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Howard H. Pattee's bibliography

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Pattee, H.H., 1961. On the origin of macromolecular sequences. Biophysical Journal, 1, 683–710.

Pattee, H.H., 1965a. The recognition of hereditary order in primitive chemical systems. In: Fox S. (Ed.), The Origins of Prebiological Systems, Academic Press, New York, pp. 385–405.

Pattee, H.H., 1965b. Experimental approaches to the origin of life problem. In: F.F. Nord (Ed.), Advances in Enzymology, vol. 27, Wiley, New York, pp. 381-415 [Reprinted in Baker, J.W., Allen, G.E. (Eds.) 1972. The Process of Biology: Primary Sources, Addison-Wesley, Reading, MA, pp. 352–380].

Pattee, H.H., Edelsack, E., Fein, L., Callahan, A. (Eds.) 1966. Natural Automata and Useful Simulations. Spartan Books, Washington DC.

Pattee, H.H., 1966. Physical Theories, Automata and the Origin of Life. In: Pattee, H., Edelsack, E., Fein, L., Callahan, A. (Eds.), Natural Automata and Useful Simulations, Spartan Books, Washington, DC, pp. 73–104.

Pattee, H.H., 1967. Quantum mechanics, heredity and the origin of life. Journal of Theoretical Biology 17, 410–420.

Pattee, H.H., 1968a. Automata theories of hereditary tactic copolymerization. In: Ketley, A.D. (Ed.), The Stereochemistry of Macromolecules, vol. 3, Marcel Dekker, New York, pp. 305–331.

Pattee, H.H., 1968b. The physical basis of coding and reliability in biological evolution. In: Waddington, C.H. (Ed.), Towards a Theoretical Biology 1, Prolegomena, Edinburgh University Press, Edinburgh, pp. 67–93.

Pattee, H.H., 1969a. Physical conditions for primitive functional hierarchies. In: Whyte, L.L., Wilson, A.G., Wilson, D. (Eds.), Hierarchical Structures, American Elsevier, New York, pp. 161–177.

Pattee, H.H., 1969b. Physical problems of heredity and evolution. In: Waddington, C.H. (Ed.), Towards a Theoretical Biology 2, Sketches, Edinburgh University Press, Edinburgh, pp. 268–284.

Pattee, H.H., 1969c. How does a molecule become a message? Developmental Biology Supplement 3, 1–16.

Pattee, H.H., 1970a. The problem of biological hierarchy. In: Waddington, C.H. (Ed.), Towards a Theoretical Biology 3, Drafts, Edinburgh University Press, Edinburgh, pp. 117–136.

Pattee, H.H., 1970b. Discussion in origins of life, New York Academy Science Symposium Proceedings. In: Margulis L. (Ed.), Origins of Life, Gordon & Breach, New York.

Pattee, H.H., 1971a. The recognition of description and function in chemical reaction networks. In: Buvet, R., Ponnamperuma, C. (Eds.), Chemical Evolution and the Origin of Life, North Holland, New York, pp. 42–50.

Pattee, H.H., 1971b. Can life explain quantum mechanics? In: Bastin, T. (Ed.), Quantum Theory

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and Beyond, Cambridge University Press, New York, pp. 307–319.
Pattee, H.H., 1971c. Physical theories of biological co-ordination. Quarterly Reviews of Biophysics 4(2/3), 255–276 [Reprinted in Grene, M., Mendelsohn E. (Eds.), 1976. Topics in the Philosophy of Biology, vol. 27 of Boston Studies in the Philosophy of Science, Reidel, Dordrecht].
Pattee, H.H., 1972a. Physical problems of decision-making constraints. International Journal of Neuroscience 3, 99–105.
Pattee, H.H., 1972b. Laws and constraints, symbols and languages. In: Waddington, C.H. (Ed.), Towards a Theoretical Biology 4, Essays, Edinburgh University Press, Edinburgh, pp. 248–258.
Pattee, H.H., 1972c. The evolution of self-simplifying systems. In: Laszlo, E. (Ed.), The Relevance of General Systems Theory, Braziller, New York, pp. 33–41.
Pattee, H.H., 1972d. The nature of hierarchical controls in living matter. In: Rosen, R. (Ed.), Foundations of Mathematical Biology, vol. 1, Academic Press, New York, pp. 1–22.
Pattee, H.H. (Ed.), 1973a. Hierarchy Theory. The Challenge of Complex Systems. Georges Braziller, New York, NY.
Pattee, H.H., 1973b. The physical basis and origin of hierarchical control. In: Pattee, H.H. (Ed.), Hierarchy Theory, G. Braziller, New York, pp. 73–108.
Pattee, H.H., 1973c. Postscript. Unsolved problems and potential applications of hierarchy theory. In: Pattee, H.H. (Ed.), Hierarchy Theory, G. Braziller, New York, pp. 131–156.
Pattee, H.H., 1973d. Physical problems of the origin of natural controls. In: Locker, A. (Ed.), Biogenesis, Evolution, and Homeostasis, Springer Verlag, Heidelberg, pp. 41–49.
Pattee, H.H., 1974a. The vital statistics of quantum dynamics. In: Oster, G.F., Silver I.L., Tobias, G.A. (Eds.), Irreversible Thermodynamics and the Origin of Life, Gordon & Breach, New York, pp. 33–43.
Pattee, H.H., 1974b. Discrete and continuous processes in computers and brains. In: Conrad, M., Güttinger, Dal Cin, M. (Eds.), The Physics and Mathematics of the Nervous System, Springer, New York, pp. 128–148.
Pattee, H.H., 1976. The role of instabilities in the evolution of control hierarchies. In: Burns, T.R., Buckley, W. (Eds.), Power and Control, Sage, London, pp. 171–184.
Pattee, H.H., 1977. Dynamic and linguistic modes of complex systems. International Journal of General Systems 3, 259–266.
Pattee, H.H., 1978a. The complementarity principle in biological and social structures. Journal of Social and Biological Structures 1, 191–200.
Pattee, H.H., 1978b. Biological systems theory: descriptive and constructive complementarity. In: Klir, G.J. (Ed.), Applied General Systems Research, Plenum, New York, pp. 511–520.
Pattee, H.H., 1979a. Discussion with R. Rosen. In: Buckley, P., Peat, D. (Eds.), A Question of Physics — Conversations in Physics and Biology, University of Toronto Press, Toronto, pp. 84–123.
Pattee, H.H., 1979b. The complementarity principle and the origin of macromolecular information. BioSystems 11, 217–226.
Pattee, H.H., 1979c. Complementarity vs. reduction as explanation of biological complexity. American Journal of Physiology 236(5), R241–R246.
Pattee, H.H., 1980. Clues from molecular symbol systems. In: Bellugi, U., Studdert-Kennedy, M. (Eds.), Signed and Spoken Languages: Biological Constraints on Linguistic Form, Dahlem Konferenzen, Verlag Chemie GmbH, pp. 261–273.
Pattee, H.H., 1981. Symbol-structure complementarity in biological evolution. In: Jantsch, E. (Ed.), The Evolutionary Vision, AAAS Selected Symposium, Westview, Boulder, CO, pp. 117–128.
Pattee, H.H., 1982a. The need for complementarity in models of cognitive behavior: a response to Fowler and Turvey. In: Weimer, W.B., Palermo, D.S. (Eds.), Cognition and the Symbolic Process, 2, Erlbaum, Hillsdale, NJ, pp. 21–34.
Pattee, H.H., 1982b. Cell psychology: an evolutionary approach to the symbol–matter problem. Cognition and Brain Theory 4, 325–341.
Pattee, H.H., 1986. Universal principles of measurement and language functions in evolving systems. In: Casti, J.L., Karlqvist, A. (Eds.), Complexity, Language, and Life: Mathematical

Approaches, Springer, Berlin, pp. 268–281 [Reprinted in Klir, G.J., 1991. Facets of Systems Science. Plenum, New York, pp. 579–592].
Pattee, H.H., 1987. Instabilities and information in biological self-organization. In: Yates, F.E. (Ed.), Self-organizing Systems. The Emergence of Order. Plenum, New York, pp. 325–338.
Pattee, H.H., 1988. Simulations, realizations, and theories of life. In: Langton, C. (Ed.), Artificial Life I, Addison-Wesley, Redwood City, CA, pp. 63–77.
Pattee, H.H., 1989. The measurement problem in artificial world models. BioSystems 23, 281–290.
Pattee, H.H., 1990. Response to E. Dietrich's Computationalism. Social Epistemology 4(2), 176–181.
Pattee, H.H., 1991. Measurement–control heterarchical networks in living systems. International Journal of General Systems 18, 213–221.
Pattee, H.H., 1992. The measurement problem in physics, computation, and brain theories. In: Carvallo, M.E. (Ed.), Nature, Cognition, and System, 2, Kluwer, Dordrecht, pp. 179–192.
Pattee, H.H., 1993. The limitations of formal models of measurement, control and cognition. Applied Mathematics and Computation 56(2–3), 111–130.
Pattee, H.H., 1995a. Evolving self-reference: matter, symbols, and semantic closure communication and cognition. Artificial Intelligence 12(1–2), 9–27.
Pattee, H.H., 1995b. Artificial life needs a real epistemology. In: Morán, F., Moreno, A., Merelo, J.J., Chacón, P. (Eds.), Advances in Artificial Life, Springer, Berlin, pp. 23–38.
Pattee, H.H., 1996. The problem of observables in biological organizations. In: Boulding, K.E., Khalil, L. (Eds.), Evolution, Order and Complexity. Routledge, London, pp. 249–264.
Pattee, H.H., 1997. The physics of symbols and the evolution of semiotic controls. Presented at the Workshop on Control Mechanisms for Complex Systems: Issues of Measurement and Semiotic Analysis. Coombs, M. (Ed.), New Mexico State University.
Pattee, H.H., 2000. Causation, control, and the evolution of complexity. In: Anderson, P.B., Emmeche, C., Finnemann, N.O., Christiansen, P.V. (Eds.), Downward Causation, Aarhus University Press, Aarhus, Denmark, pp. 63–77.
Thiebaux, J., Pattee, H.H., 1967. Statistical studies of protein sequences. Journal of Theoretical Biology 17, 121–135.
Conrad, M., Pattee, H.H., 1970. Evolution experiments with an artificial ecosystem. Journal of Theoretical Biology 28, 393–409.