International Federation of Classification Societies Newsletter

Number 10   March 1995

The International Federation of Classification Societies, founded in 1985, is composed of: Associação Portuguesa de Classificação e Análise de Dados, British Classification Society, Classification Society of North America, Gesellschaft für Klassifikation, Japanese Classification Society, Société Francophone de Classification, Società Italiana di Statistica, Association des Sociétés Yougoslaves de Statistique, Vereniging voor Ordinatie en Classificatie and Section of Classification and Data Analysis of the Polish Statistical Society. (Other societies are currently joining.)

The IFCS is a non-profit, non-political scientific organization, the aims of which are to further classification research. Among other activities, the IFCS organises a biennial conference, and supports the Journal of Classification.

From the President

I am sure that we were all distressed when we heard of the earthquake that hit the Kobe region in January. As you will know, arrangements were proceeding to hold the Federation's next conference in Kobe in March 1996. Elsewhere in this issue, Professor Hayashi, the IFCS-96 Conference President, describes the continuing plans for the conference. Let me encourage as many of you as are able to do so to attend IFCS-96.

The Federation now has a tenth Member Society: Council recently approved an application for membership from Associação Portuguesa de Classificação e Análise de Dados (CLAD). We warmly welcome our colleagues from Portugal into the IFCS.

Council has also been considering how it can increase interest in IFCS activities among individuals who come from parts of the world which do not yet have their own Classification Society. The intention is that such individuals will be invited to join the IFCS Group-at-Large; elsewhere in this issue, Vladimir Batagelj provides further information about this group.

Allan Gordon
a.d.gordon@st-andrews.ac.uk

IFCS Elections

As a result of the recent IFCS elections J. Douglas Carroll was elected as Vice-President. He will serve one year (1995) as Vice-President, then two years (1996 and 1997) as President, and one further year (1998) as Vice-President. The two additional members elected to Council were David J. Hand and Fionn Murtagh who will serve for a four-year term (1995-1998).

Contents

IFCS-96 Conference

In the early hours of 17 January, a great earthquake struck the region of Kobe, where we have been preparing to hold the IFCS-96 conference. This area is known from ancient records to be one where earthquakes have very rarely happened. Damage in the area showed a lack of preparation for earthquakes, which might have increased the extent of the disaster.

The Kobe city authorities have been devoting their full efforts to the recovery and reconstruction operation, and it seems to us that the officials are intending to hold all international events as scheduled. Nationwide reconstruction activities for Kobe region have also commenced.

I had been informed by the Kobe International Association in charge of renting the International Conference Center Kobe that the hall was scheduled to resume business in April 1995 and this information was confirmed by the Mayor of Kobe City, Mr. Kazutoshi Sasayama, at the end of February in his message. Faced with the disaster, the Organizing Committee had started to consider changing the site of the conference but as the existing state of things in Kobe cleared up in the course of time, we decided unanimously at the committee meeting on 7 March to hold the conference in Kobe on 27-30 March 1996 as originally planned.

We, Organizing Comittee members, thus hope to make our small contribution to encouraging the recovery activities of the city. I apologize for any anxiety caused you by the delay in making this announcement. We seek the support of IFCS members for this great decision.

I would like to express our heartfelt gratitude for the sympathy and encouragement we have received from societies and individuals.

Chikio Hayashi
IFCS-96 Conference President
c/o yajima@ms.kuki.sut.ac.jp

Reconstruction Work Underway in Kobe, Japan

Report from Local Scientific Organizing Committee Member, IFCS-96

My Son Asleep in Bed
It was just a quarter to six in the morning of the 17th of January. Still half dreaming in bed, I realised that I had to wake up soon not to be late for my lecture which would start at nine o'clock. I live in Osaka, Japan's second largest city located 20 km east of Kobe, and it usually takes me one and a half hours to get to my office in the west end of Kobe. One minute later, all of a sudden, my three-storied house started shaking so terribly that immediately realised it was an earthquake.
I tried to get to my 7 year-old son's bedroom next door, but was not able to stand straight on the floor. I crawled on the floor and managed to reach his room only to find him still sound asleep in his wooden bed that kept sliding backwards and forwards about one foot. Meanwhile, the house itself started squeaking, glass could be heard breaking in the distance, and the heavy brass bell bought in Belgium 10 years ago and hanging in the entrance hall for decoration went clang-clang lunatically in the darkness as if trying to tell us something horrific had happened.
Only Epicentre Information on TV
After the shaking stopped, I and my wife and son rushed to the living room downstairs, switched on the TV, and waited for a news flash about the details of the quake. While waiting, I went to the bathroom only to find out that the water service had been stopped. Fortunately gas and electricity were still available, and my house and its interior had little damage after all. Before long, the TV started reporting that the epicentre was near a little island about 40 km from Osaka and only 4 km from Kobe, and that its magnitude was 7.2 on the Richter scale. The TV also said that all public transport had stopped, and I knew that I had lost all possible ways to go to my office. Driving was out of the question under these circumstances. I tried to get in touch with my university by telephone, but in vain.
Telephone lines were damaged. I decided to stay home all day, and told my son not to go to school that day. Strangely, in the first few hours there was little news about damage in the Kobe area, so I was not worried about Kobe or my office at all. We later found out that the damage in Kobe was so extensive that all communication lines were cut off and they could not inform other areas how devastated Kobe was. After a few hours, the TV started showing horrific scenes of Kobe and its suburbs: crushed and/or burning houses and buildings, collapsed freeways, railways and bridges, destroyed harbours, thousands dead, tens of thousands injured, and hundreds of thousands homeless. This disaster was unusual, even in Japan where earthquakes are not so unusual, in that it occurred in the middle of a modern, densely-populated, and highly devel-

oped area.
I had to stay home from work for nearly a week until a possible route of public transport leading to the west end of Kobe from Osaka resumed. At first, the only possible route was to use train services that ran north of Kobe. It took four hours to reach my office. I was told by one of my colleagues beforehand that a 6-metre-wide, ceiling-high steel bookshelf in my office had collapsed and bent, and that all my books were scattered on the floor, desk, and couch, ending up with a metre-high mountain of books and files. They blocked the office door, so we had to break the glass window above the door, jump down on the books, and clear them from the doorway to get the door open.

Computer System Safe
Only 5 years ago the university moved to the present campus from the old one a few kilometres south. Fortunately, the new university buildings suffered only a little damage, but many parts of the pavement within the campus have cracks, bumps and cave-ins. Our computer centre had only a little damage; a part of the floor on which the mainframe computer is installed collapsed, but the computer itself had no serious damage at all. There were several intelligent terminals which fell off the tables, but other personal computers and work-stations were undamaged. There was quite a lot of damage to steel cabinets and filing cases where magnetic tapes and manuals were stored. We had also substantial damage to bookshelves in both the Main Library and the Institute of Economics.

Intensive Reconstruction in Kobe
Finally, I will refer to the damage on Port Island, Kobe, where our international conference is to be held next March. It is an artificially-created island, and there was some damage to some buildings and docks and the one rail transportation system, but it was certainly not as bad as that in central Kobe. If the manager of the Kobe International Conference Centre is confident about holding our conference there next year, I presume that it has no serious damage. The island is also linked to Osaka and the new Kansai International Airport by high-speed shuttle boats, so it is conveniently located for foreign visitors.
Intensive reconstruction work is under way everywhere in Kobe and its suburbs, and I hope that the new Kobe will be ready for the IFCS next year. If we in Kobe can receive the support of our IFCS members that the meeting should be held in Kobe, we would be quite happy to do our best to make it successful.

Setsuo Suoh, Kobe University of Commerce
Email:suoh@kucgw.kobeuc.ac.jp

IFCS-96,27-30 March 1996
Kobe,Japan

IFCS's Group-at-Large

From the **Guidelines** for the Group-at-Large (April 1994):

1. Individuals with an interest in classification for whom there does not exist an appropriate national, regional or linguistic Classification Society belonging to the IFCS may join the Group-at-Large. It is the intention that once the Group-at-Large contains a sufficient number of people from the same country or region, or with the same linguistic background, these individuals will form their own Classification Society and apply for it to become a member Society of the Federation.

2. Individual members of the Group-at-Large shall be liable to pay an annual due determined by the Federation's Council, and have the right to receive relevant material describing the activities of the Federation.

3. A Secretary of the Group-at-Large shall be elected by the Federation's Council for a four-year term of office. The secretary shall be a member of Council, and will be responsible for liaising between the Council and the individual members of the Group.

Last year, 1994, I (**Vladimir Batagelj**) was elected as a **Secretary of the IFCS's Group-at-Large** with the responsibility to regenerate its activities, to distribute the information about Federation's activities to the Group members, to encourage the membership and to collect the annual dues of members of the Group. The annual dues of individual members of the Group-at-Large for 1995 were set by the Council at $8, with a concessionary rate of $4 for members from poorer countries and countries with exchange control restrictions.

In the year 1995 I intend, to consolidate and enlarge the membership structure of the Group, to identify the needs of its members, and to establish basic links and services.

For detailed information about the membership in the Group-at-Large and any other related questions, suggestions or comments, please contact me at the addresses:

Vladimir Batagelj
University of Ljubljana
Department of Mathematics
Jadranska 19, 61111 Ljubljana
Slovenia

Fax: +386 61 217 281
Email: vladimir.batagelj@uni-lj.si
WWW Home Page: http://www.uni-lj.si/~vlado/ vlado.html

I established also a WWW (World Wide Web) Home Page of the Group-at-Large:
http://www.uni-lj.si/~vlado/GatLarge.html

Vladimir Batagelj was born in 1948 in Idrija, Slovenia. He is an associate professor of discrete and computational mathematics at Department of Mathematics of University of Ljubljana, Slovenia. His main research interests are in graph theory, data analysis (clustering, networks, (dis)similarity based methods) and optimization methods. His interest in clustering goes back to 1976 when he started to write a package of clustering programs CLUSE. Together with Anuška Ferligoj he is active in classification community from 1980. He was a founding member of JSK, but as a consequence of a tragic war in ex-Yugoslavia, at the IFCS conference in Paris 1993 members from Slovenia moved to the Group-at-Large. Some of his contributions to the field of data analysis are:

Batagelj V.: Note on ultrametric hierarchical clustering algorithms. *Psychometrika*, 46(1981)3, 351-352.

Ferligoj A., Batagelj V.: Clustering with relational constraint. *Psychometrika*, 47(1982)4, 413-426.

Batagelj V.: Dissimilarities Between Structured Objects — Fragments. (E. Diday, Y. Lechevallier ed.: *Proceedings of the Conference Symbolic-numeric Data Analysis and Learning, Versailles*, France, September 18-20, 1991) Nova Science Publishers, New York 1991, 255-262.

CSNA - Classification Society of North America

We are pleased to announce our officers for 1995, welcoming Dawn Iacobucci, the new Secretary/Treasurer, and returning Mel Janowitz and Stan Wasserman.
The complete list is as follows.

OFFICERS
Michael Windham, President
Herman Friedman, Past President
Peter Bryant, President Elect
Dawn Iacobucci, Secretary/Treasurer

DIRECTORS
Stephen Hirtle   Stanley Sclove
Douglas Carroll   Larry Hubert
Mel Janowitz   Stanley Wasserman

EDITOR DIRECTORS
Phipps Arabie, Journal of Classification
F.R. McMorris, CSNA Newsletter
Fionn Murtagh, CSNA Service

REPRESENTATIVES TO IFCS COUNCIL
Stephen Hirtle   Pierre Legendre

We also call to your attention once again that the 1995 annual meeting of the Classification Society of North America (CSNA) will be held in Denver, Colorado from June 22-June 25, 1995 at the Executive Tower Inn, 14th and Curtis Streets. The meeting is supported by the College of Business, University of Colorado at Denver. The meeting plans currently include a short course on Thursday, June 22, a welcoming reception on Thursday night, and regular sessions from Friday morning, June 23 until Sunday noon, June 25, 1995. A banquet is planned for Friday night and a variety of social activities in Denver and the surrounding area will be available.

In addition contributed sessions on a variety of topics, we will invited sessions on

*Classification and Clustering in Marketing
    Organizers : P. Green, the Wharton School
                 J. D.Carroll, Rutgers University

*New Optimization and Neural Network Approaches to Discriminant Analysis, with Applications
    Organizer : Fred Glover, University of Colorado at Boulder

*Neural Networks for Classification
    Organizer : Manavendra Misra, Colorado School of Mines

*Model Selection Methods in Classification and Clustering
    Organizer : Hamparsum Bozdogan, University of Tennessee

*Authorship Attribution
    Organizer : David Banks, Carnegie Mellon University

All inquiries should be directed to:
Peter Bryant, CSNA-95
College of Business, University of Colorado at Denver
Campus Box 165, Denver, Colorado 80217-3364 USA
Tel: +1 303 556 5833, Fax: +1 303 556 5899
Email: csna95@castle.cudenver.edu.

Please join us.

Michael P. Windham, President
Email: windham@sunfs.math.usu.edu

VOC-Dutch/Flemish Classification Society

The 1994 Fall Meeting of the VOC on the 10th and 11th of November celebrated the 5th anniversary of the Society. The central theme was "No Classification without Discrimination"; the programme comprised three aspects of discriminant techniques:

- discriminant analysis by means of estimating densities and applying Bayesian rules;
- logistic regression as discriminant analysis;
- non-linear discriminant analysis.

Key-note speakers were:
- Emmanuel Lesaffre, KU Leuven (Prediction and classification of related diagnostic classes), and
- David Hand, Open University (Recent Progress in supervised Classification).

During meetings, coffee breaks and after dinner drinks 40 participants discussed variants of discriminant analysis in particular, and classification in general. The meeting brought about an increase in the number of VOC-members: the actual number is now close to 100.

The 1995 Spring Meeting is organized by the Chairman of the Society and will take place in Groningen on April 13. The Meeting will not have a special theme; key note speaker is Ulf Bôckenholt.

More information on the VOC and its meetings can be obtained from the secretary.

Ineke Stoop, Secretary
Email: STOOP@SCP.NL

SFC - Société Francophone de Classification

(1) The third meeting of the SFC will take place in Namur (Belgium) on September 28-29, 1995; it is organised by the SFC and the Statistical Unit of the Department of Mathematics of the University of Namur.
The meeting includes a scientific program which will cover the most important areas in classification.
Principal activities include plenary talks, presentations of 20 minutes and a poster session.
A.D. Gordon, president of the International Federation of Classification Societies, and H.H. Bock, vice-president of the German Classification Society, will participate as invited speakers.
Authors who intend to present a talk are requested to submit an abstract (one full page, with bibliography, address, and keywords) to the organizer, not later than May 15, 1995. Abstracts will be included in an abstract booklet and distributed to the participants of the conference.
Interested persons will obtain further information (conference program, ...) and the second announcement if they contact the organizer:
J.P. Rasson, Department of Mathematics, Facultes Universitaires Notre-Dame de la Paix, 8 Rempart de la Vierge, B-5000 Namur (Belgium). Tel: (32)(81) 72 49 28; Fax: (32)(81) 72 49 14; Email:jpr@math.fundp.ac.be

(2) The issue number 4 of the *SFC Bulletin* was published in February 1995. Its content is the following:
From the President (J.P. Barthelemy)
News from the Society: Report from the general assembly of the SFC in Tours (A.Hardy)
Sorrow : Homage to Brigitte Escofier (L.Lebart)
Survey on the foundations of classification (Logical mechanism in oder to decide what is matter or not for classification (John Philip Sutcliffe)
Applications: Data Analysis and Biological Sequences 2 (A.Guenoche), Life of the Laboratories: Project Inter-PRC Symbolic-Numeric Discrimination Methods (Coordinators: O.Gascuel and P.Galinari),Thesis, Books, Seminaries, Announcements.
The next issue of the *SFC Bulletin* will appear in July 1995.

Andre HARDY, Secretary
Email: aha@math.fundp.ac.be

JCS-Japanese Classification Society

(1) The annual symposium of JCS was held in the afternoon of September 9, 1994 at the Institute of Statistical Mathematics. Speakers and presentations were as follows:
* Takenobu Tasaki and Masashi Goto(Shionogi Kaiseki Center), Private lessons in cluster analysis
* Hideo Tanaka(University of Osaka Prefecture), Possibility discriminant analysis
* Hirohiko Asano(Japan Research Center), Fuzzy discriminant analysis as a market segmentation tool

(2) The annual research meeting was held on December 16, 1994 at the Institute of Statistical Mathematics. Speakers and presentations were as follows:
* Nagatomo Nakamura(The Graduate University for Advanced Studies), Sadanori Konishi(Kyushu University) and Noboru Ohsumi(Institute of Statistical Mathematics), Classification of myrmecia body measurement data via normal mixture models
* Mika SATO(Hokkaido Musashi Women's Junior College) and Yoshiharu SATO(Hokkaido University), On a clustering model considering vagueness

* Goro Nambu, Juichiro Takeuchi and Kenya Kamimura(Keio University), Classification of body sway patterns
* Toshiko Kikuchi(Utsunomiya University), Takahide Matsuoka(Utsunomiya University), Toshiaki Takeda(Jichi Medical School), Koichiro Kishi(Jichi Medical School), Norio Watanabe(Chuo University) and Tadashi Imaizumi(Tama Institute of Management & Information Sciences), Clustering by competitive learning neural network
* Yoshio Takane, Yuriko Oshima-Takane, Thomas R.Shultz(McGill University), Approximations of nonlinear functions by feed-forward neural networks

Atsuhiro Hayashi
Email: hayashi@c.oka-pu.ac.jp

BCS-BRITISH CLASSIFICATION SOCIETY

(1) There was a joint meeting held with the British Region of the International Biometric Society on the topic Classification in Medicine on Tuesday December 6th 1994 at The Royal Entomological Society, London.
The Speakers were: Ian Poole (MRC Human Genetics Unit, Edinburgh), Nicola Crichton (University of Exeter), Ian Ford (University of Glasgow)

The titles and abstracts were:
* Ian Poole (MRC Human Genetics Unit, Edinburgh), Filtering and integrating evidence in a cervical cytology scanning system
HGU is developing a scanning system to (semi)automate the analysis of monolayer preparations of cervical scrape material. Evidence is gathered on a per-object basis in three phases - low resolution, high resolution and operator-assisted.
At each phase only the 'most significant' objects are considered from the previous phase. Finally, all the gathered evidence must be integrated into a binary decision - "sign-out" or "review" (requires further attention). My talk will discuss the practical approaches to decision making we have adopted at each of the various stages.
* Nicola Crichton (University of Exeter), Correspondence Analysis as a Screening Method for Indicants for Clinical Diagnosis
In a diagnosis, symptoms are observed and the probability of disease is assessed. Correspondence Analysis provides a method for examining the dependence between symptoms and assists in their selection for the application of probability models. The approach will be illustrated by considering two diagnostic problems. The results will be compared with those from a tree-based approach.
* Pian Ford (University of Glasgow), Identifying regions of significant change: Functional Neuroimaging based on PET
There is great interest in the use of modern neuromaging techniques to study the workings of the human brain. The aim is to identify the regions of the brain which 'light up', in images from Positron Emission Tomography, when we are subjected to stimulae.This results in a number of challenging statistical problems. The talk will cover the background to this problem, parametric and non-parametric solutions and an illustration of their use in a study of 'visualising motion'.

There will be a meeting of the British Classification Society on May 10th, 1995 at DRA Malvern, starting at 2:00.
The speakers will be:
* Brian Everitt (Institute of Psychiatry) : An introduction to finite mixture distributions and some example of their application
* Stephen Luttrell (DRA): Partitioned mixture distributions
David Hand: Assessing the performance of allocation rules
J.Q. Smith: Bayesian models forecasting emissions of toxic gas in a complex environment
There is no charge for the meeting, but pre-registration is essential. For further details, please contact: A.R. Webb (webb@signal.dra.hmg.gb) Tel: +44 1684 894490, Fax:+44 1684 894384 or R. Cockayne Tel: +44 1684 896005

Clive Moncrieff, Secretary
Email: cbm@nhm.ac.uk

GfKl-Gesellschaft für Klassfikation

The 19th Annual Conference of the Gesellschaft für Klassifikation e.V.
8 to 10 March 1995, Basel/Switzerland

The 19th Annual Conference was held in Basel(Switzerland). About 300 participants attended a three-day program comprizing 20 invited plenary or survey papers, 110 contributed papers in up to five parallel sessions, and a special poster and software session. Since the first day of the conference was also the last day of the traditional carneval session, the participants enjoyed in the evening and the pauses the numerous folklore events in the city of Basel around the conference premises.

The general title of the conference "Learning and knowledge" was reflected by a series of sessions comprizing: a psychologically oriented plenary lecture (G. Steiner, Basel); several statistical sessions on Bayesian Learning, learning by neural networks, and learning using Gibbs sampling; a tutorial on genetic algorithms; various sections presenting approaches from informatics and artificial intelligence (e.g., on inductive learning and case-based learning); and finally some lectures on computerized learning strategies in linguistics and strategy optimization.

There were at least four other main streams in this conference:

(1) The sessions related to clustering and data analysis presented models, methods and algorithms for classification, the formal properties of hierarchical and pseudo-hierarchical classifications (including the structure of the induced dissimilarity measures), and various papers on the graphical or Euclidean representation of dissimilarities and ordinally scaled data. Several sessions focussed on fuzzy classification techniques and the processing of vague information. A very fashionable topic was touched on in the three sessions on the spatial or temporal analysis of data, combined with the use of geographical information systems.

(2) A second cluster of papers was oriented towards informatics and information processing and concerned, e.g., the acquisition, the representation and the compilation of knowledge. Algebraic methods from formal concept analysis, two sessions on the combination of terminological and conceptual approaches for structuring databases, and several papers on the modeling of data structures and on computer-supported decision strategies provided interesting views in this part of information organization.

(3) The third sector was more application oriented and comprized sessions on the use of data analysis and decision support systems in marketing, in economics and in the industry. Pattern classification in the engineering sciences was as intensively discussed as were papers on the evaluation of interest derivates (the most recent finance products of the bank sector) - a very topical issue considering the recent events in bank speculations. Two very interesting sessions were concerned with the analysis of molecular sequences such as DNA or proteins.

(4) A last and extremely well attended group of sessions was concerned with electronic information systems: Organisational aspects of information distribution, the necessary coordination strategies and, in particular, the structurization and classification of the chaos of available information in systems like WWW, Gopher etc. were investigated in about 10 papers, with sometimes heated discussions. Since the origins of the German Classification Society reside, essentially, in the investigation of similar classification and organization problems for the more classical information sources (e.g., with printed catalogues and without electronic distribution networks), this section illustrates the continuing adaptive development of our Society.

Last but not least, we have to mention the social program which includednot only carneval processions, but also a memorable riverboat party on the Rhine North and East of Basel.

News from Gesellschaft für Klassfikation

1) The 19th General Assembly of the GfKl (9 March 1995) included the regular elections of the Board of the society. The new officers are:

President:	Wolfgang Gaul (Karlsruhe)
Vice-Presidents:	Hans H. Bock (Aachen)
	Bernhard Lausen (Dortmund)
Treasurer:	Hans J. Hermes (Chemnitz)
Other Council members:	Martin Schader (Mannheim)
	Mathias Herfurth (Bonn)
	Ruediger Klar (Freiburg)

2) The address of the new President is:

Wolfgang Gaul, Institut für Entscheidungstheorie und Unternehmensforschung, Universität Karlsruhe, Postfach 6980 D-76128 Karlsruhe, Germany
Tel: +49 721 608 3726, Fax: +49 721 661 227
Email: lb69 @ dkauni2.bitnet

3) The 20th Annual Conference (1996) of the GfKl will be held in Freiburg (South of Germany), probably in March 1996. For all information contact the local organizer:

Ruediger Klar, Abt. Medizinische Informatik, Universitatsklinikum Freibur, Stefan-Meier-Str. 27 D-79104 Freiburg, Germany
Tel: +49 761 203 6701, Fax: +49 761 203 6680
Email: medinf @ imbi.uni-freiburg.de

4) The Gesellschaft für Klassifikation will organize a course on "Quantitative methods in genetics and molecular biology" from 2 to 5 October 1995. The program will include halfdays on the following topics:

1. Genetic epidemiology
2. Molecular population genetics
3. Classification, taxonomy and cladistics
4. Genetic distances and molecular sequence data
5. Reconstruction of phylogenies
6. Data bases for sequence data

Information can be provided by: Prof. Hans H. Bock, Institute of Statistics, RWTH Aachen, D-52056 Aachen, Germany, Fax: +49 241 8888 130.

Hans-Herman Bock
Email: bockstat@rwth-aachen.de

SIS - SOCIETA ITALIANA DI STATISTICA

The Italian representatives of IFCS, Sergio Zani and Sergio Bolasco, organized the workshop: Data Analysis and Classification.
The workshop took place at the Institute of Statistics, University of Parma, on January 27th 1995. Contributed papers were arranged in the following sections:
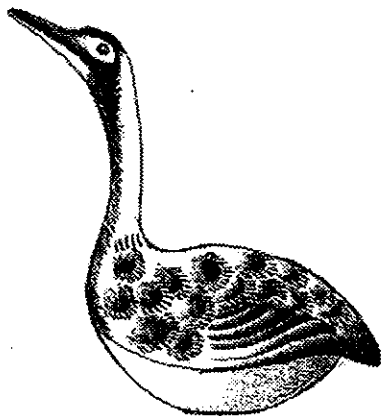
(1) Clustering methods with papers by: M. Vichi; A. Bellacicco; A. Cerioli; M. Corduas and D. Piccolo; S. Bolasco;

(2) Outliers and robustness with papers by: M.R. D'Esposito, S. Pagnotta and G. Porzio; R. Giaimo; C. Carota; G. Stoppa;

(3) Factor analysis and models with papers by: G. Bove; S. Balbi and M. Marino; C. Rossi and G. Schinaia; M. Romanazzi;

(4) Multidimensional graphics and applications with papers by: M.A. Milioli and S. Zani; M. Riani and S. Zani; F. Camillo; S. Camiz

The next meeting of Italian members of IFCS will take place in Naples on October 30-31 1995 and will be on "Multidimensional data analysis".
It is organized by the Department of Mathematics and Statistics, University of Naples; further information can be obtained from: R. Siciliano, Department of Mathematics and Statistics, University Federico II, via Cinthia - Monte, Sant'Angelo - 80126 Naples Italy, Fax: +39 81 675113
Email: gadm@dmsna.dms.unina.it

Sergio Zani
Email: statec1@ipruniv.cce.unipr.it

Statistical Symposium on Bootstrap, Discrimination and Regression with Pfof. Bradley Efron

The Symposium is co-organized by the CNAM (Conservatoire National des Arts et Metiers) and the C.I.S.I.A. (Centre International de Statistique et d'Informatique Appliquées).

September 22, 1995
Lutétia Hotel, 45 boulevard Raspil, 75279 Paris Cedex 06, France
2950FF before June 30, 1995
Information: C.I.S.I.A. Symposium Secrétariat,
1 avenue Herbillon, 94160 SAINT-MANDE France
Tel:+33 1 43 74 20 20, Fax:+33 1 43 74 17 29
Email:Tricot@vcnam.cnam.fr

Articles from the first 1995 issue of *Journal of Classification*
(to be mailed in early May)

P. J. F. Groenen, R. Mathar, and W. J. Heiser, The majorization approach to multidimensional scaling for Minkowski distances
M. Wedel and W. S. DeSarbo, A maximum likelihood approach for generalized linear models
J. D. Carroll and S. Winsberg, Fitting an extended INDSCAL model to three-way proximity data
Vladimir Batagelj and M. Bren, Comparing resemblance measures
E. Kubicka, G. Kubicki and F. R. McMorris, An algorithm to find agreement subtrees
Mariana Constantinescu and David Sankoff, An efficient algorithm for supertrees
R. Gnanadesikan, J. R. Kettenring, and S. L. Tsao, Weighting and selection of variables for cluster analysis

Next issue deadline:September 15, 1995

Editor: Keiji Yajima
Email:yajima@ms.kuki.sut.ac.jp
Fax:+81 480 21 7654
Postal:Science University of Tokyo,
School of Management,
Kuki-city, Saitama 346 Japan