was characterised by a spirit of co-operation and harmony. The Contact Persons also played their part in spreading the study of regional problems and promoting co-operation, which is increasingly important to scholars of local statistics.

Scorus at Shenzhen, November 2000

Scorus is currently involved in preparing the next Conference, the 22nd, which will be held in Shenzhen, China, from 7-10 November 2000.

The Scorus Committee is currently working with host organisations to plan and define the organisation and the exact content of the Conference.

The Scientific Programme Committee has already defined the topics which will be discussed during the Sessions and contacted the organisers.

We will be touching on the widest possible array of subjects which will embrace all the most current and essential aspects of urban and regional problems. This will encompass topics such as measuring urban development to problems of globalisation, urban indicators, comparisons on an international level, the relationship between urban violence and statistics on the impact of immigration in the development of large cities, etc. This will, therefore, ensure the presence of scholars from different geographical locations and training so that the exchange of ideas will be well-constructed and fruitful.

A one day study trip in Hong Kong has also been planned (6 November).

Bulletin No.1 of the Conference was distributed during the ISI Conference in Helsinki. It contains the list of topics for the Invited Paper Sessions, the Contributed Paper Sessions and their organisers.

Invited Paper Sessions: Topics and Organisers

- 1. How to measure the level of urban development, by Rosa
- 2. The regional distribution of economic growth in urban systems, by Hubert Jayet

- 3. Cities and global economy, by Marcel Van den Broecke
- 4. The supervisory system of urban environment and the calculation for the green GDP, by Li Chengrui and Zhong
- 5. Urbanisation in countries with a high proportion of rural population: The phenomena of floating population, by Yang Changbin
- 6. Urbanisation and segregation, by Markandey Rai
- 7. Foreign population in large cities and their impact on urban development, by Wendy Treadwell
- The comparability of international city statistics, by Per Gullström
- 9. The role of municipal statistics in the system of official statistics in China and other countries, by Klaus Trutzel
- 10. New statistical tools for the collection, compilation and dissemination of urban and regional statistics, by Sally

Contributed Paper Sessions: Topics and Organisers

- 1. Statistical support for economic policy on the local and regional level, by Frederick Ho
- 2. The use of economic data for local and regional forecasting, by Ilkka Susiluoto
- 3. Local financial markets and globalisation, by Pietro Busetta and Salvatore Sacco
- 4. Population strategies and their impact on urban development, by Michel Poulain
- 5. Cultural Statistics, by Per Gullström
- 6. Indicators on social welfare, by Jin Guifang and Li Huimin
- Low Cost GIS, by Derek Bond
- 8. Young people and big cities, by Enrico Giovannini
- 9. Urban violence/Crime statistics, by Eckart Elsner.

Bulletin No. 1 also contains information about registration fees, the provisional program of the conference, the social program for accompanying persons, the post-Conference Tour, passports, visas and other items.

Bulletin No. 2 will be published in February 2000 and will contain all the other necessary information as well as the registration form for the conference.

International Association for Statistical Education



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Pictured above: IASE Executive Committee during Helsinki General Assembly

JOAN GARFIELD REPORTS:

IASE General Assembly, Helsinki, August 1999

Message from Brian Phillips, President IASE

This is a most exciting and, I feel, critical period for statistical education. Statistics is now recognised as a crucial part of the education of students in many disciplines and is used by an ever increasing number of people in the workplace. In fact I would say that statistics is studied by more students at postsecondary level than any other topic. Hence there are a very large number of people involved in teaching statistics and it is

more important than ever that it is taught well and enthusiastically. As one of the main aims of the IASE is the improvement of statistical education worldwide, we have an important role to play. Modern methods, including advances in technology, can greatly help us get statistical concepts and ways of thinking statistically to an audience with a wide range of professional interests and abilities. By working together as part of an international community of statistical educators, we can become better informed and better prepared for the challenges which confront us.

There are many tasks in which the IASE is involved and we are fortunate to have the valuable assistance of a number of our members to help the small executive carry them out. I encourage all members to become more involved in the activities of your organisation which can be done in many ways. These include helping organise sessions at ICOTS-6, writing reports or articles for one of our publications, presenting papers at meetings organised by the IASE, suggesting improvements to our web site, getting involved in discussion groups, attending at least one IASE organised conference over the next two years, encouraging others to join the IASE and organising statistical education events in your local area. I look forward to helping make the next two years most productive years for the IASE and statistical education. Finally I wish to thank Gabriella for all the work she has done over the past two years as President and I welcome our continuing relationship, which includes her important role in planning ICOTS-6.

Address at the IASE General Assembly by outgoing IASE President, Maria-Gabriella Ottaviani

"In presenting to the International Association for Statistical Education Assembly my guidelines as IASE President, in August 1997 in Istanbul, I emphasised the need for energy, enthusiasm and ideas to foster and encourage the scientific growth of the IASE and to help circulate abroad the efforts of our members in their own countries. I also maintained that each IASE member may, in some way, serve as a connection between IASE and his/her country, and vice-versa and I emphasised the importance of National Societies of Statistics in the development of teaching. I observed that we need to recognise that cultural local characteristics and different languages can constitute some peculiar difficulties of our Section compared with other ISI Sections and since this is one more challenge for the Association, we should not underestimate it.

Since 1997 the work of the IASE has tried to keep in mind such initial considerations, not only in terms of institutional activities, but above all in terms of the activities performed by myself and the Executive Committee to extend the IASE "geographical boundaries", thanks above all to contacts with national Statistical Societies and/or Institutions. The action co-ordinated and agreed on by the Executive Committee has made it possible to carry out activities already begun, and to begin others.

Thanks to the intelligent and intensive work of Brian Phillips and Lionel Pereira-Mendoza, ICOTS-5, the most important conference organised by the association, took place in Singapore in 1998. The conference was a success, both from a scientific and organisational point of view, as the three volumes of proceedings, which were immediately made available to participants at the meeting, and the participation at the Conference of about 400 delegates from forty countries, show.

Here in Helsinki, the six invited paper sessions proposed by IASE are in progress, with invited reports of extreme interest. Added to these are four contributed paper sessions with over 30 reports.

The next IASE Round Table will be held in Tokyo in August 2000, on the theme "Training Researchers in the use of Statistics". The choice of Carmen Batanero, who proposed the theme, was received favourably by the

Executive Committee, who delegated the organisation of the meeting to her.

In Japan, IASE will also be officially present at ICME-9, where Prof. Hiroshi Fujita, Chairperson of the IPC, has invited Susan Starkings, as an IASE representative, to coordinate the Topic Study Group on "The Teaching and Learning of Statistics". Additionally, again as indicated by our Association, Mike Shaughnessy has been invited to present a plenary paper entitled "From Research to Teaching: What Research Suggests about Teaching Data and Chance", a title which is both extremely captivating and topical.

For the year 2001 the co-ordination of the IASE sessions in the ISI 53rd Session has been delegated to Lionel Pereira Mendoza.

The IASE Executive Committee has decided to hold the next ICOTS in South Africa, in Durban in 2002. The choice of South Africa is proving to be particularly appropriate, since South Africa is introducing new school curriculae for children aged 6–15, and this curriculum also includes the teaching of statistics, within the programme of mathematics. The proposed theme of the conference is "Developing a Statistically Literate Society". The International Programme Committee has now been established. It is chaired by myself, with Brian Phillips as International Organiser and Dani Ben-Zvi as IPC Secretary.

The IASE publications have been published regularly, IASE pages in the ISI Newsletter have been organised by Joan Garfield, "IASE Matters" by Carmen Batanero with the help of Michael Glencross, and the IASE Review by myself, with the assistance of Brian Phillips.

In this term other activities have been identified and organised with the aim of extending IASE's field of operations in Latin America. As IASE President I have presented an invited paper concerning the Association's role and activities in Aguascalientes, Mexico, on the occasion of the joint IASS/IAOS Conference, in 1998. I come, by the way, from my recent presentation of IASE's activities at the Fourth Latin American Congress of Statistics, held in Argentina from 26 to 30 July, where I was invited by the Sociedad Argentina de Estadística and where the Scientific Committee made evident the importance of teaching statistics including a session devoted to the subject and comprising a plenary lecture, a Round Table, many seminars and numerous contributed paper sessions. Next month, in September, the IASE, thanks to and in collaboration with the Presta Project, is organising in Brazil a Conference on Experiences and perspectives on Teaching Statistics

IASE has also made contact with some Islamic countries in this period, in particular, last year with Iran and this year with Pakistan. In 1998, Carmen Batanero represented IASE at the Fourth International Iranian Statistics Conference where a number of sessions on statistical education were organised. This year, together with Carmen, we have sent a paper concerning IASE's activities to the Sixth Islamic Countries Conference on Statistical Sciences, to be held in a few days from now in Lahore, organised by the Islamic Society of Statistical Sciences

It has been an honour for me to serve IASE in these two years, during which I have always been encouraged by IASE members and the Executive Committee, and supported in a kind and effective way by the ISI Staff. On a personal note, I must say that the dearest memory remains the moment in which, at ICOTS-5 in Singapore, I heard IASE members, demanding recognition in the academic world of the fact that research in statistics education is a research discipline in its own right. This is also my personal view and I will adopt it from now on as often as possible in order that it be recognised and realised. My decision to publish in the IASE Review short reports on the scientific activities performed by the Association has been done with this aim in mind.

I would like to thank Brian Phillips, President Elect, and C. Batanero, Joan Garfield, Michael Glencross and Lionel Pereira-Mendoza, Vice Presidents, for their important role in this term, and I would like to wish the IASE and my dear colleagues and friends — Brian Phillips, now President, Carmen Batanero, now President-Elect, Joan Garfield, Lionel Pereira-Mendoza, Dani Ben-Zvi, Gilberte Schuyten, now Vice Presidents, who form the new Exec — a favourable and prosperous term."

MARIA-GABRIELLA OTTAVIANI

Statistical Education at ISI-52

Helsinki was the place for statistical educators to be last August where the importance of our discipline was demonstrated at the 52nd ISI meeting. A total of 21 invited speakers and 14 discussants gave some wonderful presentations in the six sessions organised by the IASE and the joint session with the IAOS. IASE members were also involved in a panel discussion on statistical literacy. Apart from these there were another five contributed paper sessions for which over 30 papers were presented on statistical education. The titles and autors of these papers can be found on website:

http://www.swin.edu.au/maths/icots5/

while the complete texts of all papers being available on the ISI-52 website:

http://www.stat.fi/isi99/proceedings.html

This was a most successful time for the IASE. Detailed reports of the invited papers sessions will be given in the next IASE newsletter.

IASE Sessions at ISI-53, Seoul, Korea, August 2001

The IASE is very pleased to see that the increasing interest in our discipline has lead to an even larger number of statistical education sessions at the 53rd ISI Session to be held in Seoul, Korea in August, 2001. There are seven sessions to be organised by the IASE alone, with another four being jointly organised with other Sections. Lionel Pereira-Mendoza is coordinating our section of the programme. Planning has started and anyone interested in more information should e-mail Lionel at: lpereira@nie.edu.sg

Sole IASE Sessions

- Forum: IASE and statistics education in developing countries
- 2. Undergraduate level statistics programmes
- 3. The future of statistics education research
- Research on teaching statistics at school and university levels
- Undergraduate statistics education in non-statistics degree programmes
- 6. Continuing statistics education in the workplace
- 7. Postgraduate training of statisticians

Joint IASE Sessions

- With CWS: Women's contributions to leadership in statistical education
- 2. With IASC: Technology in statistical education
- With IAOS: The role of official statistics in the university curriculum
- 4. With IAOS: Education and the internet: Effective structures

Statistical Reasoning Thinking and Literacy (SRTL) at Kibbutz Be'eri, Israel, July 99

The First International Research Forum on SRTL was held in Kibbutz Be'eri in the beautiful northwest Negev hills in Israel. This gathering took place under the umbrellas of the International Study Group for Research on Learning Probability and Statistics and the IASE. It was sponsored by the University

of Minnesota, the Maurice and Gabriela Goldschleger Conference Foundation at the Weizmann Institute of Science, and Kibbutz Be'eri. The Forum was co-chaired by Joan Garfield (University of Minnesota, USA) and Dani Ben-Zvi (Weizmann Institute of Science, Israel), who are currently Vice-Presidents of the IASE. The Forum met for five days, to share current research, discuss important issues, and initiate collaborative projects. Sessions were held informally with a high level of interaction. Videos of students in classrooms or interview settings were used to present, discuss and argue about participants' current research.

The sessions' themes and presenters were:

- 1. Variation in sampling, Chris Reading (Australia),
- 2. Understanding the role of variation in correlation and regression, James Nicholson (Northern Ireland),
- Developing statistical reasoning about sampling distributions, Joan Garfield, Beth Chance, & Bob Delmas (USA)
- Statistical reasoning in visualization: constructing meanings for trend in time plots with spreadsheets, Dani Ben-Zvi (Israel),
- The longitudinal development of reasoning to make inferences from data presented in graphical form, Jane Watson (Australia),
- 6. Students' use of diagrams in statistics, Pamela Shaw (Australia)
- 7. Averages (in comparing two groups), Cliff Konold (USA)
- Conceptualizing statistical literacy: an assessment perspective, Iddo Gal (Israel).

Six invited discussants were asked to reflect and comment on the presentations. These were: Janet Ainley (UK), Maya Bar-Hillel (Israel), Herman Callaert (Belgium), Brian Greer (Northern Ireland), Brian Phillips (Australia), and Laurie Snell (USA).

At the end of the week participants paid a tribute to Efraim Fischbein's memory, by taking part in a commemoration ceremony at Tel-Aviv University. Joan Garfield, representing IASE, emphasised in her talk Fischbein's direct contribution to those of us working in the field of stochastics teaching and learning.

One result of the SRTL forum is to produce an edited book on Statistical Reasoning, Thinking and Literacy. This book will summarise the work presented, discussions conducted on theoretical, methodological, pedagogical, assessment, literacy and communication issues. The co-chairs also plan to organize a second Research Forum (SRTL-2) in the year 2001.

To learn more about the SRTL forum, or offer your contribution, please visit the website:

www.beeri.org.il/srtl

or e-mail Joan Garfield: jbg@tc.umn.edu or Dani Ben-Zvi: dani.ben-zvi@weizmann.ac.il.

Psychology of Mathematics Education (PME), Haifa, Israel, July 99

There were 11 presentations at the annual meeting of PME relating to research on stochastics teaching and learning. Abstracts are published in the *International Study Group Newsletter* [Vol. 12, No. 3], which can also be viewed on website:

http://www.ugr.es/~batanero/v12se99.htm

The PME Project Group for Stochastics Teaching and Learning met twice during the conference. Over 30 people attended the first meeting, which provided a useful opportunity to summarise many of the important contact points in stochastics research for people who were new to the field.

The next meeting of PME will be at Hiroshima, Japan from 23-27 July, 2000. This will finish just before ICME-9 in Tokyo. Details can be obtained from the website:

http://www.ipc.hiroshima-u.ac.jp/~pme24/.

ICME Topic Group 9 — "Statistics and Statistical Education for the Year 2000 Plus"

Invited papers will be given on statistical education for children aged 11-18, students in higher education, and also for adults. Papers will be grouped into the following categories:

- (i) Research that has been carried out on students learning statistics and how this can help the statistical educators of tomorrow.
- (ii) New innovations used and proposed to be used in the statistics teaching environment.
- (iii) Practical examples of statistical work carried out in developing countries and the way forward for these countries.
- (iv) Work related statistical education and its relationship to the classroom.
- (v) How future statistical education can be enhanced.
- (vi) Global statistical education for the future.

Short communications can be presented in the Poster Sessions. If you want to submit an abstract for a paper or need please further information, e-mail Susan starkisa@vax.sbu.ac.uk

The ICME-9 site is:

http://www.ma.kagu.sut.ac.jp/~icme-9/

ICOTS-6 — "Developing a Statistically Literate Society"

The sixth International Conference on Teaching Statistics will be held in Durban, South Africa, during mid July 2002. The IASE will make a special effort to attract African participation, and in particular will offer some financial assistance to delegates from African developing nations. It is also planned that there will be strong participation from local school teachers.

For more information, please consult the ICOTS6 website: http://www.beeri.org.il/icots6

Summary of future meetings

- July 23-27, 2000: PME, Hiroshima, Japan
- July 31-August 6, 2000: ICME-9
- August 7-11, 2000: IASE Round Table, Meiji University,
- August 2001: IASE Sessions at ISI-53, Seoul, Korea.
- July 2002: ICOTS-6 Durban, South Africa

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Lionel Pereira-Mendoza (Singapore)

Gilberte Schuyten (Belgium) Maria-Gabriella Ottaviani (Italy) (Chair Co-opted members

ICOTS-6 IPC) Susan Starkings (IASE sessions at

ICME-9)

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ADALBERT WILHELM REPORTS:

In this issue of the Newsletter we report on the changeover of IASC President and present the outgoing President's communiqué. We also present reports on the Interface 99 meeting and a preview of IASC meetings and sponsored meetings planned for 2000. The European Regional Section is actively seeking nominations for their Board of Directors to be elected in 2000.

I owe deep gratitude to Ehsan Soofi, the past Scientific Secretary, who assisted me in preparing this edition.

More extensive versions of the information below, including the latest available information on upcoming Statistics and Computing related conferences can be found via our world-wide web homepage:

http://www.stat.unipg.it/iasc/

and also via the online copy of IASC News, the societies section in the SSN (included in CSDA) available at:

http://www1.math.uni-augsburg.de/~wilhelm/iasc/

New Office Holders

The General Assembly of IASC, recently held during the ISI conference in Helsinki, marks the transition to a new Executive and Council.

Edward Wegman handed over the IASC presidency to Lutz Edler, Head of the Biostatistics Department at the German Cancer Research Center in Heidelberg.

The new President-elect is Jae C. Lee, University of Korea. The new Scientific Secretary is Adalbert Wilhelm, University of Augsburg, Germany.