Some details on the origin and development of the Valencia International Meetings on Bayesian Statistics 1

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I have often been asked about the origin of the Valencia meetings. As time passes, the number of active researchers among those who came to the first meeting, held in 1979, is obviously getting pretty thin. Thus, I enthusiastically accepted the suggestion of Raquel Prado to record that story for the ISBA newsletter.

The first thoughts of what would eventually become the Valencia meetings came in the Summer of 1976. I had just finished my Ph.D. at University College London, which Dennis Lindley, as Head of the Department of Statistics, had converted into the European Bayesian department of the early 70's. The atmosphere there was great: Phil Dawid and Mervyn Stone were faculty members; visitors during that period included most European and many American Bayesians; at any time there were about a dozen research students mostly working within a Bayesian framework; every week the 'journal club' provided an informal seminar where new ideas were tried and discussed; Adrian Smith and I were among the last students which Dennis Lindley supervised before his early retirement, and had become good personal friends. At University College the world looked Bayesian; thus, it came as a kind of a shock to discover that in most statistical conferences you had to fight for your right to work within Bayesian statistics to a mainly unsympathetic audience, with no real time left to go into the details of your work. At Dennis's suggestion, I then attended what I believe was the very first international workshop solely devoted to Bayesian Statistics. This was a European

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conference on New Developments in the Applications of Bayesian Methods (Aykaç and Brumat, 1977), sponsored by INSEAD, a French business school, and held in Fontainebleau, near Versailles, in June 1976. In what to me was a very memorable occasion, I drove Dennis Lindley and Bruno de Finetti to a cosy French restaurant, where we shared a most interesting lunch; after a long debate on the necessity or not of σ -additivity, the conversation moved towards the special atmosphere in the conference, where you no longer have to defend your Bayesian position, but could explain your work to colleagues who took for granted that the Bayesian viewpoint was, at least, a reasonable alternative. The three of us were convinced that it would be a good idea to try to establish some form of periodic Bayesian forum.

A year later, in April 1977, I attended an international conference on the Foundations of Statistical Inference held in Florence. The lively discussions among Bayesians at that meeting suggested again the convenience of a dedicated conference. Shortly after the Florence meeting, I got a Postdoctoral Fellowship to spend the 1977-78 academic year at the Department of Statistics of Yale University, a Bayesian stronghold at the time, with Richard Savage as chairman and John Hartigan teaching what must have been one of the first advanced graduate courses on Bayesian Statistics. During these months I was invited to give seminars at many North American universities with a Bayesian presence; thus, I visited Dick Barlow at Berkeley, George Box at Madison, Morrie DeGroot at Pittsburgh, Art Dempster at Harvard, Seymour Geisser at Minneapolis, Jack Good at Blacksburg, John Pratt at MIT, Jim Press at Riverside, Cesareo Villegas at Vancouver, and Arnold Zellner at Chicago. With Morrie DeGroot, there was an immediate powerful common empathy; during a very long evening, with plenty of scotch, we talked about many aspects of life and somehow, by dawn, we came to talk about statistics, and we agreed to make an effort to try to organize an international Bayesian meeting at the first available occasion. I immediately contacted Dennis Lindley and Adrian Smith and they were both enthusiastic. It was agreed that I would explore the possibilities of organizing this in Valencia.

Back to Spain in the Fall of 1978, I was appointed to the newly created Chair of Biostatistics of the University of Valencia. Spain had just emerged from a period of a repulsive fascist dictatorship, and the Spanish universities were experiencing dramatic changes. At 28, I was a pretty young full Professor by Spanish standards. Soon after, the Education Minister of the Spanish government came to Valencia for some reason, and I was introduced to him by the Provost of the university as the youngest full professor in the country; he muttered some words of praise and offered his help for new initiatives. Immediately, I mentioned to him the possibility of making Valencia the venue for a first Bayesian world meeting; he seemed surprised by my fast reaction, but asked me to write a proposal and send it directly to him. I did, and about

two weeks later, I had telephonic confirmation that funds would be allocated to organize an international conference on Bayesian statistics: Valencia 1 was on its way.

The new chair of Biostatistics, physically located at the School of Medicine, created the conditions to work with a small bunch of young graduates in mathematics which I got interested in Bayesian statistics. These included Carmen Armero, Susie Bayarri, José Bermúdez, Juan Ferrándiz, Lluis Sanjuan, Maite Rabena and Mario Sendra. The atmosphere was very attractive, both professionally and personally: we were all young, curious, energetic leftwingers in a country moving fast forward. When I told them about the meeting they all reacted fervently. Most available funds were needed to contribute to travel and accommodation expenses of the invited speakers, so that we have to take into our own hands all the administration burdens, at that time without the benefits of e-mail or even fax. The organization of the first Valencia meeting was a team effort of this group. The Valencia meetings would not have existed without this group.

The self-appointed programme committee for this first meeting consisted of Morrie DeGroot, Dennis Lindley, Adrian Smith and myself. Publicity was mainly by word of mouth. The meeting was held in Hotel Las Fuentes, a beach hotel in Alcossebre, about 100 km. north of Valencia, May 28th to June 2nd, 1979. It was a rather remote place so that transportation from Valencia airport had to be provided (some people tried to go on their own, by train, and were left at a deserted railway stop in the middle of the fields, about 6 km. away from the hotel!) We had 28 invited lectures, all followed by invited discussions, and no contributed papers. This was attended by 93 people from 13 countries, and it is probably fair to say that these people included most of the better known Bayesians at the time. The meeting was organized into early morning and late afternoon sessions, with plenty of time during the centre of the day for informal discussions by the pool, or at the beach. At night many of us moved into the local disco 'El Lobo' until late, but were ready for work first time in the morning. The last day of the conference we had an assembly were people unanimously declared that the experience had been too good to leave without a promise of continuation. It was decided that a period of four years would be appropriate to allow time for new ideas to appear, and it was agreed that the same committee would try to organize it again in Valencia with a view to create a series, in the spirit of the Berkeley symposia. After the conference dinner, George Box sang "There's No Theorem Like Bayes' Theorem," a parody of "There's No Business Like Show Business" by Irving Berlin. This a capella (without any instrumental accompaniment) performance was the genesis of the Valencia cabarets, a tradition that has continued and expanded in every subsequent Bayesian meeting (see www.biostat.umn.edu/~brad/cabaret.html for full details).

The Proceedings of Valencia 1, today a Bayesian collector must, (Bernardo *et al.*, 1980), with the papers presented and their discussion (and even George Box song!), were published by the University of Valencia Press and reprinted as an special issue by the Spanish journal of statistics *Trabajos de Estadística*, the predecessor of *Test*. The first proof-reading, at a time when T_EX did not exist, was a nightmare suffered by the same local team who made the conference possible in the first place.

The idea of purely Bayesian meetings started to gather momentum. The first conference on *Practical Bayesian Statistics* was held in Cambridge, UK, in 1982 (Dawid and Smith, 1983). This was the occasion were the second Valencia meeting was tentatively announced as an example of the sure-thing principle: the Spanish general elections were about to take place; if the conservatives won, they have already funded Valencia 1 and it was a success, so one may expect a second funding; if the socialists won, they were supposed to be specially sensitive to Bayesian Statistics so they would surely fund Valencia 2. As a matter of fact, the socialists won a historical victory (Bernardo, 1984) and Valencia 2 was held, again in Las Fuentes, September 6th to 10th, 1983. The dates were selected so that the Valencia meeting could be announced as a satellite to the ISI meeting, held that year in Madrid one week later. Valencia 2 was attended by 130 people from 24 countries, a 40% increase in people, and 84% in countries, over Valencia 1. The programme included 27 invited lectures, followed by invited discussions. To make possible for young people to present their work, we decided to have contributed papers. Since there was no space in the programme for plenary contributed sessions, and we very much wanted the new blood material to have a high profile, we invented the concept of plenary after dinner poster sessions, were people have the possibility of mixing social and academic exchanges with the added facility of a well stocked cash-bar. The experience was a tremendous success, with people staying around until very late. The last night Adrian Smith emceed the first organized Valencia meeting cabaret, a duty he kept until Valencia 5, twelve years later. The committee received an offer, which was accepted, to publish the Proceedings with North-Holland (Bernardo et al., 1985). This included the invited papers, their discussion, and a selection of 18 contributed papers. The average quality of the contributed papers submitted to the Proceedings was so high that we were forced by the volume size restrictions to take only a fraction of the papers, applying the refereeing standards of hard-core statistics journals. As a matter of fact the acceptance rate for contributed papers in this and subsequent Proceedings is only about 20% – as low as most top statistics journals!

The third meeting was planned for June 1987, roughly four years after Valencia 2 but back to our preferred June date. A federal government system was by then established in Spain, and the conference was basically funded by

the (socialist) government of the State of Valencia. The location of the first two meetings was closed for renovation, so that we have to find an alternative. We very much wanted to keep the original idea of a Mediterranean beach hotel and found an attractive location 120 km. south from Valencia. The third meeting was held at Hotel Cap Negret, in Altea, June 1st to 5th, 1987. This was attended by people 196 from 23 countries, a 51% size increase from Valencia 2. The invited programme contained 31 invited papers, followed by invited discussions, and we repeated the successful after-dinner contributed papers parties. The Proceedings of Valencia 2 had been a commercial success for the publisher (the committee agreed to renounce to royalties in favour of a lower selling price) and we were in a position to choose. Among several offers, we preferred that of Oxford University Press, who has been our publisher ever since. The Proceedings of Valencia 3 (Bernardo *et al.*, 1988) contained the invited papers, their discussion, and a selection of 28 contributed papers which, in what seemed routine by now, only made it after a fierce competition.

The fourth meeting was originally planned for June 1991 and was to be organized by the same committee. However, the whole statistical community was saddened by the death of Morrie DeGroot in 1989. The remaining committee members invited Jim Berger to join in and continue his work; moreover, Dennis Lindley mentioned his age and expressed his desire to step down from committee duties; he was named Conference President, and Phil Dawid was invited to join the committee. At the time, I had temporarily left the university to accept the post of Chief Statistical Adviser to the State Government of Valencia; as a consequence, the dates of the meeting had to be advanced by a couple of months to avoid their clash with the State elections. Finally, the expected number of delegates suggested that previous locations were not big enough, so we have to find a new larger beach location. The fourth Valencia meeting, dedicated to the memory of Morrie DeGroot, was held at Hotel Papa Luna, in Peñiscola, 140 km. north of Valencia, 15th to 20th April, 1991. This was attended by 286 people from 33 countries, a 46% size increase from Valencia 3. The invited programme contained 30 invited papers, followed by invited discussions, and the by now famous after-dinner contributed papers parties. For the first time the meeting was not held in summer (some people ignored this piece of information, came only with summer clothes, and got a cold!). The Valencia 4 cabaret had Brad Carlin as Musical Director, a duty he has kept ever since, and included his parody of "Imagine" (cowritten with Rob McCulloch), partly reproduced in the Preface of the Proceedings volume. Bayesian Statistics 4 (Bernardo et al., 1992), contained the invited papers, their discussion, and a highly selected set of 33 contributed papers. The Proceedings also reproduced the opening address to the Conference by the Governor of the State of Valencia, a politician's praise of the usefulness of Bayesian methods.

As I was still with the State Government, then as Director General of Decision Analysis, the fifth meeting was advanced by one year to avoid clashing with the State elections. It was totally sponsored by the State government, and organized from the Governor's office. Once again, expected numbers forced a change in location. The fifth Valencia meeting was held in Hotel Meliá, in Alicante, 166 Km. south of Valencia, June 5th to 9th, 1994. This was attended by 376 people from 32 countries, a 31% size increase from Valencia 4. The committee discussions trying to estimate the final number of delegates included the use of scoring rules; the winner was exempted to pay his share at a committee dinner held in a prestigious restaurant the evening before the conference started; the technicalities gave rise to a paper by two students of mine (Cervera and Muñoz), published within the Proceedings. The invited programme contained 24 invited papers, followed by invited discussions, and the usual after-dinner contributed papers parties. The fifth meeting was followed at the same location by the 3-day second ISBA world meeting; this resulted in the longest Bayesian gathering ever: eight complete days. The Proceedings of Valencia 5, Bayesian Statistics 5 (Bernardo et al., 1996), contained the invited papers, their discussion, and a very selected set of 38 contributed papers.

Shortly after Valencia 5, I felt that I was getting too removed from research and I decided to return to academic life, to a chair of Statistics at the School of Mathematics of the University of Valencia. Two years later, the socialists lost the State government. When I requested the conservative State government for funds to organize Valencia 6 they refused to give any. The 6th meeting was only sponsored by the University of Valencia, who covered the very basic administrative costs. For the first time, every delegate, invited or not, was requested to pay his or her full expenses, and there were no student grants. We expected this situation to seriously affect the number of delegates and, to lower the hotel prices, we moved from the previous five star hotel in Alicante to the newly extended and reopened 4 star Hotel Las Fuences, where the first two meetings had been held. The sixth meeting was thus held in Alcossebre, June 6th to 10th, 1998. As a matter of fact, the meeting was attended by 459 people from 33 countries, a 22% increase from Valencia 5. This totally exceeded the hotel capacity, so that many people have to be lodged in nearby holiday bungalows (were many people missed a telephone!). The invited programme contained 30 invited papers, followed by invited discussions, which, for the first time, were arranged into two parallel sessions, and the usual after-dinner contributed papers parties, which in this occasion were more crowded than ever. The cabaret which traditionally closes the Valencia meetings was held in a nearby disco opened specially for us. Organized this time by Tony O'Hagan, who was very much involved in cabaret activities before that, and with Brad Carlin acting again as Musical Director,

the variety show featured music, comedy, acting, juggling, and other acts of commercial quality. The show concluded with the now-infamous "Full Monty Carlo", a male striptease parodying the final scene from the popular movie. Most of the song and skit lyrics from this show, as well as form all previous Valencia cabarets, are contained in Carlin (2006), and may be downloaded from the web. The site also features photos of several highlights from the Valencia cabaret shows. *Bayesian Statistics 6*, the proceedings of Valencia 6 (Bernardo *et al.*, 1999), contained the invited papers, their discussion, and a highly selected set of 17 contributed papers. Its detailed contents is available within the ISBA web site at www.bayesian.org/books/bayes6.html.

At Valencia 6, it was decided to enlarge to conference committee to include Susie Bayarri, David Heckerman and Mike West, while Dennis Lindley decided to retire. Thus, the conference committee for the *Seventh Valencia International Meeting on Bayesian Statistics* consisted of Susie Bayarri, Jim Berger, Jose Bernardo, Phil Dawid, David Heckerman, Adrian Smith and Mike West. In this occasion we decided to move from the State of Valencia, and Valencia 7 took place in the Mare Nostrum Resort of Tenerife (Canary Islands), from June 2nd to June 6th, 2002. The Proceedings (Bernardo *et al.*, 2003), dedicated to Dennis Lindley, the former Conference President, contained the invited papers, their discussion, and a highly selected set of 31 contributed papers. The Preface and the contents of *Bayesian Statistics* 7 amy be downloaded from www.uv.es/ bernardo/bayes7.pdf.

The Eighth Valencia International Meeting on Bayesian Statistics, jointly held with the 2006 ISBA World Meeting, will take place from June 1st to June 6th in the Gran Hotel Bali of Benidorm, back in the State of Valencia, about 140 Km. south from town.

The Valencia meetings have been attended by scholars from 51 countries, namely, Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, China, Cuba, Czechkia, Denmark, Egypt, Finland, France, Germany, Greece, Hong Kong, Iceland, India, Iran, Ireland, Israel, Italy, Japan, Kuwait, Lithuania, Luxembourg, Mexico, Morocco New Zealand, Norway, Peru, Poland, Portugal, Puerto Rico, Romania, Russia, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, The Netherlands, United Kingdom, Ukraine, United Arab Emirates, United States of America, Venezuela and Vietnam, which pretty much cover all the areas of the world where Bayesian statistics is an active research area.

The number of delegates present in each of the Valencia meetings have been monotonously increasing except for Valencia 7, launched by the end of 2001, and adversely affected by the wake of September 11th, 2001. The actual number of delegates at each of the meetings are quoted in the upper panel of the table printed below. By May 18th, 2006, about two weeks before

Meeting	Year	Size
Valencia 1	1979	93
Valencia 2	1983	130
Valencia 3	1987	196
Valencia 4	1991	286
Valencia 5	1994	376
Valencia 6	1998	459
Valencia 7	2002	438
Valencia 8	2006	≥ 530

the meeting, 530 delegates have registered for Valencia 8. As a consequence, Valencia 8 will be the largest monographic Bayesian meeting ever held.

The Valencia meetings website, www.uv.es/valenciameeting, is regularly updated. Stay tuned!

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