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# REFERENCES

- Ackley, D. H., Hinton, G. E., & Sejnowski, T. J. (1985). A learning algorithm for Boltzmann machines. *Cognitive Science*, 9, 147–169.
- Anderson, D. C., O'Farrell, T., Formica, R. & Caponigri, V. (1969). Preconditioning CS exposure: Variation in place of conditioning and of presentation. *Psychonomic Science*, 15, 54–55.
- Ashton, A. B., Bitgood, S. C., & Moore, J. W. (1969). Differential conditioning of the rabbit nictitating membrane response as a function of US shock intensity and duration. *Psychonomic Science*, 15, 127–218.
- Atkinson, R. C., & Shiffrin, R. M. (1977). Human memory: A proposed system and its control processes. In G. H. Bower (Ed.), *Human memory: Basic processes*. New York: Academic Press.
- Baker, A. G., & Mackintosh, N. J. (1977). Excitatory and inhibitory conditioning following uncorrelated presentations of CS and US. *Animal Learning & Behavior*, 5, 315–319.
- Barto, A. G. (1985). Learning by statistical cooperation of self-interested neuron-like computing elements. *Human Neurobiology*, 4, 229–256.
- Barto, A. G. & Sutton, R. S. (1985). Neural Problem Solving. In W. B. Levy, J. A. Anderson, & S. Lehmkuhle (Eds.), *Synaptic modification, neuron selectivity, and nervous system organization* (pp. 123–152). London: Lawrence Erlbaum Associates.
- Barto, A. G., Sutton, R. S., & Anderson, C. W. (1983). Neuronlike elements that can solve difficult learning control problems. *IEEE Transactions on Systems, Man, and Cybernetics*, 13, 835–846.
- Black, R. W. & Black, P. E. (1967). Heart rate conditioning as a function of interstimulus interval in rats. *Psychonomic Science*, 8, 219–220.
- Blanchard, R., & Honig, W. K. (1976). Surprise value of food determines its effectiveness as a reinforcer. *Journal of Experimental Psychology: Animal Behavior Processes*, 2, 67–74.
- Boice, R. & Denny, M. R. (1965). The conditioned licking response in rats as a function of the CS–UCS interval. *Psychonomic Science*, 3, 93–94.
- Bullock, T. H. (1976). In search of principles in neural integration. In J. Fentress (Ed.), *Simpler networks and behavior* (pp. 52–60). Sunderland, MA: Sinauer Associates.

- Bullock, D. H. & Smith, W. C. (1953). An effect of repeated conditioning-extinction upon operant strength. *Journal of Experimental Psychology, 46*, 349-352.
- Camardo, J. S., Siegelbaum A. S., & Kandel, E. R. (1984). Cellular and molecular correlates of sensitization in *Aplysia* and their implications for associative learning. In D. L. Alkon & J. Farley (Eds.), *Primary neural substrates of learning and behavioral change* (pp. 184-203). Cambridge: Cambridge University Press.
- Capaldi, E. J. (1966). Partial reinforcement: A hypothesis of sequential effects. *Psychological Review, 73*, 459-477.
- Capaldi, E. J., Leonard, D. W., & Ksir, C. (1968). A reexamination of extinction rate in successive acquisitions and extinctions. *Journal of Comparative and Physiological Psychology, 66*, 128-132.
- Carew, T. J., Abrams, T. W., Hawkins, R. D., & Kandel, E. R. (1984). The use of simple invertebrate systems to explore psychological issues related to associative learning. In D. L. Alkon & J. Farley (Eds.), *Primary neural substrates of learning and behavioral change* (pp. 169-183). Cambridge: Cambridge University Press.
- Carlton, P. L. & Vogel, J. R. (1967). Habituation and conditioning. *Journal of Comparative and Physiological Psychology, 63*, 348-351.
- Chacto, C. & Lubow, R. E. (1967). Classical conditioning and latent inhibition in the white rat. *Psychonomic Science, 9*, 135-136.
- Davenport, S. W. (1969). Successive acquisitions and extinctions of discrete bar-pressing in monkeys and rats. *Psychonomic Science, 16*, 242-244.
- Ellison, G. D. (1964). Differential salivary conditioning to traces. *Journal of Comparative and Physiological Psychology, 57*, 373-380.
- Ellson, D. G. (1938). Quantitative studies of the interaction of simple habits. I. Recovery from specific and generalized effects of extinction. *Journal of Experimental Psychology, 23*, 339-358.
- Estes, W. K. (1955). Statistical theory of spontaneous recovery and regression. *Psychological Review, 62*, 145-154.
- Fukushima, K. (1975). Cognitron: A self-organizing multilayered neural network. *Biological Cybernetics, 20*, 121-136.
- Fukushima, K. (1988). Neocognitron: A hierarchical neural network capable of visual pattern recognition. *Neural Networks, 1/2*, 119-130.

- Gamzu, E. & Williams, D. R. (1971). Classical conditioning of a complex skeletal response. *Science, N. Y.*, **171**, 923-925.
- Garcia, J. & Koelling, R. A. (1966). Relation of cue to consequence in avoidance learning. *Psychonomic Science*, **4**, 123-124.
- Garcia, J., McGowan, B. K., Ervin, F. R., & Koelling, R. A. (1968). Cues: their effectiveness as a function of the reinforcer, *Science, N. Y.*, **160**, 794-795.
- Gibbs, C. M., Latham, S. B., & Gormezano, I. (1978). Classical conditioning of the rabbit nictitating membrane response: Effects of reinforcement schedule on response maintenance and resistance to extinction. *Animal Learning & Behavior*, **6** (2), 209-215.
- Gluck, M. A. & Thompson, R. F. (1987). Modelling the neural substrates of associative learning and memory: A computational approach. *Psychological Review*, **94**, 176-191.
- Gonzalez, R. C., Holmes, N. K., & Bitterman, M. E. (1967). Asymptotic resistance to extinction in fish and rat as a function of interpolated retraining. *Journal of Comparative and Physiological Psychology*, **63**, 342-344.
- Gormezano, I. (1972). Investigations of defence and reward conditioning in the rabbit. In A. H. Black & W. F. Prokasy (Eds.), *Classical conditioning II: Current research and theory* (pp. 151-181). New York: Appleton-Century-Crofts.
- Gormezano, I. (1984). The study of associative learning with CS-CR paradigms. In D. L. Alkon & J. Farley (Eds.), *Primary neural substrates of learning and behavioral change* (pp. 5-24). Cambridge: Cambridge University Press.
- Gormezano, I., Kehoe, E. J. & Marshall, B. S. (1983). Twenty years of classical conditioning research with the rabbit. *Progress in Psychobiology and Physiological Psychology*, **10**, 197-275.
- Grossberg, S. (1988). Nonlinear neural networks: principles, mechanisms, and architectures. *Neural Networks*, **1/1**, 17-61.
- Grossberg, S., & Schmajuk, N. A. (1987). Neural dynamics of attentionally modulated Pavlovian conditioning: Conditioned reinforcement, inhibition, and opponent processing. *Psychobiology*, **15(3)**, 195-240.
- Grossberg, S., & Schmajuk, N. A. (1989). Neural dynamics of adaptive timing and temporal discrimination during associative learning. *Neural Networks*, **2/29** 79-102.

- Halgren, C. R. (1974). Latent inhibition in rats: associative or nonassociative? *Journal of Comparative and Physiological Psychology*, 86, 74-78.
- Hebb, D. O. (1949). *The organisation of behavior*. New York: Wiley.
- Holland, P. C. (1977). Conditioned stimulus as a determinant of the form of the Pavlovian conditioned response. *Journal of Experimental Psychology: Animal Behavior Processes*, 3, 77-104.
- Holland, P. C., & Rescorla, R. A. (1975a). The effect of two ways of devaluing the unconditioned stimulus after first- and second-order appetitive conditioning. *Journal of Experimental Psychology: Animal Behavior Processes*, 1, 355-363.
- Holland, P. C., & Rescorla, R. A. (1975b). Second-order conditioning with food unconditioned stimulus. *Journal of Comparative and Physiological Psychology*, 88, 459-467.
- Hopfield, J. J. (1982). Neural networks and physical systems with emergent collective computational abilities. *Proceedings of the National Academy of Sciences USA*, 79, 2554-2558.
- Hull, C. L. (1943). *Principles of behavior*. New York: Appleton-Century-Crofts,
- Hull, C. L. (1952). *A behavior system*. New Haven: Yale University Press.
- James, B. P. (1971). Latent inhibition and the preconditioning-conditioning interval. *Psychonomic Science*, 24, 97-98.
- Kamin, L. J. (1957). The retention of an incompletely learned avoidance response. *Journal of Comparative and Physiological Psychology*, 50, 457-460.
- Kamin, L. J. (1968). 'Attention-like' processes in classical conditioning. In M. R. Jones (Eds.), *Miami symposium on the prediction of behavior: aversive stimulation* (pp. 9-33). Miami: University of Miami Press.
- Kamin, E. J. (1969a). Predictability, surprise, attention and conditioning. In B. A. Cambell & R. M. Church (Eds.), *Punishment and aversive behavior* (pp. 279-296). New York: Appleton-Century-Crofts.
- Kamin, E. J. (1969b). Selective association and conditioning. In N. J. Mackintosh & W. K. Honig (Eds.), *Fundamental Issues in Associative Learning*. (pp. 42-64). Halifax: Dalhousie University Press.
- Kehoe, E. J. (1979). The role of CS-US contiguity in classical conditioning of the rabbit's nictitating membrane response to serial stimuli. *Learning and Motivation*, 10, 23-38.

- Kehoe, E. J. (1988). A layered network model of associative learning: Learning to learn and configuration. *Psychological Review*, 95, 411-433.
- Kimble, G. A. (1961). *Hilgard and Marquis' conditioning and learning*. 2nd Ed. New York: Appleton-Century-Crofts.
- Klopff, A. H. (1987). A *neuronal model of classical conditioning*. (Tech. Rep. No. AFWAL-TR-87-1139). Wright-Patterson Air Force Base: Air Force Systems Command.
- Kohonen, T. (1988). An introduction to neural computing. *Neural Networks*, 1/1, 3-16.
- Konorski, J. (1948). *Conditioned reflexes and neuron organization*. Cambridge: Cambridge University Press.
- Konorski, J. (1967). *Integrative activity of the brain*. Chicago: University of Chicago Press.
- Konorski, J. & Miller, S. (1937). On two types of conditioned reflex. *J. Gen. Psychol.*, 16, 264-272.
- Konorski, J. & Szwajkowska, G. (1952). Chronic extinction and restoration of conditioned reflexes: IV. The dependence of the course of extinction and restoration of conditioned reflexes on the "history" of the conditioned stimulus (the principle of the primacy of first training). *Acta Biologica Experimentalis*, 16, 95-113.
- Kremer, E. F. (1971). Truly random and traditional control procedures in CER conditioning in the rat. *Journal of Comparative and Physiological Psychology*, 76, 441-448.
- Levy, W. B. & Desmond, N. L. (1985). The rules of elemental synaptic plasticity. In W. B. Levy, J. A. Anderson, & S. Lehmkuhle (Eds.), *Synaptic modification, neuron selectivity, and nervous system organization* (pp. 105-121). London: Lawrence Erlbaum Associates.
- Leyland, C. M. (1977). Higher-order autoshaping. *Quarterly Journal of Experimental Psychology*, 29, 607-619.
- Leyland, C. M. & Mackintosh, N. J. (1978). Blocking of first- and second-order autoshaping in pigeons. *Animal Learning & Behavior*, 6, 391-394.
- LoLordo, V. M. (1967). Similarity of conditioned fear responses based upon different aversive events. *Journal of Comparative and Physiological Psychology*, 64, 154-158.

- Lubow, R. E. (1965). Latent inhibition: Effects of frequency of nonreinforced preexposure of the CS. *Journal of Comparative and Physiological Psychology*, 60, 454-459.
- Lubow, R. E. & Markman, R. E. & Allen, J. (1968). Latent inhibition and classical conditioning of the rabbit pinna response. *Journal of Comparative and Physiological Psychology*, 66, 688-694.
- Lubow, R. E. & Moore, A. U. (1959). Latent inhibition: The effect of nonreinforced preexposure to the conditioned stimulus. *Journal of Comparative and Physiological Psychology*, 52, 415-419.
- Lubow, R. E. & Siebert, L. (1969). Latent inhibition within the CER paradigm. *Journal of Comparative and Physiological Psychology*, 68, 136-138.
- McAdam, D., Knott, J. R., & Chiorini, J. (1965). Classical conditioning in the cat as a function of the CS-UCS interval. *Psychonomic Science*, 3, 89-90.
- Mackintosh, N. J. (1973). Stimulus selection: learning to ignore stimuli that predict no change in reinforcement. In R. A. Hinde & J. Stevenson-Hinde (Eds.), *Constraints on learning* (pp. 75-96). London: Academic Press.
- Mackintosh, N. J. (1974). *The psychology of animal learning*. New York: Academic Press.
- Mackintosh, N. J. (1983). *Conditioning and associative learning*. New York: Oxford University Press.
- Marchant, P. G. III, Mis, F. W., & Moore, J. W. (1974). Below-zero conditioned inhibition of the rabbit's nictitating membrane response. *Journal of Experimental Psychology*, 102, 350-352.
- May, R. B., Tolman, C. W., & Schoenfeldt, M. G. (1967). Effects of pre-training exposure to the CS on conditioned suppression. *Psychonomic Science*, 9, 61-62.
- Menzel, R. (1984). Short-term memory in bees. In D. L. Alkon & J. Farley (Eds.), *Primary neural substrates of learning and behavioral change* (pp. 259-274). Cambridge: Cambridge University Press.
- Mercer, A. & Menzel, R. (1982). The effects of biogenic amines on conditioned and unconditioned responses to olfactory stimuli in the honey bee, *Apis mellifera*. *J. Comp. Physiol.*, 145, 363-368.
- Meredith, A. L. & Schneiderman, N. (1967). Heart rate and nictitating membrane classical discrimination conditioning in rabbits under delay versus trace procedures. *Psychonomic Science*, 9, 139-140.

- Millenson, J. R., Kehoe, E. J., & Gormezano, I. (1977). Classical conditioning of the rabbit's nictitating membrane response under fixed and mixed CS-US intervals. *Learning and Motivation*, 8, 351-366.
- Miller, G. A. (1956). The magical number seven plus or minus two: Some limits on our capacity for processing information. *Psychological Review*, 63, 81-97.
- Morgan, C. L. (1894). An *introduction to comparative psychology*. London: Scott.
- Mote, F. A., Jr. & Finger, F. W. (1943). The retention of a simple running response after varying amounts of reinforcement. *Journal of Experimental Psychology*, 33, 317-322.
- Muller, G. E., & Pilzecker, A. (1900). *Experimentelle beitrage zur lehre von gedachtnis. Zeitschrift fur Psychologie*, (Supplement No. 1).
- Nairne, J. S., & Rescorla, R. A. (1981). Second-order conditioning with diffuse auditory reinforcers in the pigeon. *Learning and Motivation*, 12, 65-91.
- Parrish, J. (1967). Classical discrimination conditioning of heart rate and bar press suppression in the rat. *Psychonomic Science*, 9, 267-268.
- Pavlov, I. P. (1927). *Conditioned reflexes*. (G. V. Anrep, trans.) London: Oxford University Press.
- Reberg, D. (1972). Compound tests for excitation in early acquisition and after prolonged extinction of conditioned suppression. *Learning and Motivation*, 3, 246-258.
- Rescorla, R. A. (1967). Pavlovian conditioning and its proper control procedures. *Psychological Review*, 74, 71-80.
- Rescorla, R. A. (1967b). Inhibition of delay in Pavlovian fear conditioning. *Journal of Comparative and Physiological Psychology*, 64, 114-120.
- Rescorla, R. A. (1971). Summation and retardation tests of latent inhibition. *Journal of Comparative and Physiological Psychology*, 75, 77-81.
- Rescorla, R. A. (1975). Pavlovian excitatory and inhibitory conditioning. In W. K. Estes (Ed.), *Handbook of learning and cognitive processes* (Vol. 2). Hillsdale, N. J.: Lawrence Erlbaum Associates.
- Rescorla, R. A. (1979). Conditioned inhibition and extinction. In A. Dickinson & R. A. Boakes (Eds.), *Mechanisms of learning and motivation: A memorial volume to Jerzy Konorski* (pp. 83-110). Hillsdale, NJ: Lawrence Erlbaum Associates.

- Rescorla, R. A. (1984). Comments on three Pavlovian paradigms. In D. L. Alkon & J. Farley (Eds.), *Primary neural substrates of learning and behavioral change* (pp. 25–45). Cambridge: Cambridge University Press.
- Rescorla, R. A., & Cunningham, C. L. (1977). The erasure of reinstated fear. *Animal Learning and Behavior*, 5, 386–394.
- Rescorla, R. A., & Heth, C. D. (1975). Reinstatement of fear to an extinguished conditioned stimulus. *Journal of Experimental Psychology: Animal Behavior Processes*, 1, 88–96.
- Rescorla, R. A. & Holland, P. C. (1977). Associations in Pavlovian conditioned inhibition. *Learning and Motivation*, 8, 429–447.
- Rescorla, R. A. & LoLordo, V. M. (1965). Inhibition of avoidance behavior. *Journal of Comparative and Physiological Psychology*, 59, 406–412.
- Rescorla, R. A. & Solomon, R. L. (1967). Two-process learning theory: Relationships between Pavlovian conditioning and instrumental learning. *Psychological Review*, 74, 151–182.
- Rescorla, R. A., & Wagner, A. R. (1972). A theory of Pavlovian conditioning: Variations in the effectiveness of reinforcement and nonreinforcement. In A. H. Black & W. F. Prokasy (Eds.), *Classical conditioning II: Current research and theory* (pp. 64–99). New York: Appleton-Century-Crofts.
- Romanes, G. J. (1882). *Animal intelligence*, London: Kegan Paul.
- Rozin, P. (1969). Central or peripheral mediation of learning with long CS-UCS intervals in the feeding system. *Journal of Comparative and Physiological Psychology*, 67, 421–429.
- Rumelhart, D. E., Hinton, G. E., & Williams, R. J. (1986). Learning internal representations by error propagation. In D. E. Rumelhart & J. L. McClelland (Eds.), *Parallel distributed processing: Explorations in the microstructures of cognition*, I (pp. 318–362). Cambridge, MA: MIT Press.
- Schlosberg, H. (1934). Conditioned responses in the white rat. *Journal Genet. Psychol.*, 45, 303–305.
- Schlosberg, H. (1936). Conditioned responses in the white rat: II. Conditioned responses based upon shock to the foreleg. *Journal Genet. Psychol.*, 49, 107–138.
- Schlosberg, H. (1937). The relationship between success and the laws of conditioning. *Psychological Review*, 44, 379–394.

- Schneiderman, N. (1966). Interstimulus interval function of the nictitating membrane response in the rabbit under delay versus trace conditioning. *Journal of Comparative and Physiological Psychology, 62*, 397-402.
- Schneiderman, N. (1972). Response system divergencies in aversive classical conditioning. In A. H. Black & W. F. Prokasy (Eds.), *Classical conditioning II: Current research and theory* (pp. 341-376). New York: Appleton-Century-Crofts.
- Schneiderman, N., & Gormezano, I. (1964). Conditioning of the nictitating membrane of the rabbit as a function of CS-US interval. *Journal of Comparative and Physiological Psychology, 57*, 188-195.
- Silverston, A. I. (1988). A consideration of invertebrate central pattern generators as computational data bases. *Neural Networks, 1/2*, 109-117.
- Sheffield, V. F. (1949). Extinction as a function of partial reinforcement and distribution of practice. *Journal of Experimental Psychology, 39*, 511-526.
- Sheffield, F. D. (1965). Relation between classical conditioning and instrumental learning. In W. F. Prokasy (Ed.), *Classical conditioning: A symposium* (pp. 302-322). New York: Appleton-Century-Crofts.
- Siegel, S. (1969a). Effect of CS habituation on eyelid conditioning. *Journal of Comparative and Physiological Psychology, 68*, 245-248.
- Siegel, S. (1969b). Generalization of Latent inhibition. *Journal of Comparative and Physiological Psychology, 69*, 157-159.
- Singer, W. (1985). Hebbian modification of synaptic transmission as a common mechanism in experience-dependent maturation of cortical functions. In W. B. Levy, J. A. Anderson, & S. Lehmkuhle (Eds.), *Synaptic modification, neuron selectivity, and nervous system organisation* (p. 35-64). London: Lawrence Erlbaum Associates.
- Skinner, B. F. (1935). Two types of conditioned reflex and a pseudo type. *Journal of Gen. Psychology, 12*, 66-77.
- Skinner, B. F. (1937). Two types of conditioned reflex: A reply to Konorski & Miller. *Journal of Gen. Psychology, 16*, 272-279.
- Skinner, B. F. (1938). *The behavior of organisms*. New York: Appleton-Century-Crofts.
- Skinner, B. F. (1950). Are theories of learning necessary? *Psychological Review, 57*, 193-216.

- Skinner, B. F. (1966). Operant behavior. In W. K. Honig (Ed.), *Operant behavior: areas of research and application* (pp. 12-32). New York: Appleton-Century-Crofts.
- Smith, M. C. (1968). CS-US interval and US intensity in classical conditioning of the rabbit's nictitating membrane response. *Journal of Comparative and Physiological Psychology, 66*, 679-687.
- Smith, M. C., Coleman, S. R., & Gormezano, I. (1969). Classical conditioning of the rabbit's nictitating membrane response at backward, simultaneous, and forward CS-US intervals. *Journal of Comparative and Physiological Psychology, 69*, 226-231.
- Soltysik, S. (1971). The effect of satiation upon conditioned and unconditioned salivary responses. *Acta Biologica Experimentalis, 31*, 59-63.
- Spear, N. E., Hill, W. F., & O'Sullivan, D. J. (1965). Acquisition and extinction after initial trials without reward. *Journal of Experimental Psychology, 69*, 25-29.
- Spence, K. W. (1956). *Behavior theory and conditioning*. New Haven: Yale University Press.
- Spence, K. W. & Taylor, J. (1951). Anxiety and strength of the UCS as determiners of the amount of eyelid conditioning. *Journal of Experimental Psychology, 42*, 183-188.
- Szwejkowska, G. & Konorski, J. (1959). The influence of the primary inhibitory stimulus upon the salivary effect of excitatory conditioned stimulus. *Acta Biologica Experimentalis, 19*, 162-174.
- Tait, R. W., Kehoe, E. J., & Gormezano, I. (1981). Effects of US duration on classical conditioning of the rabbit's nictitating membrane response. Unpublished observations.
- Thorndike, E. L. (1898). Animal intelligence: an experimental study of the associative processes in animals. *Psychol. Monogr. 2* (4, Whole No. 8).
- Thorndike, E. L. (1911). *Animal intelligence: Experimental studies*. New York: Macmillan.
- Trapold, M. A., Homzie, M., & Rutledge, E. (1964). Backward conditioning and UCR latency. *Journal of Experimental Psychology, 67*, 387-391.
- Vandercar, D. H. & Schneiderman, N. (1967). Interstimulus interval functions in different response systems during classical discrimination conditioning of rabbits. *Psychonomic Science, 9*, 9-10.

- Weiskrantz, L. (1970). A long-term view of short-term memory in psychology. In G. Horn & R. A. Hinde (Eds.), *Short-term changes in neural activity and behavior* (pp. 63–74). London: Cambridge University Press.
- Werbos, P. J. (1974). Beyond regression: new tools for prediction and analysis in the behavioral sciences. Unpublished PhD Dissertation, Harvard University.
- Werbos, P. J. (1988). Generalization of backpropagation with application to a recurrent gas market model. *Neural Networks*, 1/4, 339–356.
- Wilkie, D. M. (1987). Stimulus intensity affects pigeons' timing behavior: Implications for an internal clock model. *Animal Learning & Behavior*, 15, 35–39.
- Zimmer-Hart, C. L. & Rescorla, R. A. (1974). Extinction of Pavlovian conditioned inhibition. *Journal of Comparative and Physiological Psychology*, 86, 837–845.