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British Classification Society / Systematics Association Joint Meeting Nov. 1984

A joint one-day meeting is to take place on Friday, Nov.16, 1984 in the Meeting Room of the Linnean Society, Burlington House, London on the topic "Graphics in Classification". The program lists the following six papers with introductory remarks by J.C.Gower, the president of the British Classification Society and closing remarks by R.G.Davies, the president of the Systematics Association.

F.A.BISBY: Diagrammatic representation of biological taxonomies through the ages. – M.J.CLARK: Land surface classification – images and spatial information systems. – F.CRITCHLEY: Statistical classification and its presentation. – D.WISHART: Traversing the dendogram – in colour. – R.J.WHITE: Image analysis and intro-specific variation. – G.C.S.CLARKE: Presenting classifications to the public.

Organizers of the meeting are R.Alkin, Biology Department, Bldg.44, University, Southampton, S09 5NH and R.W.Payne, Statistics Department, Rothamsted, Harpenden den, AL5 2JQ, England.

Secretary of the British Classification Society is Dr.A.J. BOYCE, Dept.of Biological Anthropology, 58 Banbury Road, Oxford OX2 6QS, England.

Reports and Communications

Classification Society of North America Conference 1984

The annual conference (the 15th in the series of conferences of the former North American Branch of The Classification Society) took place in Santa Barbara, California, June 25–27, 1984 as a joint meeting together with the Psychometric Society. Altogether some 83 papers were presented in 16 sessions on 9 topics and during 3 symposia. The local arrangements were taken care of by the president of the Classification Society, Prof.Lawrence Hubert, University of California, he was also the program chairman for his Society and Prof. Bruce Bloxom, Vanderbilt University, for the Psychometric Society.

The following 9 topical areas were chosen, they are listed here together with the number of papers in brackets: Test Theory (13), Mathematical Models (5), Statistical Methods (10), Covariance Structures (12), Multidimensional Scaling (10), Measurement Theory (4), Classification (5), Classification Methodology (9), Classification Application (5).

The 3 Symposia were devoted to the following topics. New Developments in Item Factor Analysis (4), Consensus Analysis (3) and Statistical Analysis of Growth and Learning (3).

The 25 abstracts submitted through the Classification Society can be had by writing to the Secretary of the Society, Dr.George W.Furnas, Morris Research and Engineering Center. Bell Communications Research, Inc., 445 South Street, Morristown, NJ 07960, USA. Their titles are as follows: BOZDOGAN, H.: AIC – Replacements for multivariate multi-sample conventional tests of homogeneity models. – BOZDOGAN, H.. Multi-sample cluster analysis as an alternative to multiple comparison procedures. – REHNER, N.F.: Sampling distributions of consensus indices when all classifications are equally likely. – BAILEY, K.D.: Entropy clustering: from categorical to continuous data. – CORTER, J.E.: Extended similarity trees. – MARCUS, R.J.: Computer generation of structure-effect relationships from text data. – FULLER, V.. Classification and science for women and girls. – EDGINGTON, E.S.: Where do you draw the line? – RAVI KUMAR, C.N., CHIDANANDA GOWDA, K.: Generation and recognition of Kannada characters. – GHOLSTON, L.R., SCHEETZ, J.P.: Classifying males and females by mandibular and maxillary arch form and shape. – STOUT, R.L.: Multidimensional scalogram models for changes in psychotic symptoms over time. – LORR, M., KENDALL, A.J.: A comparison of IICA with two cluster methods using MMPI profiles. – GREEN, P.E., KRIEGER, A.M.: Buyer similarity measures in conjoint analysis: some alternative proposals. – HOLMAN, E.W.: Evolutionary effects in pre-evolutionary classifications. – CIAMPI, A., HOGG,

S.A.: Recursive partition in survival analysis. — WIND-HAM, M.P.: Clustering with assignment measures. — DAY, W.H.E., EDELSBRUNNER, H.: Investigation of integer and proportional link linkage clustering methods. — BRADLEY, D.: Display of hierarchical clustering results with recursively drawn trees. — FAITH, D.P.: Sensitivity of proximity measures in numerical taxonomy. — DAY, W.H.E.: Optimally efficient algorithms for comparing hierarchical classifications. — BATCHELDER, W.H.: Consensus Analysis I: A mathematical model of individual competence and knowledge aggregation. — ROMNEY, A.K.: Consensus Analysis II: The analysis of simulated and quasi-experimental data. — WELLER, S.C.: Consensus Analysis III: The analysis of data collected in naturally occurring situations. — DeSARBO, W.S., CARROLL, D.J.: Three-way metric unfolding via weighted least squares. — LUNDY, M.E., HARSHMAN, R.A., KRUSKAL, J.B.: "The best of both worlds": Combining PARAFAC-CANDECOMP unique dimensions with Tucker "Core" matrices.

The New JOURNAL OF CLASSIFICATION

On Aug.10, 1984 the first number of this new journal was received in Europe. It is published for the Classification Society of North America by Springer Verlag New York/Berlin/Heidelberg/Tokyo, has some 140 pages and is available for 45.— dollars in the USA and DM 114.— plus postage and handling in all other countries. Members of the Classification Society receive the journal as part of their annual membership dues (30.— dollars for 1984).

Three issues are planned to appear each year.

The table of contents — which is printed on the front cover — lists the following articles and two book-reviews: DAY, W.H.E., EDELSBRUNNER, H.: Efficient algorithms for agglomerative hierarchical clustering methods. — CARROLL, J.D., CLARK, L.A., DeSARBO, W.S.: The representation of three-way proximity data by single and multiple tree. — GALE, N., HALPERIN, W.C., COSTANZO, C.M.: Unclassed matrix shading and optimal ordering in hierarchical cluster analysis. — BROWN, E.K., DAY, W.H.E.: A computationally efficient approximation to the nearest neighbor interchange metric. — PAUNONEN, S.V.: A note on Cohen's Profile Similarity Coefficient r_c.

The list shows that the understanding of the concept "classification" is purely a mathematical-statistical one. We should like to point out that the journal INTERNATIONAL CLASSIFICATION covers this aspect as one of the existing approaches to classification, namely the numerical one. The journal CATALOGING AND CLASSIFICATION QUARTERLY (Haworth, New York) does not seem to include this numerical approach at all. In order not to confuse the professional environment, it may be necessary to use more distinctive terms for the different approaches, such as "numerical classification" and "conceptual classification". "Classification" could then be used to cover both aspects.

Classification as a Tool of Research

The 9th Annual Conference of the German Society for Classification will take place from June 26–28, 1985 at the University of Karlsruhe. A first announcement and call for papers has been sent out. Contributions are invited to the following topics:

Concept Analysis (construction and reconstruction of concepts, theories of characteristics and of definitions, impact of artificial intelligence).

Data Analysis (methods of scaling, canonical analysis, correspondence analysis, pattern recognition and discrimination, analysis and aggregation of discrete structures, similarity and association).

Numerical Classification (clustering methods, their asymptotical behavior and robustness, fuzzy clustering, statistical methods).

Indexing Languages and Terminologies as Information Resources (classification systems and thesauri for situation or case analyses, conceptual structure utilization, identification of analogies, etc.)

Software Tools — especially on microcomputers — (availability of programs, interfaces to data base systems, information retrieval systems, method base systems, expert systems and artificial intelligence, graphical representation, comparison of algorithms).

Applications e.g. in economics and business administration (credit scoring and insolvency prediction in banking — modelling of tariff structures in insurance, market segmentation and product positioning in marketing research, commodity and product classification), in natural sciences (discriminant analysis in medicine, taxonomy and evolution in bacteriology), in engineering and in the social sciences and the humanities.

Discussion will center around the question on how to use classification methods and results as a powerful tool of research: for analysis and synthesis, exploration of structures and optimization in retrieval. Conference languages are German and English. Colleagues are invited to submit papers describing their most recent work. A one-page summary should be sent until Jan.1, 1985 to the Secretariat of the Society, Woogstr. 36a, D-6000 Frankfurt 50.

Local arrangements will be taken care of by Prof.Dr.Wolfgang Gaul, Institut für Entscheidungstheorie und Unternehmensforschung, Universität Karlsruhe, Kollegium am Schloß, Bau III, PD 6380, D-7500 Karlsruhe 1.

3rd International Congress of Systematic and Evolutionary Biology, ICSEB-III, England 1985

From July 4–10, 1985 this Congress will be held at the University of Sussex near Brighton, England. It is sponsored by the Royal Society, British Ecological Society, Linnean Society, Palaeontological Association and Systematics Association. Previous conferences have been in Vancouver 1980 and Boulder, Colo. 1973. Proposed subjects include: Symbiosis in evolution, conservation of tropical ecosystems, biogeographic evolution of the Malay Archipelago, adaptational aspects of physiological processes, co-evolution in ecosystems and the Red Queen Hypothesis, angiosperm origins and the biological consequences, the measurement of rates of evolution, molecular biology and evolutionary theory, co-evolution and systematics, molecules vs.morphology in phylogeny, paleontology in biology.

Further information may be had from Prof.Barry Cox, ICSEB Congress Office, 130 Queen's Road, Brighton, Sussex BNI 3WE, England.