

CHAPTER III

TWENTY FOURTH GENERAL ASSEMBLY

CLOSING CEREMONY

August 16, 2000, 14.00
Bridgewater Hall

Address by the President 1997-2000, Prof. R.P. Kraft

We have had much necessary business in this second session of this 24th General Assembly, and I shall not keep you long with an extensive recitation of the accomplishments of this past triennium. Much of this was expostulated in General Secretary Andersen's admirable account already in the first session.

But I would like to recall attention to three specific items, which I believe represent genuine advances in the purposes and functioning of the union.

The first has to do with the improvement in communication within the union as a result of the establishment and growth of the IAU World-Wide Web. This has been a major priority of the General Secretary, admirably assisted by Monique Orine and Jodi Greenberg, the IAU office staff. I urge a continuation of its development. On another related front, I urge members of the Union to update their addresses, both "street" and "email" – we are often told the addresses are "out of date," but if you don't give us the revised information, we cannot update.

The second major accomplishment is the establishment of "terms of reference" between the IAU and the operating arm of the Minor Planet Center. We had no such formal agreement in earlier years, and I am pleased to note, especially in this era of developing concern over the treatment and reporting of potentially dangerous near-earth objects, that such terms of reference have been established and pleased to note the general agreement of interested parties. Many have been involved in the discussions and I am especially grateful to the ASG Hans Rickman and GS Johannes Andersen, as well as the President of the concerned Division, Mike A'Hearn, for playing leading roles in developing and negotiating the agreement.

Third, the last GA (Kyoto) designated the protection of the sky against pollution of all kinds – radio frequencies, space advertising, reflector lighting projects and so on – and at all wavelengths as a major priority of the IAU. Last year's IAU Symposium 196 "Preservation of the Astronomical Sky" gave rise to a number of recommendations, many of which were approved by UNISPACE III and later endorsed by the UN General Assembly, and thus these are now part of the official UN policies for space. The IAU is now coordinating its efforts with that of other partners to develop proposals to the UN "Committee on the Peaceful Uses of Outer Space" for specific measures of astronomical sky protection.

IAU Symposium No. 196 was a coordinated effort on the part of many astronomers too numerous to name here, but the major role of developing and coordinating the political connections with the relevant UN bodies was played by GS Andersen.

So the time has come for concluding remarks and for statements of "thank you". First I want to express my appreciation to AGS Hans Rickman, not only for his calm, valuable advice, but his meticulous attention in the preparation of documents and preliminary evaluation of the proposals for Symposia and Colloquia. We can expect that the GS's office will be in excellent hands at the end of the triennium. Second, I want to thank Johannes Andersen for his energy, enthusiasm and efficiency in running the GS office over these three years. He has been a truly PRO ACTIVE General Secretary – essentially all of the three positive developments I cited before – are a result of his pursuit of the goals desired by IAU members, as expressed in Kyoto. It has been a great pleasure to be President during Johannes' term as G.S.

I thank too Jodi Greenberg for assuming over the past two years a positive role in supporting the activities of the office in Paris. But my special thanks are reserved for Monique Léger-Orine without whose long-term knowledge of IAU affairs, dedication to duty virtually night and day, sense of genuine concern for the Union, we would all surely be in dire straights or as we say in the States "up a creek without a paddle"! And as you should all be aware, if the administrative affairs of this GA can be likened to a suspension bridge, then Monique is surely the principal supporting tower.

Finally, on behalf of all of us, I want to extend my deep appreciation to the Royal Society and the Royal Astronomical Society, to Professor Carole Jordan, and the numerous members of the NOC, to Co-chairs Rod Davies and Dennis Walsh and members of the LOC, for organising this superb GA, to all those who assisted them, the Royal Liverpool Philharmonic Orchestra – which marvelously played some of my favorite British music – and to all others whom I have surely inadvertently omitted!

And if a bit of paraphrase of Mr. Handel's text may yet be permitted: in this GA, the "*flock has been fed*", the "*trumpet has sounded*", and have all "*been raised*" from our torpor and ignorance.

Address by the President 2000-2003, Prof. F. Pacini

I would like to thank the Special Nominating Committee and all of you for electing me to the Presidency of the International Astronomical Union. I feel that this is not only a great personal honour but also a recognition of the contributions which my country and colleagues have made over the last 20 years or so to astronomy and to international collaboration in our field of science.

Astronomers of my generation have been lucky. Scientific progress has been so rapid that the twentieth century has been compared with the time when Galileo and others first turned telescopes to the sky. We have lived through the discovery of phenomena such as quasars, pulsars, black holes, molecules, relic radiation from the big bang and many others. Radio and infrared astronomy have developed very fast; X-ray and Gamma-ray studies have become possible; and of course we have watched the first men walking on the Moon. We have sent automatic probes out to all the planets in the Solar System apart from Pluto and we have now proved the existence of planets orbiting other stars. In the same period, fields of classical astronomy and astrophysics often regarded as "obsolete" were revitalized by new techniques and have become again fundamental.

My generation was also fortunate in another way: in many countries the rapid progress meant that there were good opportunities for those people who were anxious to become astronomers.

It is notable that public interest in astronomy is now greater than ever before. When I was a young boy, Camille Flammarion and my predecessor in Arcetri Giorgio Abetti were my favorite mentors with their books. However, I did not know of many other young people interested in the subject. Today we see everywhere a great flourishing of astronomical activities for the general public. On the other hand, we have the problem of light pollution; the skies are becoming so brightly lit that many people are deprived of the joy of observing the stars. Let us hope that this situation will improve; the sky is part of our heritage – just as is a sunlit mountain or a green forest.

I am convinced that astronomy has another important role, too. Its popularity encourages a better general scientific education: this is clearly very desirable because of the importance of science and technology in the modern world.

Before we meet again in Sydney, three years from now, there will certainly be more progress. New channels to study the universe are being opened and will probably lead to great discoveries. Apart from the traditional observatories with bigger and bigger telescopes and advanced space missions, special laboratories will be built in deep galleries, undersea and under the ice in Antarctica. Will we solve some of the problems of dark matter, neutrinos, high-energy cosmic rays and gravitational waves?

During the past eighty years or so, the astronomical community has been represented by the International Astronomical Union. The scientific and organizational discussions held in Manchester have stressed the importance of the IAU and, when necessary, its ability to change the ways in which it operates. It will be the duty of the Officers, the Executive Committee, the Divisions, Commissions, Working Groups, and the entire membership, to make sure that the IAU continues to maintain its important role in the development of our science.

Address by the retiring General Secretary, Dr. J. Andersen

Dear colleagues and friends,

My three years as your General Secretary are over. Like my predecessors, I am sure, I feel a mixture of regret and relief: Regret because this is an extraordinarily challenging and stimulating job; and relief because it absorbs every scrap of energy and imagination that one can put into it.

Thinking back, I believe some progress has been made: I was happy to welcome five new member countries last week, and I am hopeful that we are now on the right track towards international protection of the night sky, even if the road is long. I also trust that the IAU will maintain a central role in the research on Near Earth Objects. A Working Group on Extrasolar planets is being formed, and I wish to acknowledge the efforts of the President of Commission 51, Stu Bowyer, in achieving this. Our educational programmes are being broadened and reorganised, and the Information Bulletin, the web site, and our office have been given a facelift. And I look forward to General Assembly in 2003 when the Cosmology Prize and three of our new fellowships funded by the Gruber Foundation will be awarded.

But although I would prefer to forget them, there are also areas where no progress was made, notably a better involvement of the Divisions in our everyday life; a more lucrative investment scheme; partly electronic distribution of the Information Bulletin; and a less stressful life for the Secretariat.

But the fundamental message I want to leave you with is the pressing need for a complete overhaul of all structures and procedures in the IAU. As we enter the next century with a stronger and more active community than ever, the baggage we carry along from the previous century is coming apart everywhere. There has hardly been one of our meetings with national representatives, Division and Commission Presidents, or the several other committees where this has not been evident. Problems range from antiquated, ambiguous, contradictory or non-existing administrative or financial rules over gaps in the Commission structure and the need to restructure our publications programme to the need for more hands and new sources of income. At the Secretariat, the pressure from a growing and increasingly active membership is now running us into the limit switches, to use an observer's language. Each of us services about 3000 of you, and we have work to do besides answering e-mail and updating the web page!

I trust that the new Executive Committee will address these issues promptly and effectively, based on the many constructive suggestions we have received at this meeting. I also trust that you will all join me in thanking Monique Orine – now in her 13th year of dedicated service to the IAU – and Jodi Greenberg for keeping the ship afloat under heavy fire.

I also thank the outgoing Executive Committee for their strong support during my term, and especially Hans Rickman and Bob Kraft for their cooperation and valuable advice, and I am grateful to the co-chairs of the LOC, Rod Davies and Dennis Walsh, for their patience and personal hospitality towards me during the preparations for this General Assembly.

Being General Secretary of the IAU carries a price of three kinds, Money, research, and family life. I thank Copenhagen University and my Institute, personally and on behalf of the Union, for covering the first of these. The last two kinds of price were paid by the same person, Birgitta Nordström, who is sitting in this hall and whom, and whom many of you know. If you feel I have been useful, thank her, not me.

Finally, it is time to pass on the torch, and I am delighted to hand it to two such distinguished colleagues and trusted friends as Hans Rickman and Oddbjørn Engvold. But in the IAU there is no torch: The symbol of power is, more modestly, the key to the General Secretary's office in Paris. I hereby pass it on to you, Hans, and may you have as much fun and enjoy as much support as I have!

Address by the incoming General Secretary, Prof. H. Rickman

Dear friends and colleagues,

My first IAU meeting took place 28 years ago, and it was Colloquium No. 22 in Nice on the French Riviera. I was in the early part of my graduate studies at Stockholm Observatory, and I had just decided on the topic of my doctoral thesis, the "capture of comets". By mistake, probably, after I had told the organisers about this special interest of mine, I was listed on the programme as review speaker about capture of comets. I was very worried, because the world expertise on cometary dynamics would be in the audience, so I asked my supervisor, Prof. Lodèn what to do. But his confidence in me was so great that without hesitation he told me: just go ahead and give the talk!

Anyway, there I stood, a very nervous young man in front of people like Chebotarev, Brian Marsden, and Edgar Everhart who at the same meeting presented what seemed to be the solution of the problem I was going to tackle. But I keep the memory of this experience as a personal treasure not so much for these obvious problems as for the overwhelming benefit offered by becoming part of a worldwide community; to have met and got to know the people

behind the names on the famous papers. And this is one of the best features of the IAU to my mind: it can serve to create such a community out of the individual scientists working at different institutes in different countries.

Four years later I came to my first IAU General Assembly, the one in Grenoble. I was still a graduate student, fighting with computers to simulate some elements of cometary capture and trying to convince myself there was a point in it in spite of Everhart's seminal work. But that GA was one of the best attended we've ever had, perhaps the very best, and it was truly inspiring to be there. This was the time to realize that the community of cometary orbit computers and dynamicists was actually part of a larger community, that of the world's astronomers at large. It is easy to see that there are issues of importance to all of us, which are best discussed in common across the borders between different fields of research that often compete for attention and resources.

And, being at that great arena, I also started to realize several other important things. The technique I was using for my limited little problem had applications across all fields of astronomy and astrophysics, practically. And the problem was not so limited and isolated after all. Any findings about the origin of comets would be of potential interest within much wider circles than the one I was thus far acquainted with. While experiencing the great complexity and diversity of modern astronomy, I also saw a lot of stimulating links that kept the whole thing together, and my own vision was broadened and my interest in comets stimulated. Of course, to a large part this realization came with age and experience and would have come anyway, but I believe that attending the IAU General Assembly was of great help.

And I hope our current meeting is similarly helpful for the young ones among us here.

In fact, when it comes to the point of an agenda or a vision for what I'd like to accomplish during my term as General Secretary, one item must be to make the IAU even more useful for young astronomers - postdocs and graduate students. These categories are not eligible for membership in the IAU by the normal means of course, but the fact is that a large part of the total research work is carried out by them, so it's natural for the IAU to devote a fair share of its services to them.

To this end, I would be happy if we could develop somewhat more the information contents of the IAU web site, which can no doubt be accessed by the majority of young astronomers in the entire world. To those places where Internet connections are practically nonexistent, I would like us to offer a cheap but helpful alternative by email or snail mail. I cannot commit myself to specific actions yet, but I will certainly look into what possibilities there are, and I'll be grateful for any good advice.

As examples of things that I have in mind, I'll mention that the Commission or Division web pages should be developed so that they include not only reports on recent progress in the field but also lists of references to recent literature and, perhaps, links to some preprints that the authors want to publicise. One can also imagine to have descriptions of ongoing projects like the setup of new observing facilities accessible via the IAU web site, and perhaps even job or fellowship announcements. All of this should be interesting for most of us and in particular for the younger astronomers.

Furthermore, I am very much aware of the fact that our science is closer to the hearts of the general public than most other natural sciences. To promote the study of astronomy should therefore be a relatively easy task in principle, though we all know that reality is much harsher, especially when national budgets have to be trimmed to minimize expenditure that

does not bring short-term profit. But, still, I strongly believe that the better we can meet the demands of people for both correct and exciting information on our findings, and the better we can work for promoting also the cultural and humanistic face of astronomy, the more it will be realized that spendings on astronomy, even major ones, may really be profitable from a variety of aspects.

So I wish to work for strengthening the efforts of the IAU also when it comes to educational and outreach activities and to increase our readiness to respond impeccably, when the eyes of society are focused on us. There are recent examples that I have followed closely, because they have been close to my own field of research. From those I have learned that astronomy matters, even more than I had realized, e.g., when it comes to whether we count Pluto as one of the major planets or just the largest of a herd of smaller objects (an issue that was not even on the table in fact!), or when somebody finds that a certain near-Earth asteroid may hit our planet on a specific occasion in the future.

The experiences we have had in such cases have not been entirely positive, but we have certainly learned from them, and I think the IAU is on the right track, facing the attention of the media and the general public when important values appear to be at stake. And I do hope to be able to contribute positively to that learning process also during the years to come.

Let me stop my account of policy matters here and turn to some concluding remarks. The world of astronomy, both in the sense of our picture of the universe and the way we do our research about it, has changed a lot since I went to my first IAU meetings, and it has actually become more and more exciting! Maybe it's a common experience for many of us in my age, but for me at least the thrill of astronomy just keeps increasing with time (and age). So I feel both grateful, humble and glad to face the challenge of being IAU GS in such dynamic times, until our great community gets together again, in Sydney 2003.