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QUASI-ORDRES, INTERVALLES, ETC. : UNE BIBLIOGRAPHIE

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Etablir une bibliographie sur les quasi-ordres (semiorder, en anglais) pose des problèmes quasi-insolubles. Une première difficulté provient des diverses formes équivalentes que peut prendre cette notion : relation totale, relation asymétrique d'ordre ("ordre quasi-fort"), relation symétrique ("graphe d'indifférence"). Une seconde difficulté des contextes et donc des terminologies variées où est apparue cette notion (cf. à ce sujet, Monjardet et Jacquet-Lagrèze 1978, Monjardet 1978). Enfin une troisième liée aux deux précédentes, résulte du fait que l'étude des quasi-ordres, se trouvant à l'intersection de préoccupations multiples, se généralise dans des directions très différentes. Citons par exemple, la mesure des grandeurs, la théorie de l'indifférence ou de la préférence intransitive, les problèmes de sériation ou d'ordination, la théorie des graphes et des hypergraphes, la théorie des ensembles ordonnés. Dans ces conditions il est difficile de délimiter le thème quasi-ordres et cette bibliographie ne le tente pas. En fait, elle essaie d'abord de contenir le plus possible de livres ou articles ayant traité des quasi-ordres, avant 1979. Signalons immédiatement certaines omissions, par exemple la littérature russe sur la question (cf. Mirkin, 1972). Ensuite cette bibliographie comporte des coupes plus ou moins étendues sur des domaines connexes. C'est ainsi qu'est bien représentée la littérature, en rapide extension, sur les problèmes combinatoires proches : graphes de comparabilité, ordres, graphes et hypergraphes d'intervalles, d'arcs ou de sous-arbres. Il en est de même pour la littérature récente sur les problèmes de sériation. Par contre la littérature sur la préférence ou l'indifférence intransitive et plus généralement sur la théorie de l'utilité est loin d'être complète. On pourra consulter sur le premier point les références de Fishburn dans

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"Intransitive indifference in preference theory : a survey", 1970), sur le second la "Selected bibliography of works relating to the theory of preferences, utility and demand" dans "Preferences, utility and demand" (1971). Pour une bibliographie plus récente et tournée vers l'aide à la décision, on pourra aussi voir la thèse de Jacquet-Lagrèze (1975) ; pour une bibliographie récente sur l'agrégation des préférences, voir Kelly (1978). Signalons enfin, que d'autres thèmes voisins, comme celui des échelles de Guttman ne sont pratiquement pas représentés dans cette bibliographie. (Cf. à ce sujet, Flament C., *L'analyse booléenne des questionnaires*, Mouton, 1976).

- [1] AIGNER M., "Graphs and binary relations", in *The many facets of graph theory*, 1-21, New York, Springer-Verlag, 1969.
- [2] ARDITTI J.C., "Partially ordered sets and their comparability graphs, their dimension and their adjacency", in *Problèmes combinatoires et théorie des graphes*, Orsay, 1976, 5-11, Paris, CNRS, 1978.
- [3] ARMSTRONG W.E., "The determinateness of the utility function", *Economics Journal*, 49, (1939), 453-467.
- [4] ARMSTRONG W.E., "Uncertainty and the utility function", *Economics Journal*, 58, (1948), 1-10.
- [5] ARMSTRONG W.E., "A note on the theory of consumer's behavior", *Oxford Economic Papers*, 2, (1950), 119-122.
- [6] ARMSTRONG W.E., "Utility and the theory of welfare", *Oxford Economic Papers*, 3, (1951), 259-271.
- [7] ASCHER M., ASCHER R., "Chronological ordering by computer", *Amer. Anthropologist*, 65, (1963), 1045-1052.
- [8] AVERY P., "Semiorders and representable graphs", in *Proceedings of the Fifth British Combinatorial Conference*, 5-9, Winnipeg, Utilitas Mathematica, 1976.
- [9] BAKER K.A., FISHBURN P.C., ROBERTS F.S., "Partial orders of dimension 2, interval orders and interval graphs", *The Rand Corporation*, P.4376, 1970 and *Networks*, 2 (1972), 11-28.
- [10] BARBUT M., MONJARDET B., *Ordre et Classification, Algèbre et Combinatoire*, Paris, Hachette, 1970.
- [11] BENZECRI J.P. et collaborateurs, *L'analyse des données, Tome 2, L'analyse des correspondances*, Cn°9, A.3.1., Dunod, 1973.
- [12] BENZER S., "On the topology of the genetic fine structure", *Proc. Nat. Acad. Sci. USA*, 45, (1959), 1607-1620.
- [13] BENZER S., "The fine structure of the gene", *Scientific American*, 206, 1, (1962), 70-84.
- [14] BERGE C., *Graphes et hypergraphes*, Paris, Dunod, 1970.
- [15] BERGE C., *Graphs and Hypergraphs*, Amsterdam, North Holland, 1973.
- [16] BOGART K.P., RABINOVITCH I., TROTTER Jr W.T., "A bound on the dimension of interval orders", *J. Comb. Th. (A)*, 21 (1976), 319-328.
- [17] BOOTH K.S., LUEKER G.S., "Linear algorithms to recognize interval graphs and test for the consecutive ones property", in *Seventh Annual A.C.M. Symposium on theory of computing*, 255-265, Assoc. Comput. Mach., New York, 1975.
- [18] BOUCHET A., *Etude combinatoire des ordonnées finis*, Thèse d'état, Université Scientifique et Médicale de Grenoble, 1971.

- [19] BUNEMAN P., "A characterization of rigid circuit graphs", *Discrete Math.*, 9 (1974), 205-212.
- [20] CHANDON J.L., LEMAIRE J., "Agrégation typologique de quasi-ordres, un nouvel algorithme", in *Analyse des données et Informatique*, 63-76, IRIA, 1977.
- [21] CHANDON J.L., LEMAIRE J., POUGET J., "Dénombrement des quasi-ordres sur un ensemble fini", *Math. Sci. hum.*, 62, (1978), 61-80.
- [22] CHARPENTIER A., JACQUET-LAGREZE E., "La promotion de l'électricité dans l'industrie et l'utilisation de méthodes multicritères", *Metra*, 14, 3(1975), 431-458.
- [23] CHIPMAN J.S., "The foundations of utility", *Econometrica*, 28 (1960), 193-224.
- [24] CHIPMAN J.S., "Consumption theory without transitive indifference", in *Preferences, Utility and Demand*, New York, Harcourt Brace, 1971.
- [25] CLARK, "A survey of statistical problems in archaeological dating", *J. Multiv. Anal.*, 4 (1974), 308-326.
- [26] COGIS O., "Détermination d'un préordre total contenant un préordre et contenu dans une relation de Ferrers, lorsque leur domaine commun est fini", in *Problèmes combinatoires et théorie des graphes*, 83-84, Paris, Centre National de la Recherche Scientifique, 1978.
- [27] COGIS O., "Graphes de Ferrers et graphes à seuils", in *Actes du Colloque Algèbre Appliquée et Combinatoire*, Grenoble, Université Scientifique et médicale de Grenoble, 1979.
- [28] COOMBS C.H., *A theory of data*, New York, Wiley, 1964.
- [29] DEAN R.A. and KELLER G., "Natural partial orders", *Canad. J. Math.*, 20 (1968), 535-554.
- [30] DEBREU G., "Representation of a preference ordering by a numerical function", in *Decision Processes*, R.M. Thrall; C.H. Coombs and R.L. Davis, Eds, 159-165, New York, Wiley, 1954.
- [31] DE LA VEGA W.F., Deux algorithmes de sériation, in *Les méthodes mathématiques de l'archéologie*, CADA, CNRS, 1971.
- [32] DEROO M., "Analyse sensorielle, quasi-ordres et représentations simpliciales", *Math. Sci. hum.*, 63 (1978), 25-49.
- [33] DIRAC C.A., "On rigid circuit graphs", *Abh. Math. Sem. Univ. Hamburg*, 25 (1961), 71-76.
- [34] DUCHET P., "Propriété de Helly et problèmes de représentation", in *Problèmes combinatoires et théorie des graphes*, Colloque CNRS d'Orsay, Paris, CNRS, 1978.
- [35] DUCHET P., "Représentation des familles de Helly", *J. Comb. Th. (B)*, à paraître.
- [36] DUNNEL R.C., "Seriation method and its evaluation", *Am. Antiquity*, 35, 3 (1970), 305-319.
- [37] EKMAN G., "Dimensions of colour vision", *J. Psychol.*, 38 (1954), 467-474.
- [38] ELISEEFF V., "De l'application des propriétés du scalogramme à l'étude des objets", in *Calcul et Formalisation dans les sciences de l'homme, Rome*, 1966, Paris, CNRS, 1968.
- [39] ESWARAN K.P., "Faithful representation of a family of sets by a set of intervals", *SIAM J. Comput.*, 4, 1(1975), 56-68.

- [40] EYTAN M., "Matrices ordonnables : une étude algébrique", *Math. Sci. hum.*, 50(1975), 15-22.
- [41] FECHNER G.T., *Elemente der Psychophysik*, Leipzig, Breitkopf und Hartel, 1860.
- [42] FINE N.J., "Proof of a conjecture of Goodman", *J. Symbolic Logic*, 19 (1954), 41-44.
- [43] FISHBURN P.C., "Semiorders and risky choices", *J. Math. Psychol.*, 5 (1968), 358-361.
- [44] FISHBURN P.C., "Intransitive indifference in preference theory : a survey", *Operations Research*, 18, 2(1970), 207-228.
- [45] FISHBURN P.C., "Intransitive indifference with unequal indifference intervals", *J. Math. Psychol.*, 7 (1970), 144-149.
- [46] FISHBURN P.C., "An interval graph is not a comparability graph", *J. Comb. Th.*, 8 (1970), 442-443.
- [47] FISHBURN P.C., "Conditions for simple majority decision functions with intransitive individual indifference", *J. Econ. Th.*, 2 (1970), 354-367.
- [48] FISHBURN P.C., "Utility theory with inexact preferences and degrees of preference", *Synthese*, 21 (1970), 204-221.
- [49] FISHBURN P.C., "Suborders on commodity spaces", *J. Econ. Th.*, 2, 6(1970), 321-328.
- [50] FISHBURN P.C., *Utility theory for decision making*, New York, Wiley, 1970.
- [51] FISHBURN P.C., "Betweenness, orders and interval graphs", *J. pure appl. algebra*, 1, 2 (1971), 159-178.
- [52] FISHBURN P.C., "On the construction of weak orders from fragmentary information", *Psychometrika*, 38, 4 (1973), 459-472.
- [53] FISHBURN P.C., "Interval representations for interval orders and semi-orders", *J. Math. Psychol.*, 10, (1973), 91-105.
- [54] FISHBURN P.C., *Les mathématiques de la décision*, Paris, Gauthier-Villars, 1973 (traduction de Mathematics of decision theory, Mouton, 1972).
- [55] FISHBURN P.C., *The theory of social choice*, Princeton, Princeton University Press, 1973.
- [56] FISHBURN P.C., "Semiorders and choice functions", *Econometrica*, 43, 5-6 (1975), 975-977.
- [57] FISHBURN P.C., GEHRLEIN W.V., "Alternative methods of constructing strict weak orders from interval orders", *Psychometrika*, 39, 4 (1974), 501-516.
- [58] FISHBURN P.C., GEHRLEIN W.V., "A comparative analysis of method for constructing weak orders from partial orders", *J. Math. Sociol.*, 4, 1, (1975), 93-102.
- [59] FITZERALD C.H., "Optimal indexing of the vertices of graphs", *Math. Comp.*, 28 (1974), 825-831.
- [60] FLAMENT C., "Comportement de choix et échelle de mesure. I: Etude théorique; II : Etude expérimentale", *Bull. C.E.R.P.*, 9 (1960), 165-186.
- [61] FLAMENT C., "Hypergraphes arborés", *Discrete Math.*, 21 (1978), 223-227.
- [62] FOLDES S., HAMMER P.L., "On split graphs and some related questions", in *Problèmes combinatoires et théorie des graphes*, 139-140, Paris, CNRS, 1978.
- [63] FOURNIER J.C., "Une caractérisation des graphes de cordes", *C.R. Acad. Sci. Fr.*, 286 (1978), 811-813.

- [64] FOURNIER J.C., "Graphes de cordes, hypergraphes de chaines et matroïdes graphiques", in *Actes du Colloque Algèbre appliquée et Combinatoire*, Grenoble, Université scientifique et médicale de Grenoble, 1979.
- [65] FRANK A., "Some polynomial algorithms for certain graphs and hypergraphs", in *Proc. 5th British Combinatorial Conf.*, 211-226, Winnipeg, *Utilitas Mathematica*, 1976.
- [66] FULKERSON D.R., GROSS O.A., "Incidence matrices and interval graphs", *Pacific J. Math.*, 15 (1965), 835-855.
- [67] GALANTER E.H., "An axiomatic and experimental study of sensory order and measure", *Psychological Review*, 63, (1956), 16-28.
- [68] GALLAI T., "Transitiv orientierbare graphen", *Acta math. Acad. Sci. hungar.*, 18 (1967), 25-26. Reviewed in *Mathematics Reviews* 36, n°5026.
- [69] GAVRIL F., "Algorithms for minimum coloring, maximum clique, minimum covering by cliques and maximum independent set of a chordal graph", *SIAM J. Comp.* 1 (1972), 180-187.
- [70] GAVRIL F., "The intersection graphs of subtrees in trees are exactly the chordal graphs", *J. Comb. Th.* 16 (B), (1974), 47-56.
- [71] GAVRIL F., "An algorithm for testing chordality of graphs", *Infor. Process. Lett.*, 3 (1974/5), 110-112.
- [72] GAVRIL F., "A recognition algorithm for the intersection graphs of directed paths in directed trees", *Discrete Math.*, 13 (1975), 237-249.
- [73] GAVRIL F., "Algorithms on clique separable graphs", *Discrete Math.*, 19 (1977), 159-165.
- [74] GAVRIL F., "A recognition algorithm for the intersection graphs of paths in trees", *Discrete Math.*, 23 (1978), 211-227.
- [75] GELFAND A.E., "Seriation methods for archaeological materials", *Am. Antiquity*, 36 (1971), 263-274.
- [76] GELFAND A.E., "Rapid seriation methods with archaeological applications", in F.R. Hodson et al (eds), *Mathematics in the Archaeological and Historical Sciences*, Edinburgh, Edinburgh University Press, 1971.
- [77] GEORGESCU-ROEGEN N., "The pure theory of consumer's behavior", *Quart. J. of Economics*, 50 (1936), 545-593.
- [78] GHOUILA-HOURI A., "Caractérisation des graphes non orientés dont on peut orienter les arêtes de manière à obtenir le graphe d'une relation d'ordre", *C.R. Acad. Sci. Fr.*, 254 (1962), 370.
- [79] GILMORE P.C. and HOFFMAN A.J., "A characterization of comparability graphs and of interval graphs", *Canad. J. Math.*, 16 (1964), 539-548.
- [80] GOLUMBIC M.C., "Comparability graphs and a new matroid", *J. Comb. Th.* (B), 22,1 (1977), 68-90.
- [81] GOLUMBIC M.C., "Trivially perfect graphs", *Discrete Math.*, 24 (1978), 105-107.
- [82] GOODMAN N., *Structure of appearance*, Cambridge, Mass., Harvard University Press, 1951.
- [83] GUILBAUD G.Th., "Continu expérimental et continu mathématique", notes de cours (1962) et *Math. Sci. hum.*, 62 (1978), 11-33.
- [84] GUTTMAN L., "A new approach to factor analysis : the Radex, in P. Lazarsfeld (ed.), *Mathematical Thinking in the Social Sciences*, New York, Free Press, 1954.

- [85] HAJNAL A., SURANYI A.J., "Über die Auflösung von Graphen vollständige Teilgraphen", *Ann. Univ. Sci. Budapest Eötvos Sect. Math.*, 1 (1958), 113.
- [86] HAJOS G., "Über eine Art von Graphen", *Internationale Math. Nachrichten*, 11 (1957), Sondernummer 65.
- [87] HALPHEN E., "La notion de vraisemblance", *Publications de l'I.S.U.P.*, 4, 1 (1955), 41-92.
- [88] HARARY F., "A graph theoretic approach to similarity relations", *Psychometrika*, 29 (1964), 143-151.
- [89] HODSON F.R., KENDALL D.G., TÄUTU P. (eds), *Mathematics in the Archaeological and Historical Sciences*, Edinburgh, Edinburgh University Press, 1971.
- [90] HOLE F., SHAW M., Computer analysis of chronological seriation", *Rice Univers. Studies*, 53, (1967), 1-166.
- [91] HOLLAND P.W., "Semiorder theory I : Characterization of semiorders", *Memorandum NS 44*, Department of Statistics, Harvard University, 1966.
- [92] HOLLAND P.W., "Semiorder theory II : Linear semiorders", *Memorandum NS 45*, Department of Statistics, Harvard University, 1966.
- [93] HUBERT L., "Some applications of graph theory and related non-metric techniques to problems of approximate seriation : the case of symmetric proximity measures", *Br. J. math. statist. Psychol.*, 27, 2 (1974), 133-153.
- [94] HUBERT L., "Spanning trees and aspects of clustering", *Br. J. math. statist. Psychol.*, 27 (1974), 14-28.
- [95] HUBERT L.J., "Problems of seriation using a subject by item response matrix", *Psychol. Bull.*, 81, 12 (1974), 976-983.
- [96] HUBERT L.J., "Seriation using asymmetric proximity measures", *Brit. J. math. statist. Psychol.*, 29 (1976), 32-52.
- [97] HUBERT L.J., BAKER F.B., "Applications of combinatorial programming to data analysis : the traveling salesman and related problems", *Psychometrika*, 43, 1 (1978), 81-91.
- [98] HUBERT L.J., SCHULTZ J., "Quadratic assignment as a general data analysis strategy", *Brit. J. math. stat. Psychol.*, 29 (1976), 190-241.
- [99] JACQUET-LAGREZE E., "How we can use the notion of semiorders to build outranking relations in multicriteria decision making", in *Utility, subjective Probability and human decision making*, ed. C. Vlek et P. Wendt, D. Reidel, 1975 et Metra, 13, 1 (1974), 59-86.
- [100] JACQUET-LAGREZE E., *La modélisation des préférences ; préordres, quasi-ordres et relations floues*, Thèse de 3ème Cycle, Université Paris-V, 1975.
- [101] JACQUET-LAGREZE E., "Représentation de quasi-ordres et de relations probabilistes transitives sous forme standard et méthodes d'approximation", *Math. Sci. hum.*, 63 (1978), 5-24.
- [102] JAMISON D.T., LAU L.J., "Semiorders and the theory of choice", *Econometrica*, 41 (1973), 901-902.
- [103] JAMISON D.T., LAU L.J., "Semiorders and the theory of choice : a correction", *Econometrica*, 43, 5-6 (1975), 975-977.
- [104] JAMISON D.T., LAU L.J., "The nature of equilibrium with semi-ordered preferences", *Econometrica*, 45, 7 (1977), 595-605.

- [105] KELLY J.S., *Arrow impossibility theorems*, New York, Academic Press, 1978.
- [106] KENDALL D.G., "A statistical approach to Flinders Petrie's sequence dating", *Bull. Int. Statist. Inst.*, 40 (1963), 657-680.
- [107] KENDALL D.G., "Incidence matrices, interval graphs, and seriation in archaeology", *Pacific J. Math.*, 28 (1969), 565-570.
- [108] KENDALL D.G., "Some problems and methods in statistical archaeology", *World Archaeol.*, 1 (1969), 68-76.
- [109] KENDALL D.G., "A mathematical approach to seriation", *Phil. Trans. R. Soc. Lond.*, A 269 (1971), 125-135.
- [110] KENDALL D.G., "Abundance matrices and seriation in archaeology", *Zschr. Wahrschein.*, 17 (1971), 104-112.
- [111] KENDALL D.G., "Seriation from abundance matrices", in F.R. Hodson *et al* (eds), *Mathematics in the Archaeological and Historical Sciences*, Edinburgh, Edinburgh University Press, 1971.
- [112] KOTZIG A., "Paare Hajóssche Graphen", *Časop. Pěst. Mat.*, 88 (1963), 236-241.
- [113] KRANTZ D.H., "Extensive measurement in semiorder", *Philosophy of Science*, 34 (1967), 348-362.
- [114] KLEE V., "What are the intersection graphs of arcs in a circle", *Am. Math. Monthly*, 7 (1969), 810-813.
- [115] KUZARA R.S., MEAD G.R., DIXON K.A., "Seriation of anthropological data : a computer program for matrix ordering", *Amer. Anthropologist*, 68, 6 (1965), 1442-1455.
- [116] LANDAU J., DE LA VEGA F., "A new seriation algorithm applied to European protohistoric anthropomorphic statuary", in F.R. Hodson *et al* (eds), *Mathematics in the Archaeological and Historical Sciences*, Edinburgh, Edinburgh University Press, 1971.
- [117] LECLERC B., "Arbres et dimension des ordres", *Discrete Math.*, 14 (1976), 69-76.
- [118] LEKKERKERKER C.G., BOLAND J.C., "Representation of a finite graph by a set of intervals on the real line", *Fund. Math.*, 51 (1962), 45-64.
- [119] LERMAN I.C. "Analyse du phénomène de la sériation à partir d'un tableau d'incidence", in *Les méthodes mathématiques de l'archéologie*, CADA, CNRS, 1971.
- [120] LERMAN I.C., "Analyse du phénomène de sériation à partir du tableau d'incidence", *Math. Sci. hum.*, 38 (1972), 39-57.
- [121] LIPSKI W. Jr, NAKANO T., "A note on the consecutive 1's property (infinite case)", *Comment. Math. Univ. St Paul*, 2 (1976-77), 149-152.
- [122] LUCE R.D., "Semi-orders and a theory of utility discrimination", *Econometrica*, 24 (1956), 178-191.
- [123] LUCE R.D., SUPPES P., "Preference, utility and subjective probability", in R.D. Luce, R.R. Bush and E. Galanter (eds), *Handbook of mathematical psychology*, III, 249-410, New York, Wiley, 1965.
- [124] LUCE R.D., "Three axiom systems for additive semi-ordered structures", *SIAM J. Appl. Math.*, 25 (1973), 41-53.
- [125] MAY K.O., "Intransitivity, utility and the aggregation of preference patterns", *Econometrica*, 22 (1954), 1-13.

- [126] MENUET J., "Quasi-ordres et modélisation des préférences", Note SEMA n°197, (1974), 1-77.
- [127] MILLIER C., TOMASSONE R.E., "Méthodes d'ordination et de classification: leur efficacité et leurs limites", in *Archéologie et calculateurs*, Paris, CNRS, 1970.
- [128] MIRKIN B.G., "Description of some relations on the set of real-line intervals", *J. Math. Psychol.*, 9 (1972), 243-252.
- [129] MONJARDET B., JACQUET-LAGREZE E., "Modélisation des préférences et quasi-ordres", *Math. Sci. hum.*, 62 (1978), 5-10.
- [130] MONJARDET B., "Axiomatiques des quasi-ordres", *Math. Sci. hum.*, 63 (1978), 51-82.
- [131] MOORE J.I. Jr, "Interval hypergraphs and D-interval hypergraphs", *Discrete Math.*, 17 (1977), 173-179.
- [132] NG Y.K., "Sub-semiorder. A model of multidimensional choice with preference intransitivity", *J. Math. Psychol.*, 16, 1 (1977), 51-59.
- [133] ORE O., *Theory of graphs*, Chapitre 11, Providence, American Mathematical Society, 1962.
- [134] PARLEBAS P., "Effet Condorcet et dynamique sociométrique. I : l'ordre de préférence au niveau individuel", *Math. Sci. hum.*, 36 (1971), 5-31. II : Incohérences rationnelles et cohésions groupales", *Math. Sci. hum.*, 37 (1972), 37-67.
- [135] PATTANAIK P.K., *Voting and collective choice*, Cambridge, Cambridge University Press, 1971.
- [136] PETRIE W.M.F., "Sequences in prehistoric remains", *J. Anthropol. Inst.*, 29 (1899), 295-301.
- [137] PNUELI A., LEMPEL A., EVEN S., "Transitive orientation of graphs and identification of permutation graphs", *Canad. J. math.*, 23, 1 (1971), 160-175.
- [138] POINCARÉ H., *La science et l'hypothèse*, Chapitre 2, Paris, Flammarion, 1902.
- [139] POINCARÉ H., *La valeur de la science*, Chapitre 3, Paris, Flammarion, 1905.
- [140] RABINOVITCH I., "The Scott-Suppes theorem on semiorders", *J. Math. Psychol.*, 15, 2 (1977), 209-212.
- [141] RABINOVITCH I., "The dimension of semiorders", *J. Comb. Th. (A)*, 25 (1978), 50-61.
- [142] RABINOVITCH I., "An upper bound on the dimension of interval orders", *J. Comb. Th. (A)*, 25 (1978), 68-71.
- [143] RENFREW C., STERUD G., "Close-proximity analysis : a rapid method for the ordering of archaeological materials", *Am. Antiquity*, 34 (1969), 265-277.
- [144] RENZ P.L., "Intersection representations of graphs by arcs", *Pacific J. Math.*, 34 (1970), 501-510.
- [145] RIGUET J., "Les relations de Ferrers", *C.R. Acad. Sci. Fr.*, 231 (1950), 936-937.
- [146] ROBERTS F.S., *On the compatibility between a graph and a simple order*, The Rand Corporation, Memorandum RM-5778-PR, 1968.

- [147] ROBERTS F.S., *Representations of indifference relations*, Unpublished doctoral dissertation, Stanford, Stanford University, 1968.
- [148] ROBERTS F.S., "Indifference graphs", in F. Harary (Ed.), *Proof techniques in graph theory : Proceedings of the Second Ann Arbor Theory Conference*, 139-146, New York, Academic Press, 1969.
- [149] ROBERTS F.S., "On the boxicity and the cubicity of a graph", in W.T. Tutte (Ed.), *Recent progress in combinatorics : Proceedings of the Third Waterloo Conference*, 301-310, New York, Academic Press, 1969.
- [150] ROBERTS F.S., "On nontransitive indifference", *J. Math. Psychol.*, 7 (1970), 243-258.
- [151] ROBERTS F.S., "On the compatibility between a graph and a simple order", *J. Comb.Th.*, 11 (1971), 28-38.
- [152] ROBERTS F.S., "Homogeneous families of semiorders and the theory of probabilistic consistency", *J. Math. Psychol.*, 8 (1971), 248-263.
- [153] ROBERTS F.S., *Discrete mathematical models with applications to social, biological and environmental problems*, New York, Prentice Hall, 1976.
- [154] ROBERTS F.S., "Food webs, competition graphs and the boxicity of ecological phase space", in *Theory and Applications of graphs*, 477-490, *Lecture Notes in Math.* 642, New York, Springer Verlag, 1978.
- [155] ROBERTS F.S., *Graph theory and its applications to problems of society*, Philadelphia, SIAM, 1978.
- [156] ROBINSON W.S., "A method for chronologically ordering archaeological deposite", *Am. Antiquity*, 16 (1951), 293-301.
- [157] ROGERS D.G., "Similarity relations on finite ordered sets", *J. Comb. Th. (A)*, 23 (1977), 88-99.
- [158] ROSE D.J., "Triangulated graphs and the elimination process", *J. Math. Analy.*, 32 (1970), 597-609.
- [159] SCOTT D., "Measurement structures and linear inequalities", *J. Math. Psychol.*, 1 (1964), 233-247.
- [160] SCOTT D., SUPPES P., "Foundational aspects of theories of measurement", *J. Symbolic Logic*, 23 (1958), 113-128.
- [161] SHARP H. Jr, "Enumeration of transitive, step-type relations", *Acta math. Acad. Sci. Hung.*, 22 (1971-72), 365-371.
- [162] SHEVRIN L.N., FILIPPOV N.D., "Partially ordered sets and their comparability graphs", *Siberian Math. J.*, 11 (1970), 497-509.
- [163] SIBSON R., "Some thoughts on sequencing methods", in *Mathematics in the Archaeological and Historical Sciences*, Edinburgh, Edinburgh University Press, 1971.
- [164] SIBSON R., "Local order multidimensional scaling", *Bull. Inter. Statist. Institute, Proceedings of the 39th session*, 1973, Vienne, 45, 4.
- [165] SIBSON R., "Order invariant methods for data analysis", *J. Royal Stat. Soc. B*, 34 (1975), 311-349.
- [166] STAHL F.W., "Circular genetic maps", *J. Cell. Physiol.* 70 (sup.1) (1967), 1-12.
- [167] STERNIN H., *Statistical methods of time sequencing*, Stanford University Department of Statistics, Technical Report n°112, 1965.

- [168] SUPPES P., ZINNES J., "Basic measurement theory", in R.D.Luce, R.R.Bush, and E. Galanter (eds.), *Handbook of Mathematical Psychology*, I, 1-76, New York, Wiley, 1963.
- [169] SZCZOTKA F.A., "On a method of ordering and clustering of objects", *Zastosowania Matematyki*, 13 (1972), 23-33.
- [170] TORGERSON W.S., *Theory and methods of scaling*, New York, Wiley, 1958.
- [171] TROTTER W.T. Jr, MOORE J.I. Jr, "Characterization problems for graphs, partially ordered sets, lattices and families of sets", *Discrete Math.*, 16 (1976), 361-381.
- [172] TUCKER A.C., *Two characterizations of proper circular-arc graphs*, Technical Report 69-6, Operations Research House, Stanford, Stanford University, 1969.
- [173] TUCKER A.C. "Characterizing circular-arc graphs", *Am. Math. Monthly*, 77 (1970), 1257-1260.
- [174] TUCKER A.C., "Matrix characterizations of circular-arc graphs", *Pacific J. Math.*, 39 (1971), 535-545.
- [175] TUCKER A.C., "A structure theorem for the consecutive 1's property", *J. Comb. Th.*, 12 (B) (1972), 153-162.
- [176] TUCKER A., "Some structure theorems for some circular-arc graphs", *Discrete Math.*, 7 (1974), 167-195.
- [177] TUCKER A.C., "Circular-arc graphs, new uses and a new algorithm", in *Theory and Applications of graphs*, ed. Alavi Y. and Lick D.R., 580-589, *Lecture Notes in Math.* 642, New York, Springer Verlag, 1978.
- [178] TVERSKY A., "The intransitivity of preferences", *Psychol. Review*, 76 (1969), 31-48.
- [179] VINCKE P., "Quasi-ordres généralisés et représentation numérique", *Math. Sci. hum.*, 62 (1978), 35-60.
- [180] VINCKE P., *Concept de quasi-ordre généralisé et théorèmes de représentation*, thèse de doctorat, Université Libre de Bruxelles, 1976.
- [181] WALTER J.R., *Representations of rigid cycle graphs*, Dissertation, Wayne State University, 1972.
- [182] WALTER J.R., "Representations of chordal graphs as subtrees of a tree", *J. Graph Theory*, 2 (1978), 265-267.
- [183] WEGNER G., *Eigenschaften der Nerven Homologisch-einfacher Familien in R^n* , Unpublished doctoral dissertation, Göttingen, 1967.
- [184] WIENER N., "Contribution to the theory of relative position", *Proc. Cambridge philos. Soc.*, 17 (1912-14), 441-449.
- [185] WIENER N., "Studies in synthetic logic", *Proc. Cambridge philos. Soc.*, 18 (1914-1916), 14-28.
- [186] WIENER N., "A new theory of measurement : a study in the logic of mathematics", *Proc. London math. Soc.*, 19 (1919-1920), 181-205.
- [187] WILKINSON E.M., "Archaeological seriation and the traveling salesman problem, in F.R. Hodson et al (eds.), *Mathematics in the Archaeological and Historical Sciences*, Edinburgh, Edinburgh University Press, 1971.
- [188] WINE R.L., FREUND J.E., "On the enumeration of decisions patterns involving n means", *Ann. math. Statist.*, 28 (1957), 256-259.