References

Abensour, M. (2007). Against the sovereignty of philosophy over politics: Arendt's reading of Plato's cave allegory. *Social Research, 74*(4), 955–982.

Alpers, S. (1983). *The art of describing: Dutch art in the seventeenth century*. Chicago: The University of Chicago Press.

Alpert, B. O. (2013). The meaning of the dots on the horses of Pech Merle. *Art, 2*, 476–490.

Arendt, H. (1963). *Eichmann in Jerusalem: A report on the banality of evil*. New York: Viking Press.

Arendt, H. (1990). Philosophy and politics. *Social Research, 57*(1), 73–103.

Bartlett, F. C. (1932). *Remembering: A study in experimental and social psychology*. Cambridge: Cambridge University Press.

Belkin, N. J., Oddy, R. N., & Brooks, H. M. (1982). ASK for information retrieval: Part I. Background and theory. *Journal of Documentation, 38*(2), 61–71.

Berti, A., & Frassinetti, F. (2000). When far becomes near: Remapping of space by tool use. *Journal of Cognitive Neuroscience, 12*(3), 415–420.

Bouricius, L. G. N. (1925). Anthony van Leeuwenhoek de Delftsche natuuronderzoeker (1632-1723). *De Fabrieksbode, 44*(10), Offprint 3pp.

Brookes, B. C. (1980). The foundations of information science. Part I. Philosophical aspects. *Journal of Information Science, 2*, 125–133.

Brown, L. (2005). *Introduction. In Plato. Protagoras and Meno* (pp. xi–xxiv). London: Penguin Books.

Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge: Harvard University Press.

Cesarani, D. (2016). *Final solution: The fate of Jews 1933–1945*. New York: St. Martin's Press.

Chappell, S. G. (2013). Plato on knowledge in the *Theaetetus*. In: E. N. Zalta (Ed.). *The Stanford Encyclopedia of philosophy* (Winter 2013 Edition). Retrieved August 11, 2017, from https://plato.stanford.edu/archives/win2013/entries/plato-theaetetus/

Chatman, E. A. (1990). Alienation theory: Application of a conceptual framework to a study of information among janitors. *Research Quarterly, 29*(3), 355–368.

Chatman, E. A. (1996). The impoverished life-world of outsiders. *Journal of the American Society for Information Science, 47*(3), 193–206.

Chatman, E. A. (1999). A theory of life in the round. *Journal of the American Society for Information Science, 50*(3), 207–217.

Chatman, E. A. (2000). Framing social life in theory and research. *The New Review of Information Behaviour Research, 1*, 3–17.

Clayton, N. S., Bussey, T. J., & Dickinson, A. (2003). Can animals recall the past and plan for the future? *Nature Reviews Neuroscience, 4*(8), 685–691.

C. Cole, *The Consciousness' Drive*, https://doi.org/10.1007/978-3-319-92457-1

Clayton, N. S., & Dickinson, A. (1998). Episodic-like memory during cache recovery by scrub jays. *Nature, 395*(6699), 272–274.

Clottes, J., & Lewis-Williams, J. D. (1998). *The shamans of prehistory: Trance and magic in the painted caves*. New York: Harry N. Abrams.

Cole, C. (1999). The activity of understanding a problem during interaction with an 'enabling' IR system. *Journal of the American Society for Information Science, 50*(6), 544–552.

Cole, C. (2012). *Information need: A theory connecting information search to knowledge formation*. Medford: Information Today.

Cole, C., Beheshti, J., & Abuhimed, D. (2017). A relevance model for middle school students seeking information for an inquiry-based class history project. *Information Processing and Management, 53*(2), 530–546.

Cole, C., Beheshti, J., Abuhimed, D., & Lamoureux, I. (2015). The end game in Kuhlthau's ISP model: Knowledge construction for grade eight students researching an inquiry-based history project. *Journal of the Association for Information Science and Technology, 66*(11), 2249–2266.

Commins, B., & Lockwood, J. (1979). The effects of status differences, favored treatment, and equity on intergroup comparisons. *European Journal Social Psychology, 9*, 281–289.

Coolidge, F. L., & Wynn, T. (2009). *The rise of Homo sapiens: The evolution of modern thinking*. Chichester: Wiley-Blackwell.

de Kort, S. R., Dickinson, A., & Clayton, N. S. (2005). Retrospective cognition by food-caching western scrub-jays. *Learning and Motivation, 36*(2), 159–176.

Dervin, B. (1998). Sense-making theory and practice: An overview of user interests in knowledge seeking and use. *Journal of Knowledge Management, 2*(2), 36–46.

Dervin, B., & Nilan, M. (1986). Information needs and uses. *Annual Review of Information Science and Technology, 21*, 3–33.

Dobell, C. (1958). *Antony van Leeuwenhoek and his little animals*. New York: Russell & Russell.

Donald, M. (1991). *Origins of the modern mind: Three stages in the evolution of culture and cognition*. Cambridge: Harvard University Press.

Donald, M. (1998). Hominid enculturation and cognitive evolution. In C. Renfrew & C. Scarre (Eds.), *Cognition and material culture: The archaeology of symbolic storage* (pp. 7–17). Cambridge: The McDonald Institute for Archaeological Research.

Edelman, G. M. (1989). *The remembered present: A biological theory of consciousness*. New York: Basic Books.

Eliot, T. S. (1943). Little Gidding. In *Four quartets* (pp. 31–39). New York: Harcourt Brace.

Ford, B. J. (1991). *The Leeuwenhoek legacy*. Bristol: Biopress.

Gallup, G. G., Jr. (1970). Chimpanzees: Self-recognition. *Science, 167*(33914), 86–87.

Geertz, C. (1966). Religion as a culture system. In M. Banton (Ed.), *Anthropological approaches to the study of religion* (pp. 1–46). London: Tavistock.

Gettier, E. (1963). Is justified true belief knowledge? *Analysis, 23*, 121–123.

Gibbon, E. (1776–1789). *The history of the decline and fall of the Roman Empire* (6 Vols). London: Strahan and Cadel.

Harari, Y. N. (2015). *Sapiens: A brief history of humankind*. New York: Harper Collins.

Harari, Y. N. (2016). *Homo dues: A brief history of tomorrow*. Toronto: Signal.

Harnad, S. (1987a). Category induction and representation. In S. Harnad (Ed.), *Categorical perception: The groundwork of cognition* (pp. 535–565). Cambridge: Cambridge University Press.

Harnad, S. (1987b). Psychophysical and cognitive aspects of categorical perception: A critical overview. In S. Harnad (Ed.), *Categorical perception: The groundwork of cognition* (pp. 1–25). Cambridge: Cambridge University Press.

Heather, P. (2005). *The fall of the Roman Empire: A new history*. London: MacMillan.

Heidegger, M., & Sadler, T. (2002). *The essence of human truth: On Plato's cave allegory* (T. Sadler, Trans.). London: Continuum.

Hjorland, B. (2017). Theory development in the information sciences. Review of the book by D. H. Sonnenwald. *Journal of the Association for Information Science and Technology, 68*(7), 1796–1801.
Hodges, A. (1983). *Alan Turing: The enigma*. New York: Simon and Shuster.
Hoffmann, P. (2008). *Stauffenberg: A family history, 1950–1944*. Montreal: McGill-Queen's University Press.
Huerta, R. D. (2003). *Giants of delft: Johannes Vermeer and the natural philosophers: The parallel search for knowledge during the age of discovery*. Lewisburg: Bucknell University Press.
Jonas, E., Greenberg, J., & Frey, D. (2003). Connecting terror management and dissonance theory: Evidence that mortality salience increases the preference for supporting information after decisions. *Personality and Social Psychology Bulletin, 29*, 1181–1189.
Kuhn, T. (1962). *The structure of scientific revolutions*. Chicago: University of Chicago Press.
Lewis-Williams, D. (2002). *The mind in the cave: Consciousness and the origins of art*. New York: Thames and Hudson.
Lewis-Williams, D., & Pearce, D. (2005). *Inside the Neolithic mind: Consciousness, cosmos and the realm of the gods*. New York: Thames & Hudson.
Lohr, S. (2017, December 1). A.I. Today ay underwhelm, but before long it may overtake expectations. *The New York Times*, B3.
MacKay, D. M. (1969). *Information, mechanism and meaning*. Boston: MIT Press.
Malafouris, L. (2009). Between brains, bodies and things: Tectonoetic awareness and the extended self. In C. Renfrew, C. Frith, & L. Malafouris (Eds.), *The sapient mind: Archaeology meets neuroscience* (pp. 89–104). Oxford: Oxford University Press.
Mann, C. C. (2011). The birth of religion. *National Geographic*, 219(6), 34–59. Retrieved December 2, 2015, from http://ngm.nationalgeographic.com/2011/06/gobekli-tepe/mann-text
McLeish, K. (1996). Editor's introduction. In R. Graves (Au.), *The Greek myths* (pp. 11–20). London: The Folio Society.
Metz, C. (2017, December 1). In Toronto, developing a new way for machines to see. *The New York Times*, B3.
Minsky, M. (1975). A framework for representing knowledge. In P. H. Winston (Ed.), *The psychology of computer vision* (pp. 211–277). New York: McGraw-Hill.
Minsky, M. (1986). *The society of mind*. New York: Simon & Schuster.
Mithen, S. (1996). *The prehistory of the mind: The cognitive origins of art, religions and science*. London: Thames and Hudson.
Montias, J. M. (1989). *Vermeer and his milieu: A web of social history*. Princeton: Princeton University Press.
Nriagu, J. O. (1983). *Lead and lead poisoning in antiquity*. New York: Wiley.
Orwell, G. (1961). 1984. New York: New American Library.
Oxford Dictionary of Current English. (1985). (R. E. Allen, Ed.). Oxford: Oxford University Press.
Pasher, Y. (2014). *Holocaust versus Wehrmacht: How Hitler's 'final solution' undermined the German war effort*. Lawrence: University Press of Kansas.
Penrose, R. (1997). *The large, the small and the human mind. With A. Shimony, N. Cartwright, & S. Hawking*. M. Longair (Ed.). Cambridge: Cambridge University Press.
Plato. (2005). *Protagoras and Meno* (A. Beresford, Trans.). London: Penguin Books.
Plato. (2014). *Theaetetus* (J. McDowell, Trans.). Oxford: Oxford University Press.
Popper, K. (1967). Knowledge: Subjective versus objective. In D. Miller (Ed.), *Popper selections* (pp. 58–77). Princeton: Princeton University Press.
Popper, K. (1975). *Objective knowledge: An evolutionary approach*. Oxford: Clarendon Press.
Pritchard, D., & Turri, J. (2014). The value of knowledge. In Edward N. Zalta (ed.), *The Stanford encyclopedia of philosophy* (Spring 2014 Edition). Retrieved August 16, 2017, from https://plato.stanford.edu/archives/spr2014/entries/knowledge-value/
Rochat, P. (2003). Five levels of self-awareness as they unfold early in life. *Consciousness and Cognition, 12*(4), 717–731.

Rosch, E. (1973). On the internal structure of perceptual and semantic categories. In T. E. Moore (Ed.), *Cognitive development and the acquisition of language* (pp. 111–144). New York: Academic.

Savolainen, R. (2017). Information need as trigger and driver of information seeking: A conceptual analysis. *Aslib Journal of Information Management, 69*(1), 2–21.

Scarborough, J. (1984). The myth of lead poisoning among the romans: An essay review. *Journal of the History of Medicine and Allied Sciences, 39*(4), 469–475.

Schacter, D., & Addis, D. (2007). The cognitive neuroscience of constructive memory: Remembering the past and imagining the future. *Philosophical Transactions of the Royal Society of London Series B, 362*(1481), 773–786.

Schacter, D. L., Benoit, R. G., & Szpunar, K. K. (2017). Episodic future thinking: Mechanisms and functions. *Current Opinion in Behavioral Sciences, 17*, 41–50.

Sherif, M. (1966). *In common predicament: Social psychology of intergroup conflict and cooperation*. New York: Houghton Mifflin.

Shreeve, J. (2015). Mystery man. *National Geographic, 228*(4), 30–57.

Siegel, S. (2006). Which properties are represented in perception? In T. Gendler & J. Hawthorne (Eds.), *Perceptual experience* (pp. 481–503). New York: Oxford University Press.

Smith, S. M., Fabrigar, L. R., & Norris, M. E. (2008). Reflecting on six decades of selective exposure research: Progress, challenges, and opportunities. *Social and Personality Psychology Compass, 2*, 464–493.

Squire, C. (1905). *The mythology of the British Islands*. London: Blackie and Son.

Squire, L. R. (1992). Memory and the hippocampus: A synthesis from findings with rats, monkeys, and humans. *Psychological Review, 99*(2), 195–231.

St. Jacques, P. L., Szpunar, K. K., & Schacter, D. L. (2017). Shifting visual perspective during retrieval shapes autobiographical memories. *NeuroImage, 148*(1), 103–114.

Stanford Encyclopedia of Philosophy. (2014). *Epistemology*. Los Angeles: The Metaphysics Research Lab, Center for the Study of Language and Information (CSLI), Stanford University. Retrieved December 8, 2015, from http://plato.stanford.edu/entries/epistemology/

Steadman, P. (2001). *Vermeer's camera: Uncovering the truth behind the masterpieces*. Oxford: Oxford University Press.

Steadman, P. (2017). Vermeer's the little street: A more credible detective story. *Essential Vermeer Newsletter*, no. 35, December 2015. Retrieved March 9, 2018, from http://www.essentialvermeer.com/delft/little-street-steadman/little-street-steadman.html#.WqLsLUxFw2x

Steup, M. (2016). Epistemology. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Fall 2016 Edition). Retrieved June 5, 2017, from https://plato.stanford.edu/archives/fall2016/entries/epistemology/

Suddendorf, T., & Corballis, M. C. (2007). The evolution of foresight: What is mental time-travel, and is it unique to humans? *Behavioral and Brain Sciences, 30*(3), 299–351.

Sweeny, K., Melnyk, D., Miller, W., & Shepperd, J. A. (2010). Information avoidance: Who, what, when, and why. *Review of General Psychology, 14*(4), 340–353.

Swillens, P. T. A. (1950). *Johannes Vermeer: Painter of Delft, 1632–1675* (C. M. Breuning-Williamson, Trans.). Utrecht: Uitgeveri Het Spectrum.

Tajfel, H. (1981). *Human groups and social categories: Studies in social psychology*. Cambridge: Cambridge University Press.

Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology, 33*, 1–39.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Pacific Grove: Brooks/Cole Publishing Company.

Taylor, R. S. (1968). Question-negotiation and information seeking in libraries. *College & Research Libraries, 29*(3), 178–194.

Taylor, C. (1989). *Sources of the self*. Cambridge: Cambridge University Press.

Tulving, E. (1972). Episodic and semantic memory. In E. Tulving & W. Donaldson (Eds.), *Organization of memory* (pp. 381–403). London: Academic.

Tulving, E. (2002a). Chronesthesia: Conscious awareness of subjective time. In D. T. Stuss & R. C. Knight (Eds.), *Principles of frontal lobe function* (pp. 311–325). Cary: Oxford University Press.

Tulving, E. (2002b). Episodic memory: From mind to brain. *Annual Review of Psychology, 53*, 1–25.

Turing, A. M. (1936–1937). On computable numbers, with an application to the Entscheidungsproblem. *Proceedings of the London Mathematical Society, Series 2*, 42(2144), 230–265.

Turing, A. M. (1950). Computing machinery and intelligence. *Mind: A Quarterly Review of Philosophy, 59*(236), 433–460.

Weaver, W. (1949). Recent contributions to the mathematical theory of communication. In C. E. Shannon & W. Weaver (Eds.), *The mathematical theory of communication* (pp. 94–117). Urbana: The University of Illinois Press.

Wynn, T., & Coolidge, F. L. (2004). The expert Neandertal mind. *Journal of Human Evolution, 46* (4), 467–487.

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