

## BCS 502: Cognition

### Fall 2014

This required graduate seminar is intended to provide students with breadth of knowledge in the domain of cognition (excluding language). The course is based on classic readings in the field and aims to develop students' formal presentation and discussion skills through instructor-guided, student-led seminars.

### Course Meetings

Mondays, 9:30am – 12pm, Meliora 366

Office hours: by appointment

### Instructors

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### Course Overview

In each session, we will discuss two classic cognition topics. The goal of each class is to understand the theory underlying the topic, past and present, and to evaluate the supporting evidence.

**Reading & Research:** You will become familiar with central ideas in cognitive science by reading and discussing classic articles. The expectation is that you will understand major theories in cognitive science by reading the original articles that catalyzed the theory and a couple of more recent articles that expanded on the theory. You will gain *special* familiarity with *at least* one assigned classic idea by reading assigned articles, conducting your own independent literature review of that topic, and presenting that topic in seminar.

**Presentation:** You will lead at least one, 1-hour seminar on classic topics in cognition. Your goal will be to lead the students to consider a theory and the evidence that supports the theory as well as any points of debate over the theory. Your presentation will be formal, using projector slides. The instructors work with students one-on-one to choose the content of the presentations.

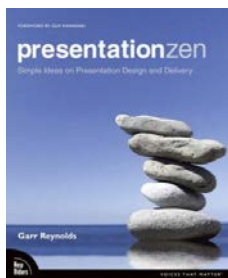
**Participation:** When you are not presenting a seminar, you will be expected to participate in discussion. You will read the assigned classic articles and read or skim the supplementary readings. Importantly, you are required to bring discussion notes to class so that you have a defined discussion agenda. You must speak!

**Examination:** There is one take-home essay final exam. The specific essay question(s) will be given at the time of the exam. The questions will cover only the Primary Readings. The exams are non-cumulative.

### Materials

Classic Readings (listed below) will be provided on Blackboard

Supplementary Readings must be copied, downloaded, or requested from the library on your own (plan ahead)



### **Required Text:**

Reynolds, G. (2008). *Presentation Zen*. Berkeley: New Riders Press.

## **Specific Requirements**

### **Reading & Research Period (first two class meetings):**

The first two weeks of the semester is your time to research and read about your assigned topics, prepare your first presentation, and meet one-on-one with your instructor consultant to get feedback for your first presentation.

You must **set up an individual meeting** with your instructor consultant during those two weeks.

You must create a **storyboard** to show the planned content of your first presentation to your instructor consultant. You will learn about storyboards by reading *Presentation Zen*.

### **Presentation, 1-hour (50%):**

Your presentation topics will be assigned on the first day of class. You will be assigned an instructor as your one-on-one consultant for each presentation. You will be assigned a set of articles (the Primary and Secondary articles on the syllabus) for each presentation. Those readings will serve as a launch pad for your research into that topic. To prepare your presentation, you will research your topic and put together a coherent 1-hour narrative of the theory and evidence: past and present.

You are required to present the Classic articles, Supplementary articles, and independently discovered research articles. Any independently discovered primary research that you include in your presentation **must have been cited at least 50 times** according to the ISI Web of Science. The purpose of this rule is to ensure that we cover material that stands the test of time and that is embraced by the scientific community.

To find ISI Web of Science, go to the River Campus Library homepage and click the tab "Databases" then type in "ISI". ISI Web of Science will be an option. Further advice about using ISI Web of Science is included at the end of this syllabus.

The presentation will be **1 hour** including questions (usually about 40 slides); you are responsible for sustaining the discussion for 1 hour. The presentation is formal: digital slides created in Powerpoint or Keynote (etc.) must be used. The content of your presentation is of primary importance but, you will also be evaluated on the style and clarity of your slides. Style and clarity will be assessed following the guidelines of *Presentation Zen*. Submit your slides to the instructor in pdf format for posting on BlackBoard.

Address the following types of questions in your presentations:

- a. **Background**: where did the central question/idea of the article come from?
- b. **Method**: what method(s) are considered valid/invalid, ground-breaking/standard?
- c. **Observations**: what did they claim to measure, what was the actual dependent measure? What did they find?
- d. **Conclusion**: what was the main conclusion, what logic and/or assumptions were used to reach that conclusion, and was the conclusion convincing?
- e. **News**: what was new or important about the findings?
- f. **Implications**: what were/are the broader implications of this article?
- g. **Advances**: what has changed in terms of theory or methods from the classic to the more recent articles?

### **Participation (25%):**

Participate actively in class discussions when you are not the presenter. You are required to read the classic articles and read or skim the supplementary readings. You are expected to come to class with a discussion agenda that you developed while reading the assigned articles. You must have written discussion notes for each class – they can be brief but, they should represent ideas and questions for discussion. We might collect your notes in class. Attendance is required. You might be called on to speak during the discussion so be sure to plan a question or comment. Note that your contributions

should be substantive (i.e., not clarification questions). The quality of your participation will also be evaluated.

If you feel that you will not have enough to say in class after reading the Primary readings, you must read the Secondary readings.

We assume that all students have prior exposure to cognitive science and are prepared to engage in this discussion-driven course. If you feel that you do not have an adequate background in cognition to understand the readings, you must do your own additional research on the topic to achieve an understanding. We recommend the textbook *Cognition: The Thinking Animal* by Daniel T. Willingham (Prentice Hall).

**Final Exam (25%):**

There will be a take-home final exam. You will have 48 hours to complete the exam. The exam will ask you to answer essay questions about the Classic Readings. The exam will require that you have access to the internet, library databases, and journal articles. The required length of the essay will be **6 pages** (within 200 words) excluding a references page, double-spaced, 1-inch margins, 11pt Arial font, APA format for references.

**Schedule of Topics & Primary Readings** (*the full schedule including Secondary Readings is attached*)

Topic	Date	Classic Readings (Required for All Students)
<b>Introduction &amp; Organization</b>	<b>9/8</b>	Gardner, H. (1985). Psychology: The wedding of methods to substance. In H. Gardner, <i>The Mind's New Science: A history of the cognitive revolution</i> , pp. 89-137. Basic Books, New York.
<b>Prep; Individual Meetings (no class)</b>	<b>9/15</b>	<i>Reynolds, G. (2008). Presentation Zen. Berkeley: New Riders Press.</i>
<b>Representations</b>	<b>9/22</b>	Watson, J. B. (1913). Psychology as the behaviorist views it. <i>Psychological review</i> , 20(2), 158. Tolman, E.C. (1948). Cognitive maps in rats and men. <i>Psychological Review</i> , 55, 189-208.
<b>Mental Processes</b>		Donders, F. C. (1898). On the speed of mental processes, <i>Acta Psychologica</i> 30, 412-431. Sternberg, S. (1966). Memory Scanning: Mental Processes Revealed by Reaction-Time Experiments. <i>American Scientist</i> , 57, 421-457. Kutas, M., Donchin, E., & McCarthy, G. (1977). Augmenting mental chronometry - P300 as a measure of stimulus evaluation time. <i>Science</i> 197, 792-795.
<b>Attention</b>	<b>9/29</b>	Posner MI, Snyder CRR, Davidson BJ. (1980). Attention and the detection of signals. <i>J. Exp. Psychology: General</i> , 109, 160-74 Corbetta M, Akbudak E, Conturo TE, Snyder AZ, Ollinger JM, et al. (1998). A common network of functional areas for attention and eye movements. <i>Neuron</i> , 21, 761-73 Treisman, A. & Gelade, G. (1980) A feature integration theory of attention. <i>Cognitive Psychology</i> , 12, 97-136. Friedman-Hill, S.R., Robertson, L.C., and Treisman, A. (1995). Parietal contributions to visual feature binding: evidence from a patient with bilateral lesions. <i>Science</i> 269, 853-855.
<b>Objects</b>	<b>10/6</b>	Spelke, E. S. (1990). Principles of object perception. <i>Cognitive Science</i> , 14, 29-56. Lettvin, J. Y., Maturana, H. R., McCulloch, W. S., & Pitts, W. H. (1959). What the frog's eye tells the frog's brain. <i>Proceedings of the IRE</i> , 47(11), 1940-1951. Heider, F., & Simmel, M. (1944). An experimental study of apparent behavior. <i>American Journal of Psychology</i> , 57, 243 - 249. Johansson, G. (1973). Visual perception of biological motion and a model for its analysis. <i>Perception &amp; Psychophysics</i> , 14, 201-211.
<b>10/13</b>		<b>No class (Fall Break)</b>

<b>Imagery &amp; Dimensions</b>	<b>10/20</b>	Shepard, R., & Metzler, J. (1971). Mental rotation of three dimensional objects. <i>Science</i> , 171(972), 701-3.
		Pylyshyn, Z. (1981). The Imagery Debate: Analogue Media versus Tacit Knowledge. <i>Psychological Review</i> , 88(1), 16-45.
		Meck, W. H., & Church, R. M. (1983). A mode control model of counting and timing processes. <i>Journal of Experimental Psychology: Animal Behavior Processes</i> , 9(3), 320.  Zorzi M, Priftis K, Umiltà C (2002). Brain damage: Neglect disrupts the mental number line. <i>Nature</i> 417: 138-139.

<b>Memory</b>	<b>10/27</b>	Scoville, W. B., & Milner, B. (1957). Loss of recent memory after bilateral hippocampal lesions. <i>J. Neurol. Neurosurg. Psychiat.</i> , 20, 11-21.
		Vargha-Khadem, F., Gadian, D. G., Watkins, K. E., Connelly, A., Van Paesschen, W., & Mishkin, M. (1997). Differential effects of early hippocampal pathology on episodic and semantic memory. <i>Science</i> , 277, 376-380.
		Roediger, H., & McDermott, K. (1995). Creating false memories: Remembering words not presented in lists. <i>Journal of Experimental Psychology: Learning, Memory, &amp; Cognition</i> , 21(4), 803-814.
		Loftus, E. F. (1975). Leading questions and eyewitness report. <i>Cognitive Psychology</i> , 7(4), 560-572.
	<b>11/3</b>	Baddeley, A. D., & Hitch, G. (1974). Working memory. <i>Psychology of learning and motivation</i> , 8, 47-89.
		D'Esposito, M., Detre, J. A., Alsop, D. C., Shin, R. K., Atlas, S., & Grossman, M. (1995). The neural basis of the central executive system of working memory. <i>Nature</i> , 378(6554), 279-281.
		Collins, A. M., & Loftus, E. F. (1975). A spreading-activation theory of semantic processing. <i>Psychological Review</i> , 82(6), 407-428.  Graf, P., Shimamura, A. P., and Squire, L. R. (1985). Priming across modalities and priming across category levels: Extending the domain of preserved function in amnesia. <i>Journal of Experimental Psychology</i> , 11(2), 386-396.

<b>Categorization &amp; Concepts</b>	<b>11/10</b>	Rosch, E., Mervis, C.B., Gray, W., Johnson, D., & Boyes-Braem, P. (1976). Basic Objects in Natural Categories. <i>Cognitive Psychology</i> , 8(3), 382-439.
		Warrington, E.K., & Shallice, T. (1984). Category specific semantic impairments. <i>Brain</i> , 107, 829-853.

Insight & Introspection	11/17	Duncker, K. (1945). On problem solving. Psychological Monographs, 58(5), 1-113.
		Brown, R., & McNeil, D. (1966). The "tip of the tongue" phenomenon. Journal of Verbal Learning and Verbal Behavior, 5, 326-337.
		Nelson, T. O. (1990). Metamemory: A theoretical framework and new findings. Psychology of learning and motivation, 26, 125-173.
11/24 No class (Thanksgiving)		
Logic	12/1	Wason, P. C., & Shapiro, D. (1971). Natural and contrived experience in a reasoning problem. Quarterly Journal of Experimental Psychology, 23, 63-71.
		Tversky, A. & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. Science, 185, 1124-1131.
Culture & Cognition	12/8	Heider, E. R., & Olivier, D. C. (1972). The structure of the color space in naming and memory for two languages. Cognitive Psychology, 3(2), 337-354.
		Davidoff, J., Davies, I., and Roberson, D. (1999). Colour categories in a Stone-Age tribe. Nature, 398, 203-204.
		Lakoff, G., & Johnson, M. (1980). The metaphorical structure of the human conceptual system. Cognitive Science, 4, 195-208.
Final: Take-home Essay, 48 hours		

**Tip****How to do a cited reference search:**

Cited reference searching enables you to find journal articles that have cited another article. Through a cited reference search, you can discover how a known idea or innovation has been confirmed, rejected, applied, improved, or extended.

Access ISI Web of Science from the UR Library page, under the Databases tab:

<http://www.library.rochester.edu/> (enter **ISI Web of Science** in search), Select **Web of Science**.

To perform a cited reference search on your CLASSIC ARTICLE in ISI Web of Science:

1. Click **Cited Reference Search** from the top of the page.
2. Enter values in the search fields on the Cited Reference Search page (author, journal, year) from your classic article. You have to find the abbreviate journal name in the “**journal abbreviation list**” below the Cited Work field.
3. Click **Search** to display the Cited Reference Selection page, which lists the articles that seem to match your search criteria.
4. On the Cited Reference Selection page, select references that seem to match the article you entered by clicking the checkboxes.
6. Click **Finish Search** to retrieve the articles that cite that article.
7. On the panel to the left, you can **Refine** your search under **Source Titles** by selecting recognized journals. This will result in a list of articles in “good” journals that have cited your classic article. Choose one of them to be your second, more recent article.

Search Example:

To search for articles that have cited the following article:

Nash, J. F. (1950). Equilibrium in n-person games. Proceedings of the National Academy of Sciences, 36(1), 48-49.

1. Click **Cited Reference Search**.
2. On the Cited Reference Search page, enter Nash J\* in the Cited Author field. It is advisable to truncate after the first initial using the asterisk wildcard character in case the author uses a second given name or initial.
3. Enter P NATL ACAD SCI USA in the Cited Work field (which was retrieved from the **journal abbreviation list**). Enter 1950 in the Cited Year field.
4. Click **Search**. The Cited Reference Selection page, which lists the references found by the lookup, is displayed.
5. Click checkboxes to select all the references that match the article by J Nash that you are searching.
6. Click **Search**.
7. The Cited Reference Search Results -- Summary page is displayed. These are the articles that cite the article by J Nash listed above.

Topic	Date		Classic Readings (Required for All Students)	Presenter	More Modern Readings (Required for Presenters, Recommended for All Students)
Introduction & Organization	9/8		Gardner, H. (1985). Psychology: The wedding of methods to substance. In H. Gardner, The Mind's New Science: A history of the cognitive revolution, pp. 89-137. Basic Books, New York.		
Prep: Individual Meetings (no class)	9/15		Reynolds, G. (2008). <i>Presentation Zen</i> . Berkeley: New Riders Press.		
Representations					
			Watson, J. B. (1913). Psychology as the behaviorist views it. <i>Psychological review</i> , 20(2), 158.	(I)	a) Chomsky, N. (1959). A Review of B. F. Skinner's Verbal Behavior. <i>Language</i> , 35(1), 26-58.
			Tolman, E.C. (1948). Cognitive maps in rats and men. <i>Psychological Review</i> , 55, 189-208.		
	9/22		Donders, F. C. (1898). On the speed of mental processes, <i>Acta Psychologica</i> 30, 412-431.		a) Stroop, J. R. (1935). Studies of interference in serial verbal reactions. <i>Journal of Experimental Psychology</i> , 18, 643- 662.
			Sternberg, S. (1966). Memory Scanning: Mental Processes Revealed by Reaction-Time Experiments. <i>American Scientist</i> , 57, 421-457.		b) Paschler, H. (1994). Dual-task interference in simple tasks: Data and theory. <i>Psychological Bulletin</i> , 116(2), 220-244.
Mental Processes			Kulas, M., Donchin, E., & McCarthy, G. (1977). Augmenting mental chronometry- P300 as a measure of stimulus evaluation time. <i>Science</i> 197, 792-795.	(b)	
			Posner MI, Snyder CRR, Davidson BJ. (1980). Attention and the detection of signals. <i>J. Exp. Psychology: General</i> , 109, 160-74	(I)	a) O'Craven, K., Downing, P., & Kanwisher, N. (1999). fMRI evidence for objects as the units of attentional selection. <i>Nature</i> , 401(6753), 584-587.
			Corbetta M, Akbudak E, Conturo TE, Snyder AZ, Ollinger JM, et al. (1998). A common network of functional areas for attention and eye movements. <i>Neuron</i> , 21, 761-73		
Attention	9/29		Treisman, A. & Gelade, G. (1980) A feature integration theory of attention. <i>Cognitive Psychology</i> , 12, 97-136.		a) Baylis, G. C., & Driver, J. (1993). Visual attention and objects: Evidence for hierarchical coding of location. <i>JEP: HPP</i> , 19(3), 451-470.
			Friedman-Hill, S.R., Robertson, L.C., and Treisman, A. (1995). Parietal contributions to visual feature binding: evidence from a patient with bilateral lesions. <i>Science</i> 269, 853-855.	(b)	b) Arguin, M., Cavanagh, P., Joannette, Y. (1994). Visual feature integration with an attention deficit. <i>Brain Cogn</i> , 24: 44-56.
Objects	10/6		Spekreijse, E. S. (1990). Principles of object perception. <i>Cognitive Science</i> , 14, 29-56.	(I)	a) Cavanagh, P. 2011. Visual Cognition. <i>Vision Research</i> , 51, 1538-1551.
			Lettyvin, J. Y., Maturana, H. R., McCulloch, W. S., & Pitts, W. H. (1959). What the frog's eye tells the frog's brain. <i>Proceedings of the IRE</i> , 47(11), 1940-1951.		
			Heider, F., & Simmel, M. (1944). An experimental study of apparent behavior. <i>American Journal of Psychology</i> , 57, 243 - 249.		a) Allison, T., Puce, A., McCarthy, G. (2000). Social perception from visual cues: role of the STS region. <i>Trends in Cognitive Sciences</i> , 4(7), 267-278.
			Johansson, G. (1973). Visual perception of biological motion and a model for its analysis. <i>Perception &amp; Psychophysics</i> , 14, 201-211.	(b)	b) Wheatley, T., Milleville, S. C., & Martin, A. (2007). Understanding animate agents: Distinct roles for the social network and mirror system. <i>Psychological Science</i> , 18, 469-474.
10/13 No class (Fall Break)					
Imagery & Dimensions	10/20		Shepard, R., & Metzler, J. (1971). Mental rotation of three dimensional objects. <i>Science</i> , 171(972), 701-3.	(b)	a) Kosslyn, S.M. (1981). The Medium and the Message in Mental Imagery. A Theory. <i>Psychological Review</i> , 88(1), 46-66.
			Pylyshyn, Z. (1981). The Imagery Debate: Analogue Media versus Tacit Knowledge. <i>Psychological Review</i> , 88(1), 16-45.		b) Kerr, N.H. (1983). The role of vision in "visual imagery" experiments: evidence from the congenitally blind. <i>Journal of Experimental Psychology: General</i> , 112, 265-77.
			Meek, W. H., & Church, R. M. (1983). A mode control model of counting and timing processes. <i>Journal of Experimental Psychology: Animal Behavior Processes</i> , 9(3), 320.		c) Farah, M.J., Hammond, K.M., Levine, D.N., and Calvanio, R. (1988). Visual and spatial mental imagery: Dissociable systems of representation. <i>Cognitive Psychology</i> , 20, 439-462.
			Zorzi M, Piffis K, Umiltà C (2002). Brain damage: Neglect disrupts the mental number line. <i>Nature</i> 417: 138-139.	(I)	a) Dehaene, S., Bossini, S., & Giraux, P. (1993). The mental representation of parity and number magnitude. <i>Journal of Experimental Psychology: General</i> , 122, 371-396.
					b) Gallistel, C. R. (1989). The representation of space, time and number. <i>Annual Review of Psychology</i> , 40, 155-189.



Topic	Date	Classic Readings (Required for All Students)	Presenter	More Modern Readings (Required for Presenters, Recommended for All Students)
Memory		Scoville, W. B., & Milner, B. (1957). Loss of recent memory after bilateral hippocampal lesions. <i>J. Neurol. Neurosurg. Psychiat.</i> , 20, 11-21.		a) Tulving, E. (1985). How Many Memory Systems are there? <i>American Psychologist</i> , 40, 385-398.
	10/27	Varley-Khadem, F., Gadian, D. G., Watkins, K. E., Connely, A., Van Paesschen, W., & Mishkin, M. (1997). Differential effects of early hippocampal pathology on episodic and semantic memory. <i>Science</i> , 277, 376-380.	(b)	b) Howe & Courage. (1993). On resolving the enigma of infantile amnesia. <i>Psychological Bulletin</i> , 113(2), 305-326.
		Roeigger, H., & McDermott, K. (1995). Creating false memories: Remembering words not presented in lists. <i>Journal of Experimental Psychology: Learning, Memory, &amp; Cognition</i> , 21(4), 803-814.	(j)	a) Roeigger, H.L. (2000). Why retrieval is the key process to understanding human memory. In Tulving (ed) <i>Memory, Consciousness, and the Brain: The Tallium Conference</i> , pp 52-75. Philadelphia: Psychology Press.
Memory		Loftus, E. F. (1975). Leading questions and eyewitness report. <i>Cognitive Psychology</i> , 7(4), 560-572.		b) Craik, F. & Tulving, E. (1975). Depth of processing and the retention of words in episodic memory. <i>Journal of Experimental Psychology: General</i> , 104, 268-294.
	11/3	Baddeley, A. D., & Hitch, G. (1974). Working memory. <i>Psychology of learning and motivation</i> , 8, 47-89.	(b)	a) Shallice, T., & Warrington, E. K. (1970). Independent functioning of verbal memory stores: A neuropsychological study. <i>Quarterly Journal of Experimental Psychology</i> , 22(2), 261-273.
		D'Esposito, M., Detre, J. A., Alsop, D. C., Shin, R. K., Altes, S., & Grossman, M. (1995). The neural basis of the central executive system of working memory. <i>Nature</i> , 378(6554), 279-281.		b) Paulesu, E.; Ffith, C. D., & Frackowiak, R. S. (1993). The neural correlates of the verbal component of working memory.
Categorization & Concepts	11/10	Collins, A. M., & Loftus, E. F. (1975). A spreading-activation theory of semantic processing. <i>Psychological Review</i> , 82(6), 407-428.	(b)	a) Collins, A. M., & Quillian, M.R. (1969). Retrieval time from semantic memory. <i>Journal of Verbal Learning and Verbal Behavior</i> , 8, 240-247.
		Graf, P., Shimamura, A. P., and Squire, L. R. (1985). Priming across modalities and priming across category levels: Extending the domain of preserved function in amnesia. <i>Journal of Experimental Psychology</i> , 11(2), 386-396.		b) Ratcliff, R. & McKoon, G. (1988). Does activation really spread? <i>Psychological Review</i> , 88(5), 454-462.
		Rosch, E., Mervis, C.B., Gray, W., Johnson, D., & Boyes-Braem, P. (1976). Basic Objects in Natural Categories. <i>Cognitive Psychology</i> , 8(3), 382-439.	(b)	c) McNamara, T.P. (1994). Priming and theories of memory: A reply to Ratcliff and McKoon. <i>Psychological Review</i> , 101(1), 185-187.
Insight & Introspection	11/17	Warrington, E.K., & Shallice, T. (1984). Category specific semantic impairments. <i>Brain</i> , 107, 829-853.	(b)	a) Murphy, G.L., & Smith, E. (1982). Basic level superiority in picture categorization. <i>Journal of Verbal Learning and Verbal Behavior</i> , 21, 1-20.
		Dunker, K. (1945). On problem solving. <i>Psychological Monographs</i> , 58(5), 1-113.	(j)	b) Mandler, J. M. (1982). How to build a baby II: Conceptual primitives. <i>Psychological Review</i> , 99(4), 587-604.
		Brown, R., & McNeil, D. (1966). The "tip of the tongue" phenomenon. <i>Journal of Verbal Learning and Verbal Behavior</i> , 5, 326-337.	(j)	a) Moscovitch, M., Winocur, G., & Behrmann, M. (1997). What is special about face recognition? Nineteen experiments on a person with visual object agnosia and dyslexia but normal face recognition. <i>Journal of Cognitive Neuroscience</i> , 9, 555-604.
No class (Thanksgiving)				
Logic	11/24	Nelson, T. O. (1990). Metamemory: A theoretical framework and new findings. <i>Psychology of learning and motivation</i> , 26, 125-173.		b) Cattamazza, A., & Shelton, J. R. (1998). Domain specific knowledge systems in the brain: The animate – inanimate distinction. <i>Journal of Cognitive Neuroscience</i> , 10, 1 – 34.
	12/1	Wason, P. C., & Shapiro, D. (1971). Natural and contrived experience in a reasoning problem. <i>Quarterly Journal of Experimental Psychology</i> , 23, 63-71.	(j)	a) Ericsson, K.A., Lehmann, A.C. (1996). Expert and exceptional performance. <i>Annual Review of Psychology</i> , 47, 273-305.
		Tversky, A. & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. <i>Science</i> , 185, 1124-1131.	(j)	b) Mandler, J. M. (1982). How to build a baby II: Conceptual primitives. <i>Psychological Review</i> , 99(4), 587-604.
Culture & Cognition	12/8	Heider, E. R., & Oliver, D. C. (1972). The structure of the color space in naming and memory for two languages. <i>Cognitive Psychology</i> , 3(2), 337-354.	(j)	a) Cosmides, L. (1989). The logic of social exchange. <i>Cognition</i> , 31, 187-276.
		Davidoff, J., Davies, I., and Roberson, D. (1999). Colour categories in a Stone-Age tribe. <i>Nature</i> , 398, 203-204.		b) Kaiser, M., Jorides, J., Alexander, J. (1986). Intuitive reasoning about abstract and familiar physics problems. <i>Memory &amp; Cognition</i> , 14, 308-312.
		Lakoff, G., & Johnson, M. (1980). The metaphorical structure of the human conceptual system. <i>Cognitive Science</i> , 4, 195-208.	(b)	a) Gigerenzer, G. (1991). How to make cognitive illusions disappear: Beyond heuristics and biases. In W. Stroebe & M. Hewstone (Eds.), <i>European review of social psychology</i> (Vol. 2, pp. 83-115). Chichester, England: Wiley.
Final: Take-home Essay, 48 hours to complete				