacy Test (LILT)**
  - In the first weeks of class, all students are required to complete the LILT assessment test. This test is used for college wide assessment and the individual student's score on the test is not factored into the final MOI grade. The LILT test must be completed no later than **Friday, September 8<sup>th</sup>**.
- **Virtual Tour & Online Tutorial Quiz**
  - Prior to the Library Information Session students will participate in an online tour and tutorial to introduce them to library resources. Students will be required to complete a short quiz to demonstrate their understanding of the information included in the tour and tutorial. You must complete the tour, tutorial, and quiz no later than **5:00 pm on 9/23**
- **Library Information Session**
  - All students must attend an information literacy session in the library with their MOI class. The library information session is scheduled for **9/25 during class**. **We will meet in ARC 202 for the day**
- **Argumentative Essay:** All MOI students will write an argumentative essay on a topic relevant to the course topic. The essay must be a minimum of 6 full, type-written pages, and include appropriate references. The final essay must be submitted to e-learn by 9:00PM on 10/30 and will be evaluated for originality via turnitin.com.
- **Critical Thought Reflections:** Students will complete a number of short reflective writing assignments to demonstrate their understanding of multiple perspectives on a subject/issue, to communicate thoughts, feelings, and/or problems, to identify personal dispositions and biases, and to integrate knowledge gained within and outside of the classroom.

Be honest and thoughtful. These papers are a chance for reflection. There are no right answers and answers will not be judged. Each paper should be at least one page in length, double-spaced, using a 12-point font. **Each paper is due via e-Learn on the date listed above by 9 p.m. NO LATE PAPERS will be accepted.**

These papers are informal exercises in writing and thinking and will not be given a formal letter grade. Your overall grade for informal writing will be based on the time, thought, and effort that appears to be put into the assignments and turning them in on time. The point system used will be as followed: 5: paper is thorough and author really seemed to think about the topic; 3: paper is ok, but just scratches the surface; it doesn't appear that the topic was thought about at a deeper level; 1: very little effort appears to be put into the paper; 0: paper is not turned in.

- CR1 – 9/6 – How have your first few weeks of college compared to what you imagined? If they are the same, why, if they are far different, how and why were you off?
- CR2 – 10/2 – What would be a better way to schedule our days? Currently, much of our life is governed by agriculture and industrial standards of a different century. Could we take our current understanding of human biology to create a healthier work/life schedule?
- CR3 – 10/9 – How does time create stress? What are the ways that you can stress proof your life and how it interfaces with time?
- CR4 – 10/23 – Where is your time horizon? How far ahead do you plan? How far into the future do you feel is concrete? How or why might people have different time horizons and how might that create conflict?
- CR5 – 11/6 – Does knowing about problems like our misunderstanding of future selves and planning fallacies help you? Or, does knowledge of a cognitive bias do little to correct the bias?
- CR6 – 11/15 – How do you think about the past? Are your memories organized a particular way, how do you approach remembering things from different parts of your life? What is your first memory? What is your earliest 'vivid' memory?
- CR7 – 11/27 – If we all experience and understand time differently, how are we able to come to a consensus on a moment in time?
  
- **Group Discussion Leader:** Each of you will assemble in small groups and be required to give an in-class presentation on a topic designed to provide greater breadth to an area discussed in class. You should plan on speaking for 40 min. and rely on a Powerpoint presentation (which I will then post on the course website so that it is available to everyone). Each person in the group is expected to speak and so you should allocate the half class in an equitable fashion.
- **Cognitive Biases Primer:** As a class we will research cognitive biases as introduced in the common reading. A primer topic presents information about your topic that takes about 3-5 minutes to read and understand. It takes potentially difficult to understand material and digests it for an educated but not specialized audience. Your primer should include a definition, multiple examples that demonstrate the cognitive bias (with at least one on issues from Blindspot), information on how to avoid or inoculate yourself from the bias, and media to help demonstrate or explain the bias.
- **Addressing Real-Life Temporal Challenge:** In your group, you will create a website that explores and then proposes a change to a current time issue. We will have time during the course to clarify your project goals and what exactly it could be. The main criteria for it – it should address a real life problem. The overall aim of this project is to

bind together the theory, the relevant research findings, your own experiences and insights, the practical applications of what you have learned and put into practice the acquired skills.

- **Experiential Project:** There are two options for this assignment, you can choose between A or B:
- A: Spend a day with your time perspective opposite
  - In this experiential project you will need to find a partner with a different time perspective profile. You will interview this person (or each other if both of you are taking this class), so that by the end of it you should have some idea of the ways in which the two of you differ because of your time perspective. You don't need to be different on everything – in fact, there should be some similarities – but you should be able to identify some key differences that can be explained in light of your different time orientations and spend some time becoming acquainted with the daily life of your partner. In order to accomplish that, each of you must spend a minimum of three hours following the other person around as they go about their usual activities. You may choose to do this at any time during the day, and at any point during the week. You might want to make this choice based on the time perspective on which you're focusing.
  - In your 3-4 page paper describe not only the activities in which you engaged, but also describe your reactions, feelings, and cognitions while “living your partner's life” for that brief period, and discuss how their life differs from yours because of their different time perspective. You could also discuss how this experience changed your opinion of your partner's time perspective, if it shed any light on your own decisions, and whether it might change any of your choices.
- B: Change your time perspective for 5 days
  - This project gives the opportunity to change some element of your time perspective for a week. First, you need to determine the most distinctive, influential aspect of your time perspective profile: the single orientation that most makes you who you are. Then you'll need to decide how you want to alter it.
  - During the five days for which you are engaging in this experience, you should try to alter a variety of facets of your life according to your change in time perspective. You should alter your social interactions, behaviors, choices, cognitions, decision-making processes, interpretations, emotions: in short, everything that your normal time perspective influences.
  - You will need to keep a diary of your experiences and reactions during the project. You should make an entry at least every day, and talk about how your altered time perspective influenced your life that day. When you turn in your 3-4 page paper, you will need to attach this diary to it. Your paper should discuss the elements listed above: both your experiences and your reactions, in regard to each of the ways in which you changed your life for five days in accordance with your new time perspective. Please also reflect on how this experience has shed new light on your normal life, and whether it has convinced you to make any changes in your normal behavior and choices.

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- Engagement
  - Critical Thinking Journal. Over the course of the semester I will ask students to respond to questions in-class. You must be present in order to receive credit. If you will be absent any given day, make sure to send me an e-mail before class.
  - In-Class Participation/Activities/Discussion. I look forward to this being an active class where we discuss ideas and participate in a number of different activities. I will post questionnaires/surveys and other aids to facilitate in class experiments and inquiries, please do your best to fill them out on time.
  - Out of class engagement. In addition to learning, the college experience involves building relationships with peers and faculty. For many students, interactions with faculty take place only in the classroom. For students at small liberal arts colleges, though, students and faculty often meet serendipitously both on and off campus. Thus, by attending guest lectures, meetings and other campus community events you can contribute to our learning experience. Further you can contribute to your peers learning by bringing our attention to relevant new studies or information by posting on twitter or instagram and tagging me (@engagedbrain) or through our course webpage.
  - Comprehension Checks. There will be exams/quizzes in class. The exam questions may include the following question formats: multiple-choice; fill-in-the-blank; matching; true/false; and short-answer sections. Everything that is presented in lecture and in the article/chapter readings will be fair game. Note also, that some of the lecture material will be non-overlapping with the article/textbook, as lectures are designed to augment, or expand upon, the article/chapter readings. Your lowest 10% of scores will be dropped.

\*Check the Assignment Detail page on the course website for detailed information.

Ropes Course Paper	5%
Common Reading Exam	10%
Critical Thought Reflections	10%
Argumentative Essay	20%
Information Literacy (1% each)	3%
Group Presentation	7%
Cognitive Biases Primer	10%
Addressing Real-Life Temporal Challenge with Presentation	20%
Experiential Project	10%
Engagement	5%

The grading standards for the class will be as follows:

A	93-100%	B-	80-82.9%	D+	67-69.9%
A-	90-92.9%	C+	77-79.9%	D	63-66.9%
B+	87-89.9%	C	73-76.9%	D-	60-62.9%
B	83-86.9%	C-	70-72.9%	F	59.9% and below

### **ADDITIONAL COURSE POLICIES\***

#### **Academic Honesty Policy**

Loras College strives to nurture active learners, reflective thinkers, ethical decision makers and responsible contributors. Students are required to take pride in and protect personal intellectual property, by not engaging in acts of academic dishonesty. The institution will hold students accountable for academic dishonesty.

All Loras college students have the responsibility to:

1. Familiarize themselves with Loras's academic honesty policy as stated in the bulletin. The policy can be accessed using the following link:  
<http://inside.loras.edu/Academics/IQ/Documents/Academic%20Honesty%20Policy.doc>
2. Utilize available resources on the Loras College Campus to learn how to comply with the Academic Honesty Policy.
3. Be proactive with a faculty or support services member in addressing questions and clarifications regarding academic dishonesty.

#### **Class Expectations/Decorum**

Free discussion, inquiry, and expression is encouraged in this class. Classroom behavior that interferes with either (a) the instructor's ability to conduct the class or (b) the ability of students to benefit from the instruction is not acceptable. Daily expectations include:

Come to class prepared. This includes careful reading of assignments, watching any pre-posted lectures, being prepared to participate in discussions and completing any assignments that are due.

- Be attentive and responsive in class
- Respect fellow students' opinions and ideas
- Contribute to the class by making topic-specific comments as appropriate
- Offer critiques and alternative ideas in a non-condescending manner
- Provide a fair share of work to group projects and team activities

I hope to encourage, nurture and develop the following characteristics in my students with the design of the course and assignments:

- Personal Accountability
- Resilience/Work ethic/Perseverance/Motivation
- Lifelong learning
- Communication/Teamwork/Interpersonal Skills
- Balance
- Risk Tolerance/Decisiveness
- Attention to detail
- Creativity/Adaptability

This means that if you come to class willing to engage with the material and how we attempt to understand it and are not afraid to try and fail (at first) we should have class where we learn and enjoy the experience.

**Make-up/Late Assignment Policy**

For assignments with more than one week notice, 10% off everyday after initial due date. No assignments accepted after 10 days past due. Can you have an extension? Sure, any extension only costs 10% per day past the deadline. I don't think that I ever include deadlines or assignments that are not included in the syllabus at the beginning of class. As I note below, the deadline is really the last possible time to have the assignment done and really you should aim to have the assignment done a day before the deadline. Lastly, I will note that any assignment turned in before 5:00AM the day after the assigned deadline will not incur the 10% penalty, though some assignments have hard 9:00PM (or other specific) deadlines and are noted in the syllabus (or communicated in another written format), general assignment page. Late work policy does not apply to assignments due in the last week of class or finals week. All assignments in the last week and during finals are only accepted until specified deadline (no late work accepted). For daily assignments (things assigned from one class to the next), there is no late work accepted.

**Laptop Policy**

Please turn off or silence all electronic communication devices during class. I will try to remember to do the same. Feel free to use a computer/tablet for taking notes in class. While I encourage the use of computer in class and try to make purposeful use of them, I do not want you to distract others with your computer usage. There is evidence that off-task computer use affects not only the user but the other students within eye-shot of them, so it took me a long time to consider the data, but it is my hope that everyone remains respectful so that we can harness the power of using computers in class.

**Reasonable Accommodations**

In accordance with federal law, if you have a diagnosed disability or believe that you have a disability that might require reasonable accommodations, please discuss your needs with me at your earliest convenience. Documentation of your disability must be on file with the Lynch Office of Disability Services (LODS), 120 Academic Resource Center (563-588-7134) for you to receive accommodations.

**Disclaimer/Subject-to-Change Statement:**

The schedule on the syllabus is tentative and subject to change without notice as instructor deems necessary. Students are responsible for keeping track of any changes made during the course of the semester, including those given via verbal instruction in class, e-mail, twitter or posted to the course website.

\*Check the Course Information page on the course website for more detailed information

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**Tentative Course Schedule:**

<b>Day</b>	<b>Topic</b>	<b>Reading</b>	<b>Assignment</b>
8/28	Research/Critical Thinking/Logical Fallacies/Civil Discourse	BS CH 1-3	Dialogue and Debate; Ground Rules for Discussion
8/30	Mindbugs	BS CH 4-6	Syllabus Assignment
9/4	Labor Day		Ropes Course Paper Draft Due (9/8)
9/6	IAT	(Singal, 2017)	LILT (9/8) /CR1
9/11	Cognitive Biases	BS CH 7-8	
9/13	Outsmarting the Machine		Common Reading Exam Released
9/18	History of Time-Keeping	(Andrewes, 2006)	
9/20	Reading Research		Virtual Tour and Quiz due 9/23 at 5:00PM
9/25	Research/ Library (SCIE 109)		Ropes Course Final Paper
9/27	Chronobiology & Circadian Rhythm	(Kohyama, 2011)	
10/2	Project / Group Planning		CR2
10/4	Brain and Neural Substrates	(Mauk & Buonomano, 2004)	Common Exam Due
10/9	Time and Stress	(Urbanski, 2011)	
10/11	Development of Time		CR3
10/16	<b>Fall Free Days</b>		

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10/18	Temporal Construal	(Trope & Liberman, 2003)	
10/23	Temporal Metaphor		CR4
10/25	Myopia	(Halfmann, Hedgcock, & Denburg, 2013)	
10/30	PA – Loras General Education		Argumentative Essay
11/1	Registration Advising		
11/6	Time and Art		CR5
11/8	Time and Autobiographical Memory	(Block & Gruber, 2014; Landau, Arndt, Swanson, & Bultmann, 2017)	
11/13	Work Day		
11/15	Time and Sports		CR6
11/20	Planning Fallacy	(Boniwell & Zimbardo, 2004)	Experiential
11/22	<b>Thanksgiving</b>		
11/27	Time in Mental Illness		CR7
11/29	Time and Culture	(Ezzell, 2006; Levine & Norenzayan, 1999)	Temporal Challenge
12/4	Presentations		
12/6	Presentations		
12/11-12/14	<b>Finals</b>		Cognitive Biases Primer

### Cognitive Biases Codex

Buster Benson categorized cognitive biases into 4 major categories and 20 sub-categories.

#### 1. Too much information

- We notice that are primed or repeated – availability heuristic, attention bias, illusory truth effect, mere exposure effect, context effect, cue-dependent forgetting, mood-congruent memory bias, frequency illusion, omission bias
- Certain things stick out in memory – bizarre, funny, interesting, anthropomorphic – bizarreness effect, humor effect, Von Restorff Effect, picture superiority effect, self-relevance effect
- We notice change – anchoring, contrast effect, focusing effect, money illusion, framing effect, distinction bias
- We are drawn to things that confirm our own existing beliefs – confirmation bias, congruence bias, choice-supportive bias, selective perception, observer-expectancy effect, experimenter's bias, observer effect, expectation bias
- We notice flaws in others more easily than flaws in ourselves – bias blind spot, naïve realism

#### 2. Not enough meaning

- We find stories and patterns (even in sparse data) – Confabulation, clustering illusion, neglect of probability, anecdotal fallacy, illusion of validity, recency illusion, gambler's fallacy, hot-hand fallacy, illusory correlation
- We fill in characteristics from stereotypes, generalities, and prior histories when there is not enough information – Group attribution error, stereotyping, functional fixedness, moral just-world hypothesis, authority bias, bandwagon effect, placebo bias
- We imagine things and people we're familiar with or fond of as better than things – halo effect, in-group bias, cross-race effect, cheerleader effect, positivity effect
- We simplify probabilities and numbers to make them easier to think about – mental accounting, normalcy bias, Murphy's law, survivorship bias, zero sum bias
- We think we know what others are thinking – curse of knowledge, illusion of transparency, spotlight effect
- We project our current mindset onto the past and future – hindsight bias, outcome bias, telescoping effect, impact bias, planning fallacy, time-saving bias, projection bias

#### 3. Time and Information Constraints

- We need to be confident and feel important – overconfidence effect, egocentric bias, optimism bias, social desirability bias, third-person effect, forer effect, Barnum effect, Dunning-Kruger Effect, illusory superiority, Lake Wobegone effect, Fundamental Attribution Error
- We favor the immediate over delayed – hyperbolic discounting, appeal to novelty
- We continue things that we've invested any time and energy – sunk cost fallacy, irrational escalation, loss aversion, IKEA effect, processing difficulty effect, zero-risk bias, disposition effect, endowment effect

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- We prefer a lack risk and the status quo – system justification, reverse psychology, decoy effect, social comparison bias, status quo bias
- We prefer simple or more complete information – ambiguity effect, information bias, belief bias, conjunction fallacy, less-is-better effect

## 4. Remembering

- Memory is malleable – misattribution of memory, source confusion, cryptomnesia, false memory, suggestibility, spacing effect
- We form generalities – implicit associations, prejudice, negativity bias, fading affect bias
- We reduce specifics – misinformation effect, duration neglect, serial recall effect, list-length effect, modality effect, memory inhibition, primacy effect, recency effect
- Memory is not memory – levels of processing, testing effect, absent-mindedness, next-in-line effect

**Temporal Challenges**

Timezones

Daylight Savings

Shift Work

Emergency Service Locations

Boredom

Work/Life Balance

Life Expectancy

Propose your own

## References

- Andrewes, W. J. H. (2006). A Chronicle Of Timekeeping. Retrieved June 13, 2017, from <https://www.scientificamerican.com/article/a-chronicle-of-timekeeping-2006-02/>
- Block, R. A., & Gruber, R. P. (2014). Time perception, attention, and memory: A selective review. *Acta Psychologica*, *149*, 129–133. <https://doi.org/10.1016/j.actpsy.2013.11.003>
- Ezzell, C. (2006). Clocking Cultures. Retrieved June 13, 2017, from <https://www.scientificamerican.com/article/clocking-cultures-2006-02/>
- Kohyama, J. (2011). Neurochemical and neuropharmacological aspects of circadian disruptions: an introduction to asynchronization. *Current Neuropharmacology*, *9*(2), 330–341.
- Landau, M. J., Arndt, J., Swanson, T. J., & Bultmann, M. N. (2017). Why life speeds up: Chunking and the passage of autobiographical time. *Self and Identity*, 1–16. <https://doi.org/10.1080/15298868.2017.1308878>
- Levine, R., & Norenzayan, A. (1999). The pace of life in 31 countries. *Journal of Cross-Cultural Psychology*, *30*(2), 178–205.
- Mauk, M. D., & Buonomano, D. V. (2004). The neural basis of temporal processing. *Annual Review of Neuroscience*, *27*(1), 307–340. <https://doi.org/10.1146/annurev.neuro.27.070203.144247>
- Singal, J. (2017). Psychology's Favorite Tool for Measuring Racism Isn't Up to the Job. Retrieved June 16, 2017, from <http://nymag.com/scienceofus/2017/01/psychologys-racism-measuring-tool-isnt-up-to-the-job.html>
- Trope, Y., & Liberman, N. (2003). Temporal construal. *Psychological Review*, *110*(3), 403–421. <https://doi.org/10.1037/0033-295X.110.3.403>
- Urbanski, H. F. (2011). Role of Circadian Neuroendocrine Rhythms in the Control of Behavior and Physiology. *Neuroendocrinology*, *93*(4), 211–222. <https://doi.org/10.1159/000327399>