

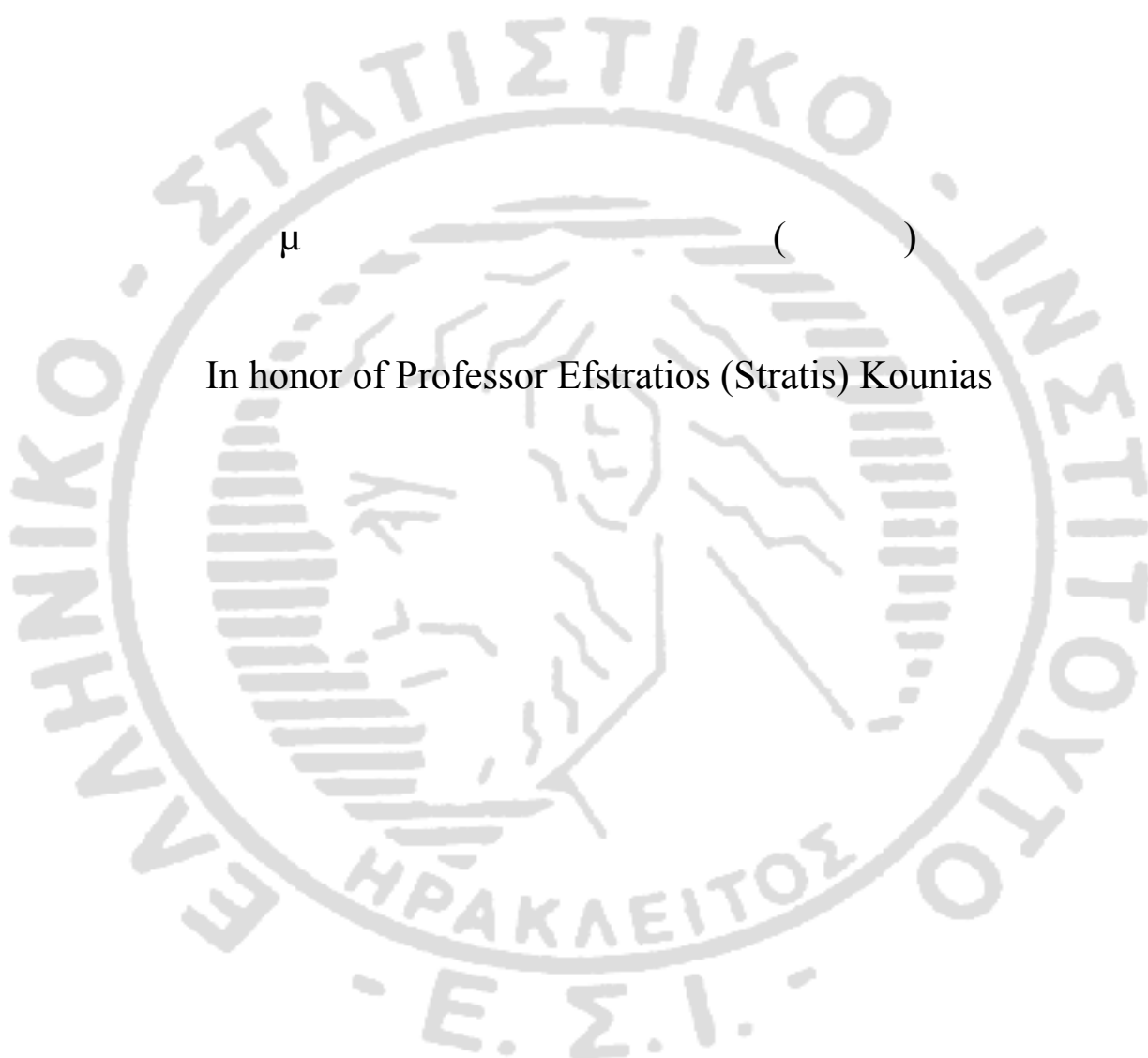
ΣΤΑΤΙΣΤΙΚΟ  
ΠΕΡΙΣΚΟΠΙΟ



STATISTICAL  
PERISCOPE

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In honor of Professor Efstratios (Stratis) Kounias







**Stratis Kounias**



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# Stratis Kounias

## His Life and Career

Chronis Moyssiadis  
Professor of Statistics, Aristotle University of Thessaloniki

I am very glad to be given the opportunity to talk about the Life and the Career of my teacher, friend and colleague or merely the statistician Prof. Stratis Kounias.

Prof. Stratis Kounias was born on May 22<sup>nd</sup>, 1936, in the small town of Leonidion about 200 km south of Athens, where he took his primary and secondary education. He is the third of the four children of George and Sophia Kounias. In 1953 he entered the Mathematics Department of the University of Athens from where he graduated in 1957 with honors. After his military service for 28 months in the Airforce, he worked for a while (1960-61) as a teacher in secondary school and as an assistant in the Mathematics Department of the University of Athens. In 1961 he won a scholarship from the Greek Scholarship Foundation for graduate studies. He went to Manchester, England where he received his diploma in Statistics in 1962 and his Ph.D in Mathematical Statistics in 1965. The Ph.D thesis entitled “Some Problems in Statistical Control Theory” was written under the supervision of Professor P. Whittle. In the meantime (1963) he got married to Sonia Katsigris. They have two children, George and Sophia.

Prof. Stratis Kounias had the following academic positions:

- ❖ Research Associate (1965-66), Department of Statistics, John Hopkins University, Maryland, USA.
- ❖ Assistant Professor (1966-68), Department of Statistics, University of Connecticut, Storrs Conn, USA.
- ❖ Assistant Professor (1968-71), Department of Mathematics and Statistics, McGill University, Montreal, Quebec, Canada.
- ❖ Associate Professor (1971-76), Department of Mathematics and Statistics, McGill University, Montreal, Quebec, Canada.
- ❖ Professor (1976-88), Department of Mathematics, Aristotle University of Thessaloniki, Greece.
- ❖ Professor (1988-2003), Department of Mathematics, University of Athens, Greece
- ❖ Professor Emeritus (2003- ), University of Athens, Greece
- ❖ Visiting Professor (2003-04 and 2007-09), Department of Mathematics and Statistics, University of Cyprus.

It was in 1976 when he was elected in the Department of Mathematics at the University of Thessaloniki as a Professor in the 3<sup>rd</sup> Ordinal Chair of Mathematical Science. At that time I was a graduate student in this department working as an assistant on Mathematical Analysis. After the election of Stratis Kounias, I was very lucky to collaborate with him assisting him in the course of Probability. This collaboration was so fascinating that made me change my initial topic and start studying in the area of experimental designs under his supervision. I think I never regretted that. The personality and the work of Prof. Kounias was determinative for the Department of Mathematics at Thessaloniki. New courses in Mathematical

Statistics, Linear Programming, Operation Research etc., were introduced and an Applied Mathematics direction was originated. The research potential of Stratis Kounias at that time was huge. Many people received their Ph.D. in this period under his supervision: K. Bagiatis (1979) (the former Rector of the University of Thessalia), E. Bora-Senta (1980), C. Moyssiadis (1981), T. Chadjipantelis (1985), N. Farmakis (1985), C. Koukouvinos (1988) and K. Sotirakoglou (1989). Four of them are now full professors and the rest Assistant or Associate Professors. He also co-supervised with me the work of S. Chadjiconstantinidis. He also supervised the thesis of the Italian Luigi Salmaso (1998), who had come for one year, as an Erasmus student, at the University of Athens and Miltiadis Chalikias (2007).

Before coming to Thessaloniki he had supervised three more persons: B.R. Gulati at the University of Connecticut (1969), C.I. Petros, at McGill University, Montreal (1975) and Chr. Panagiotopoulos, at the University of Athens (1976), where Stratis Kounias spent a year (1975-76) as a Visiting Professor. Dr. Panagiotopoulos is now professor at the University of Piraeus.

Professor Kounias has also supervised more than 30 graduate students for their master degree (four at McGill University and the rest at the University of Athens).

Prof. Stratis Kounias published a number of Books on Probability Theory, Statistics, Linear Programming and Applied Regression Analysis. Some of them, especially the first book on Probability and Statistics (1977) and the one on Linear Programming (1985), shaped the teaching of Probability, Statistics and Linear Programming at the University of Thessaloniki. He also published numerous papers in international scientific journals. Using the Mathematical reviews classification and the contents of the papers, one can classify these papers in four categories. We'll analyze shortly these categories in order to reveal the research interests of Prof. Kounias:

- ◆ Fourteen papers ([1]-[14]<sup>1</sup>) were published on Bonferroni Bounds and Probabilistic Inequalities.

The Bonferroni Bounds problem is to find upper or lower bounds for the probability of the union (or some other set function) of a finite set of arbitrary events under limited information. Stratis Kounias started studying this problem, early in 1968, trying to find better bounds. Working with Marin J., using some results from his study on relative inequalities and facing the Bonferroni Bounds problem as a Linear Programming problem, they attained some better bounds in 1976. Some years later, about 1987, his interest on this topic renewed and working with Kiki Sotirakoglou, they improved the Bonferroni and the Sobel-Uppuluri bounds, as well. In 1998 he revisited the area and compared the Poisson approximation with the Bonferroni bounds.

- ◆ Nineteen papers ([15]-[33]) were published on Experimental Designs.

In the 60s, Kiefer in a series of papers studied the Optimal Design Problem. Fedorov, Wynn, Atkinson and other researchers made significant contributions on this subject. The optimal discrete designs were known for a few values of the parameters. The development of algorithms and of combinatorics and the great development of the computers gave, that time, new impulse in the discrete optimization. Stratis Kounias worked on such topics with almost all of his students. Most of them centered on the construction of D- and A-optimal designs for different cases, or to prove that such designs are not attainable.

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<sup>1</sup> The numbers refer to *Kounias' publication list on page 37*

Some of them deal with G-optimality, with optimality of Latin Squares or with optimization under special conditions. It is important to note that the research on the topics on this and the following category is continued not only by the “sons” or “daughters” of Stratis Kounias, but also by many of his “grandchildren”.

- ◆ Twenty-four papers ([34]-[57]) were published on Combinatorial topics.  
Kounias’s interest for the study of combinatorial topics grew with his work on the experimental designs. He worked with many of his students on Orthogonal Arrays, on Difference Sets, on Hadamard matrices, on Golay sequences etc. The work of Jennifer Seberry gave a new impulse to the research team under Kounias’s supervision. Two of the members of this team (Chadjipantelis and Koukouvinos) visited Prof. Seberry in Australia. This collaboration proved very productive.
- ◆ There are a number of papers ([58]-[68]) on Miscellaneous topics. A number of these are about optimal bounded control which was the topic of the Ph.D. thesis of Stratis Kounias. There are also papers on time series, on econometric topics, etc.
- ◆ He has also published a lot of papers in proceedings of conferences or in various miscellaneous journals.

Prof. Stratis Kounias has taught many courses in different countries and different universities. He was always available to answer questions to his students and to collaborate with them in order to clarify all the difficult points.

Prof. Stratis Kounias spent a lot of time in participating in University administrative positions. Indeed, in 1982 a new law for Higher Education passed which changed the outdated University Structure. Stratis Kounias was the first Head of the Department of Mathematics, for three years, at the University of Thessaloniki. At the same time he was elected as Vice-rector of Academic Affairs at the University of Thessaloniki for three years. He was also Head of the Department of Mathematics for seven years at the University of Athens.

Prof. Kounias also participated in many committees of different institutions, unions etc. So, he has been for two years president of the Greek Mathematical Society, two years president of the union of the academic staff of the Greek Universities and seven years president of the Greek Statistical Institute. He has also been for two terms town councilor in the Municipality of Leonidion, and for many years candidate, unfortunately without success, for the Greek Parliament. He has also been for many years member or vice-president in the *Greek Committee for International Détente and Peace*. As vice-president of this committee he participated as witness in the “trial” against Bill Clinton for the bombing of Yugoslavia, which was held in New York in 2000.



## A Conversation with S. Kounias

### Tell us a few things about your young years.

I was born in Leonidion in 1936, where I went to school in 1941. From Leonidion High school I graduated in 1953. The same year, I took the entrance exams for the Mathematics department of the University of Athens. The department was accepting 100 students every year but in September only 32 passed the exam because Dr. D. Kappos who had just arrived as a Professor, gave a difficult exam. Thus a new exam took place in January 1954 and 64 more students succeeded.

Leonidion is a town of 3500 inhabitants, the centre of Tsakonia, where the residents speak the Tsakonian dialect. My father had a bookstore and the newspapers agency. The newspapers came by boat from Piraeus; road to Athens did not exist; it was built in the 60's. In any case, those years were very difficult because of the occupation and the civil war that followed.

### Tell us a few things about your University years? What professors did you have? What classmates did you have?

From the Mathematics Department I graduated in October 1957 with honors. Among my professors were Kappos in Analysis, Papaioannou in Mechanics, Fousianis in Algebra, Brikas in Geometry and Sarantopoulos in Projective Geometry. As for Probability or Statistics absolutely nothing. We had heard however that Kanellos who at that time was giving private lessons, had submitted his Thesis in Probability.

One of my classmates was Apostolos Hadjidimos who had passed the entrance exam the previous year but started the same year as I did. Stelios Andreadakis, Tasos Mallios, Pavlos Georgiou, and George Roussas were in senior years. Stratos Galanis, Leonidas Tsitsas and Fredos Papangelou were in junior years.

### What did you do after finishing your studies?

I returned to Leonidio and gave some private lessons to High school students. In April 1958 I joined the airforce for my army duty. I went to Thessaloniki for the basic training and then went to airforce base in Tatoi, as staff sergeant. My service lasted 32 months.







• **When did you begin your political activities?**

In Manchester we had many Greek students, like H. Mpakopoulos, P. Pavlopoulos, F. Theofanidis, P. Afxentiou, etc. who studied economics. I met there also Antonis Modinos and George Papadopoulos who was studying Physics and was from Limassol. In fact, Modinos was a former member of the Cypriot Communist Party AKEL. There I met also I. Chadjiantonas from Nicosia and P. Savvidis a Greek-Egyptian.

There was also an association of Greek Students in the University and we had intense political discussions; it was the time that G. Papandreou was forced to resign by the young king, and there existed a governmental instability in Greece. Thus I began slowly to be politicized. Later I served as President of the association. In the University gym we played every week volleyball with the Iranian team.

At that time arrived in Manchester the wife of A. Abatielos (she was a British citizen) to talk about the release of her husband from the jail; Abatielos was dockworker and member of the Greek Communist Party (KKE). Many Greek students attended the talk something that was found out by the Greece Embassy in London because a student was collaborating with the Secret Service (KYP), which we did not know about.

Thus the Greek ambassador Mr Melas called me in London, suggested to me to stop any relations with the Cypriots who were members of AKEL and reminded me that I was a scholar of Greek state (IKY).

• **How did you find yourself in the States? Did you like it there or no?**

As soon as I finished my studies I sought work in Greece in the Centre of Economic and Social Research but the effort was not successful. Even before my return to Greece, a friend of P. Whittle from Johns Hopkins University wrote to him that he was seeking a collaborator. Whittle asked me if I was interested.

Thus, in 1965 we went with Sonya and George by boat to New York. An aunt of Sonya's waited for us in the harbor. They did not know each other because the brother of Sonya's father moved to the States in 1910 when he was 12 years old and never came back.

Hopkins. Johns  
 Johns Hopkins,  
 Geoffrey Watson,  
 Johns Hopkins.  
 Research Associate 1 1966-68  
 University of Connecticut  
 Assistant Professor,  
 1968  
 visa Storrs,  
 «No US arms for  
 dictatorship».  
 1950.  
 Simon Fraser McGill Montreal  
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We stayed with her for a few days and then moved to Baltimore. There we stayed with a cousin of Sonya's until we found an apartment. Professor Geoffrey Watson from Australia, was at the faculty staff at Johns Hopkins; the environment was very pleasant. In Baltimore I had a crisis of kidney stones which they were removed in the very famous Johns Hopkins hospital. I was in Baltimore as Research Associate for one year. In 1966-68 I worked as assistant Professor at the University of Connecticut, there Sofia was born. In America I would characterize the conditions within the University more democratic compared to England where the Professor was controlling everything. In 1968 my visa expired and the application for its renewal was turned down. From Storrs, where the University was located, I was frequently traveling by train or bus to New York to buy Greek newspapers and to eat patsa in Greek restaurants.

Greece was already under the Junta regime and I remember that once in New York I found myself confronted with Greeks that supported the dictatorship. They became wild because in my car I had a sticker that said "No US arms for dictatorship". The Hellenism in the States was mainly old immigrants with conservative opinions, while any leftists had been expelled or forced to stay inactive by McCarthy regime in the 50s.

**How did you end up in Canada? Was it better there? Tell us about your colleagues and friends there.**

McGill University in Montreal and Simon Fraser in Vancouver offered me positions. It was that time that I met my uncle, the brother of my father. Going for a lecture, in relation to my possible job in Simon Fraser, I stayed for a few hours in San Francisco seeking the brother of my father who had moved to the States in 1913 at the age of 12. He had changed his surname to Couneo, while since 1931 he was working with Italians and had cut any relations with Greeks; He was married to an Irishwoman. Finally I went to his home where I met his wife and by tram she took me to a small shop that he maintained. After half an hour that I talked with him, we took a photo together and left; it was clear that my presence was not pleasant.

1968, McGill assistant professor. Montreal

Michael Stevens McGill  
goodness of fit tests. McGill

V. Seshadri (Inverse Gaussian distribution),  
George Styan, Arak M. Mathai, Miklos Csörgö,  
D. Dowson.  
Harold Ruben.

1968, ASA.  
To 1971-72 72-73, McGill.  
1975 McGill  
Mathai.

**Bonferroni;**

Connecticut i R. Gulati. McGill Petros

( )  
Master  
Bonferroni  
Connecticut Annals of Statistics

I decided to accept the offer by McGill where I moved in 1968, as assistant professor. Driving to Montreal we made a stop at New York to see Th. Cacoullos. He cooked for us steaks in the barbecue, he sold to us a cane chair he did not want for 10 dollars and we left.

At McGill I was sharing an office with Michael Stevens who worked on goodness of fit tests. St. Negrepointis was already in McGill. Among my colleagues in the Department were V. Seshadri (Inverse Gaussian distribution), George Styan, Arak M. Mathai, Miklos Csörgö, and D. Dowson. Harold Ruben came later. Takis Papaioannou, whom I met for the first time in New York in 1968, in an ASA conference, joined the department later.

In 1971-72 or 72-73, I do not remember well, I met for the first time Bambis Charalambides who came to McGill as Visitor. I remember that he had a serious tooth problem and needed an operation. We had told him "do not interfere with the junta because you will return to Greece and nobody knows what will happen". Theofilos was also a Visitor at McGill. Stavros Kourouklis came to McGill in 1975 as a postgraduate student in Computing; he received his doctorate later in the USA. Also P. Moschopoulos studied at McGill and completed his doctorate with Mathai.

**How did you start working in Experimental Designs and Bonferroni Inequalities?**

Basically this began while I was in Connecticut where I had an Indian student, B. R. Gulati. Together we started working on experimental designs which was the topic of his PhD thesis. Later at McGill I had another student from India by the name of Petros (the surname) who finished first his Master's thesis and later his PhD on experimental designs.

With Bonferroni inequalities I started working also while at Connecticut and I had published a paper in the Annals of Statistics and since then the inequality bears my name.

sections (American Statistical Association (ASA). O McGill, Mathai, half-baked, I Mathai. Statistical Society of Canada to Canadian Journal of Statistics, Mathai Styan Mathai Montreal, 60000 Park Avenue, 1960. « » 29 1969 25

- **Tell us a few words about the foundation of the Canadian Statistical Society and your involvement in this.**

Back then (like today) ASA sections were existing. My colleague at McGill, Mathai, who was Indian and was saying that he was “half-baked”, initiated a big effort for the foundation of the Canadian Statistical Society. He had to work very hard to overcome the obstacles created primarily by those who were members of the local ASA sections. I remember a meeting in Toronto organized in reality to throw out Mathai. Finally the Statistical Society of Canada was established which gave birth to the Canadian Journal of Statistics, that Mathai was typing by himself. Myself, as the treasurer of the Society I began to deal with orders from libraries and other financial matters. Fortunately G. Styan took over this task later. In any case despite the difficulties created in the beginning, finally Mathai was honored for his services to Statistical Community of Canada.

- **Did your activities in Canada during the dictatorship lead to the Police Station? Tell us about that.**

In Montreal, at Park Avenue, lived roughly 60000 Greek immigrants, that came there after 1960. The local Democratic Association "Makrygiannis" was very active. Among the members one could find all the opinions and tendencies of the Left.

It was Sunday March 29, 1969 and the Greek Consul was going to give a talk in the local Greek church on the occasion of March 25. The association was in alert and in fact they had made known that they will not allow a representative of the junta regime to talk about freedom and the Greek independence and in particular inside the church. Naturally the junta supporters came prepared bringing with them private police. There was chaos inside the church. We were arrested and as we were coming out of the church they were throwing pepper on our eyes. Finally we were led to the police station where we were accused for perturbation of religious aggregations. In the afternoon we were released; the juridical adventure lasted for almost 2 years; fortunately we were acquitted.





1975

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In 1975 I applied again. This time I was elected. Thus I returned for one year to McGill, where I had already become associate professor and then moved permanently to Thessaloniki in 1976. My first concern was the planning of courses on Probability, Statistics and Linear Programming since such courses did not exist.

McGill, associate professor

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1976. μ μ  
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In the department a number of people were working as assistants, as they were called, K. Bagiatis, E. Bora-Senta, Ch. Moysiadis, N. Farmakis. All of them were interested in a doctorate and asked to collaborate with me in Statistics. All of them worked on experimental designs except E. Bora-Senta who worked on time series and later K. Sotirakoglou who worked on Bonferroni inequalities. Later I collaborated with Th. Chadjipantelis, Ch. Koukouvinos, K. Sotirakoglou and St. Chadjikonstantinidis. When I left Thessaloniki K. Sotirakoglou and St. Chadjikonstantinidis continued and finished their doctorate under the supervision of Ch. Moysiadis who was already an assistant professor.

Bonferroni.

With Ch. Koukouvinos, we were given the opportunity to collaborate with Jennifer Seberry from Australia. In one of our papers with Ch. Koukouvinos were referred to a paper by Wallis - Seberry – et al., as «Wallis et al.» Seberry sent a strict letter where she declared that her name was not «Wallis et al» as we had reported but "Jennifer Seberry". We apologized and after this incidence a great and long-lasting friendship and collaboration started. In fact she invited Ch. Koukouvinos who went to Australia twice.

Jennifer

Seberry

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Wallis-Seberry-k.a., Wallis et al  
Seberry μ μ  
μ μ «Wallis et al»  
μ μ «Jennifer Seberry».

It was in Thessaloniki that we organized the summer of 1987 the *European Meeting of Statisticians of the Bernoulli Society*. It was precisely then that George had the accident in Leonidion during his summer vacation from his studies in Canada.

μ  
1987

European Meeting of Statisticians Society.

Bernoulli

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• **Tell us about your administrative activities in Thessaloniki. How were you elected Vice Chancellor?**

In 1982 the new law for higher education passed by the Greek parliament. It was the law that created the four faculty ranks of lecturer, Assistant, associate and Full Professor. The law also gave to 80% of the students the right to vote for the various University bodies in a period where the Student Group (PSK) associated with the Communist party was very powerful. The elections began from the Departments with the election of Chairmen. After I was elected Chairman of the department, I was a member of a committee for the identification of candidates for the new University Leaders (I was already member of KKE since 1979). As a result of this search I found myself candidate for Vice chancellor. Thus I was elected Vice chancellor of Academic Affairs with P. Leontidis as Vice chancellor of Financial Affairs and D. Fatouros as Rector, for a three-year period.

The time was such that various changes were made like the abolition of University robes. In fact, because I was handing-over the degrees during the University diploma ceremonies wearing a handmade pullover they circulated a photo in the local press protesting about the new situation.

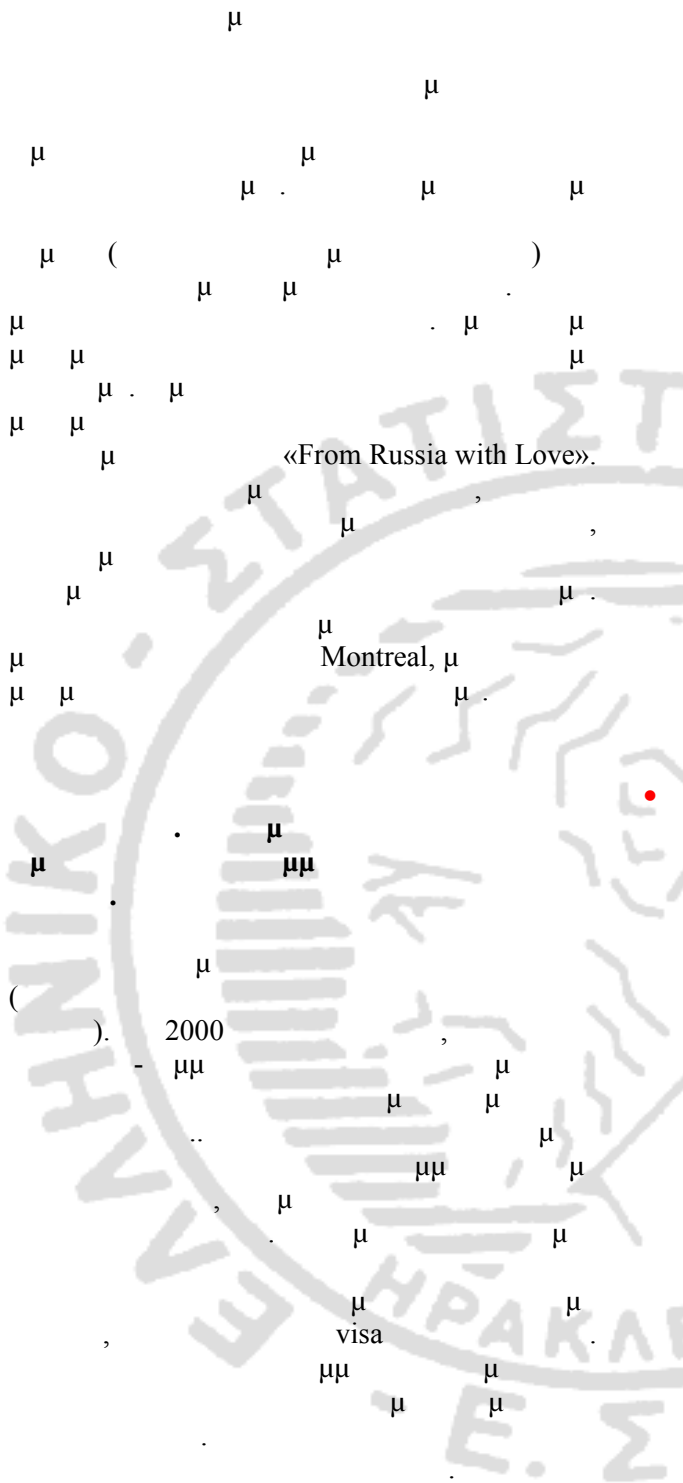
Generally I avoided formalities. In an event in Kileler where I was representing the University and was to receive some honorary award for the foundation of installations of Forestry in the University park at Pertouli, I drove with my old car and they did not lead me to parking area for the officials. As a result, I sat on the back and the award reached me hand by hand.

• **Tell us about your political activities in Greece.**

In Thessaloniki I was twice candidate of KKE for the Greek Parliament. I remember that we were visiting cafes and various districts talking to people and one time they did not let us enter in a cafe. As we know in Thessaloniki the assassination of Lambrakis took place in 1963 and bad memories still existed from the activities of the underground organizations that had been created or were tolerated by the authorities in order to spread fear among the peoples.







Since we are talking about the years in Athens I could mention that during this period I visited Canada and in one of these visits I arranged to pass also to the States in order to give a series of lectures in various Universities. We took a bus but something had happened at that time (perhaps concerning Quantafi) and the security measures were increased. Thus the border controllers entered into the bus. We had with us Canadian passports and did not have any problem. However at the time, I was studying the Russian language and I had in my bag a book titled "From Russia with Love". As soon as the American controller saw it, checked the computers and ordered us to step down. Finally I was not given permission to enter the States while there was no problem with Sonya. Fortunately an American gave us a lift on his car and drove us back to Montreal from where we had started.

**In Athens you continued your work and in the Greek Committee for International Détente and Peace. Tell us about your trip to the States and the participation of Clinton's trial.**

In Athens I was vice-president of EEDYE (Greek Committee for the International Détente and Peace). In 2000 in New York, Left-Communist organizations set up a trial against Clinton for the bombardment of Yugoslavia. They called therefore Peace movements from around the globe to participate with a representative; in certain cases they covered also the air tickets. Thus, as Vice-president of EEDYE I traveled to New York where now I did not experience any entry problems because I had obtained a visa from Athens. Basically, in the trial I participated as a witness against Clinton while others participated as judges and others as public prosecutors.

- **Closing this discussion I would like to ask you to tell me what all this traveling and all these collaborators and friends from all these years finally mean to you.**

I would say that all came quite coincidentally. Everything was brought by the circumstances. In any case I should say that the contact and communication with the common people was an enormous experience! This is something that one may not realize so much if he/she is permanently occupied with the teaching and the research at the University.

I think that the situation and my administrative or party activities for many years, were such that I had not enough time for research. Many times I wonder if this was my own escape or just an excuse. The only period I have plenty of time is now that I am visiting the University of Cyprus.

My conclusion after all these years is that *wherever* you are, you should respect *in practice* the opinions, the statements and the beliefs of the others. If the others do not agree with your own perceptions it means that the conditions have not still matured for their realization.



Kounias, Papaioannou, Styian and Puka families in Tirana, Albania.



Panarcadian Games Sept. 25, 1959. S. Kounias on the left with teammates and the Chairman of the Athletic Club «Leonidas».



## Arak M. Mathai

My association with Stratis goes back to 1960's when he came to McGill University, Department of Mathematics. It was 1967 or 1968, the exact year will be available from his cv. From that time onward we worked as a team in all departmental activities, in resisting the attempts of domination over the statistics group by mathematicians and also in pushing forward statistics programs. Our statistics group was a good group consisting of Harold Ruben as head of the group, then Michael A. Stephens, Donald Dawson, Miklos Csorgo, V. Sehsadri, Stratis Kounias and myself. Seshadri joined the department in 1962 or 1963, Michael A Stephens in 1963 and I joined in 1964. Others came later. Then later George P.H. Styan and Takis Papaioannou joined. Michael A. Stephens left for McMaster University in Ontario. Later Donald Dawson and Miklos Csorgo also left for Carleton University in Ottawa.

In my years at McGill University, from 1964 until 2000 as a regular faculty member and from 2000 onward as an Emeritus Professor of Mathematics and Statistics, I had taught students from almost all countries. I had a large number of M.Sc and Ph.D students from different countries. Among all nationalities I found the Greeks the best as human beings. I had a good number of students of Greek origin, all of them still keep in touch with me. I had colleagues from many nationalities and two Greeks among them. Among all people that I had come across in my life Stratis Kounias is the best as a human being.

We had identical views on many things. I shared some of his passion for socialistic system but I was never a socialist or a capitalist. I liked the aspect of protecting the weak, old and handicapped in the society. But I did not like a system which kills individual initiatives. Equality among people in everything is logically an impossible concept. For running a factory someone has to be the manager and others have to be the workers on the production line. Stratis took it to the extreme, most probably because he did not stay in iron-curtain countries in those days. I remember one incident when we were discussing merit increases in the departmental meeting. Stratis put forward the idea that increases in salaries should not be based on merits but on needs of the individual. Apparently nobody else shared that view.

Most interesting and turbulent years were the early 1970's when we organized the Statistical Society of Canada and the Canadian Journal of Statistics. Several people, individuals and groups, tried to set up a statistical society from time to time. All were failures and all had given up. The last person, who attempted, also sent around a circular saying that there was no interest among statisticians in Canada to create a Canadian Statistical Society and hence he was giving up the attempt. I had noted the defects in all the precious attempts and I knew that I could establish a Society successfully. I put forward the idea to Stratis. He told me that if I wanted to organize he would stand by me but he warned that there would be onslaught by the "establishment" and only if I could withstand, then only try it. I told him that I could withstand. Then we decided to go forward. We took one more person from our Department at McGill, who was not in the main stream of Statistics, and one from the University of Montreal. Only four were needed to incorporate a corporation without share capital at that time in Canada.

For establishing a Society there are two major approaches. One is from the bottom up. Like-minded people assemble and make a resolution to start a Society. Then ask for people to join in. This approach works only if there is a senior in the group who can order others to do what he wants. In other words an imposed consensus is created first and then order the subordinates to carryout his wishes. Only one or two, whom others respected, were there in the "establishment" at that time who could organize and none was involved and hence all previous attempts failed. If a person, not a part of the "establishment", has to be successful he has to go the other way, from top down. That is, establish it by incorporation and thus create a legal entity first. Then ask willing people to join. We did it and it was successful. During the incorporation I had put forward the names "Statistical Society of Canada", "Canadian Statistical Society", "Statistical Sciences Association of Canada" and for the journal the names "Annals of Statistics" [There was no Annals of Statistics at that time] and "The Canadian Journal of Statistics". But the registrar's office did not accept our first choices of names saying that they might interfere with the name "Statistics Canada" because the government was changing the name of the bureau of economics and statistics to Statistics Canada at that time. Hence we were given the name "Statistical Science Association of Canada".

After establishing the legal entity, we had also invited all in the establishment to join in all respectable positions as President, Editor, Vice-President etc. Almost all joined and later all of them withdrew. There was resentment and the atmosphere was nasty to describe it mildly. At the first sign of attack from the establishment the fellow from University of Montreal crossed over to the opposition camp. Now there was intense pressure on Stratis to quit our group. If Stratis also quit then it would have become a one-man show and naturally would collapse. But Stratis kept his word and stood by me all the way through. I would have done the same for him if he was organizing and if I had given my word to stand by him.

There was an amusing episode in this connection. The “establishment” called a meeting of 21 of their hand-picked persons to start another Canadian Statistical Society. Stratis and I were also invited. Their thinking was that even if the two of us opposed they could pass a resolution 21 for and 2 against. When they send such a circular around everyone would switch from our Society to the new one. They thought that in this chess game they had check-mated us and there was no way to escape. Whether we went for their meeting or not it was fait accompli in their calculation.

In the normal course, two people cannot defeat 21 consisting of the “establishment” also. So, we devised the only strategy left – filibuster the whole meeting. They had in the agenda an item of adopting a constitution for the new Society. We decided to filibuster by way of clarifying items in the proposed constitution. We sat down, marked down all the points and decided that Stratis would ask for clarifications and I would give the points one after the other. We could successfully filibuster the meeting until lunch time. Then during the lunch time there was immense pressure on Stratis to break away from me. But Stratis did not betray me. In the afternoon also we did the same and by 3 pm one by one the “establishment” left and the meeting collapsed. After calling the meeting in Ottawa their strategist had called me, as part of psychological warfare, and said that after the Ottawa meeting I would have only one choice left, that was to commit suicide to save my face. This was not the first occasion that he and others used the psychological warfare tactics against me.

When the attack intensified Stratis asked me why not let them take it and run it and why not withdraw. I told him that I had no interest to run neither the Society nor the Journal for ever. After fully established they could take and run them. Stratis agreed and decided to stay with me and we established both the Society and the Journal.

Our research collaboration was confined to one paper only, that was on an optimization problem connected with integer programming.

After the junta fell in Greece Stratis went back to Greece. The next time when I visited him in Greece he was in the middle of organizing a protest demonstration, possibly against something the Americans did at that time. I do not remember the exact cause. As a friend of Stratis I also joined him. That was the first and last time I participated in a street demonstration to protest against something. I do not usually subscribe to street demonstrations. The next time when I visited him in Greece he told me that he had bought an old chateau and remodeling it. The last time when I visited Greece was when Professors Koutras, Charalambides and others had organized a conference in Athens.

In summary I have fond regards for Stratis and I consider him as the best person that I ever came across in my life.





positions and his opinions in an environment where it is not certain that the ideology of a scientist, and in particular a communist ideology, is bearable. This is said in the sense that such an ideology disputes not only the capitalistic system but also a lot of well established traditional opinions that constitute the ideologic system of the urban class, as system of scientific opinions that is taught or even constitutes the basis for scientific research.

Stratis Kounias has fought and is still fighting within the educational system and also as a direct fighter against the imperialistic war and in support of peace and socialism. Undeniably all academics talk for peace, the researchers, the politicians irrespectively of their ideological and political affiliation, in reality almost everybody. It is impossible to find in our days an ideologist in favor of war. If however the statements and the oaths of faith were sufficient to secure peach on earth then the world would have been so much better today.

Stratis in his fervid speeches for this very important issue he proved with sensitivity and that he knows how to fight for peace. After all he knows quite well that the war and the military attacks are not undertaken by some idiosygratic individuals, by villains and those with war-like DNA, but it is the result and the inherent characteristic of endoimperrialistic oppositions expressed blankly when it is time for the reallocation of markets, namely the sources of raw material. The fact that the war is part of the nature of the capitalistic system is used as bugbear and punishment against people in pursue of self-reliant growth, people trying to choose their own path of social development, or people in need to be free from class violence and exploitation.

Stratis is a scientist who did not trade the science and his knowledge and has *no* interest for personal enrichment and personal gain at all costs.

I have not met Stratis as a University professor, namely in the classroom and in his contact with the students, since my student years have been ended a long time ago. I am certain though that he gained the love of his students with his attitude, his behavior, and his sweet, human style. In such moments I go back to my own student years between 1964 and 1971, and I realize that due to the general situation and the dictatorship, I was not given the opportunity to have met such schoolteachers as Stratis Kounias.

## Jennifer Seberry

I can't remember when I first started writing to Professor Stratis Kounias about Block Designs but I think it must have been over 35 years ago.

He, his student Professor, Christos Koukouvinos and I started working together before Professor Koukouvinos went into the army so Professor Koukouvinos would have papers continuing to be published during those years he could not work on research. Professor Kounias always thought ahead about his students careers.

The most memorable moment in my recollection is when he cooked me fish stew at his home, I was astonished that someone of his eminence would spend the time to cook for me.

Professor Kounias is a great man, a foremost researcher and an inspiration for humanity.

## Luigi Salmaso

I went in Athens for the preparation of my bachelor's degree on design of experiments. Stratis Kounias was the local referring person for the Erasmus students. He followed me on the preparation of the Thesis very carefully. He was an excellent teacher and most of all an incredible Leader with an enormous interior strength and extraordinary human capacity. He motivated me like no other with respect to both studying design of experiments and being a good person. After that meeting I had a great motivation in the academic career and I entered the PhD Program working with him on design of experiments. He visited Italy for a few times for discussing research projects and making some wonderful trips to the Dolomites and to Venice.

Stratis: a great scientist and a formidable human being!



## Evangelos Mahairas

I have heard many things about Professor Stratis Kounias and on top of all, that he is a superb Mathematician. Although we are originated from the same area (Arcadia) I first met him in 1988 when he moved from the University of Thessaloniki to the University of Athens. He knew me though since March 25<sup>th</sup>, 1944 when he was 8 years old and I was marching through Leonidion as chief commander of the *Parnon* light artillery troops.

I heard that in Thessaloniki he was very active with the Peace Movement as Vice-Chairman of the local group of the Greek Committee for International Defense and Peace (EEDYE). So, when he moved to Athens I invited him to join the Central Secretariat of EEDYE where he was elected Vice-Chairman. Under this capacity he represented EEDYE as speaker in anti-war events in various cities around the country.

In 1999 he was in charge of the EEDYE and Greek Red Cross convoy that transferred medicine and clothing to Yugoslavia which was bombarded by NATO aircrafts. In addition, he represented EEDYE in international events and he is a member of the Editorial board of our 3-monthly magazine "Peace Paths".

In 2000 he represented EEDYE in a special event organized by the USA anti-imperialist organizations in New York against President Clinton as the primary responsible for the destruction of Yugoslavia and until today he offers his services to the Greek and the International Peace Movement.

## Llukan Puka

The first contact with Professor Kounias, was at the end of 80s. It was the time of many difficulties in Albania and also the beginning of big changes in the country.

At that time I received a letter from Stratis, inviting me for a talk at the Mathematics Department of Athens University. I was really surprised, because we did not have any contacts or relations with Greek Universities until that time. Of course, we did not have relations at all, except in some exceptional cases. In 1983, I had a PhD diploma in probability from “Pierre et Marie Curie” (Paris 6) University and after returning in Albania I was in contact only with some colleagues from France.

During the same period I received also a letter from Professor Takis Papaioannou, from Ioannina, asking me for a possible study visit in Tirana in view of some collaboration. In this letter was mentioned that Professor George Styran, from McGill University in Montreal, wanted to visit Albania too. You will see later why I am mentioning all this names.

So, with a very great pleasure I accepted the invitation and I went to Athens. At that time, my first language was French; I spoke very little English. At the airport I met a young assistant from Mathematics Department, Vasilis, who spoke very little Albanian, just few words for understanding. Stratis came at the hotel with Sonya, his wife. And this was the first time that I met him. It is unnecessary to say how familiar this first discussion was. I was a little anxious for my seminar, because of the language. They, Stratis and Sonya, speak French, so the conversation with them was easy. But Stratis told me: “I will also do the translation from French to English for the colleagues”. I remember Sonia saying to me, joking: “If you want to come again to Athens, you have to learn and speak English”. Stratis explained to me that a seminar was also scheduled in Thessaloniki. I told him that I had only one week of permission (special!) from my authorities and also that I was obliged to go through Ioannina for my return in Albania (financial question but also a way to discuss with Takis the perspective of the visit). He laughed, saying “it will be for another case”, and organized my visit to Ioannina where I met Takis and Maria, his wife, French speakers too. After the seminar in Athens, Stratis changed the hotel

for me, to be near Sintagma and Plaka and have more possibilities to visit Athens during this short visit.

After my return to Tirana, I organized the visit of Stratis and Takis (and George too) with their wives to Albania, being the first Greek mathematicians (Canadian too) who visited our mathematics department. It was a magnifiqu visit, because all of them knew each other since the 70s in Canada. And the visit was a good occasion to be together again. For me it was the first contact. A family friendship was created with them from that time which is continuing. Many other visits followed. Our wives, Sonya, Maria, Evelyn and Tanusha, also found nice this new friendship.

I would like to mention another fact. You may remember the events of 1997 in Albania when with the crash of the pyramid schemes, the country sunk in a catastrophic and dangerous situation. One day during this period, early in the morning Stratis called me and invited us to go to Athens, in order to be in a safe place during this period. I remember in fact many other details like this, when Stratis and Sonya’s house was, and is (in Athens or in Leonidion), as our home.

Every time we met, Stratis was very eager and wanted to know every thing, every moment ready to help you.

In a biography, I do not remember the name; the author was perplexing how to begin the writing. Finally, he begins with the expression “C’etait un home”. I think, if somewhere someone will take the initiative to write a biography for Stratis, the best way to begin is the same: “He is a home”. All his life is the best argument.

## Peter Whittle

I have known Stratis from the time he began graduate studies in 1961, a prelude to a long and successful career. However, had I known him from only those early days, I would still have regarded him as one of the most generous and vivid personalities I have met -- an impression which has only been reinforced since.

Stratis turned up at the Statistical Laboratory of the University of Manchester as an unannounced surprise package in 1961, shortly after I had taken post there myself. He had been accepted as a research student in the Faculty of Economics, but realised on arrival that the courses available there were insufficiently mathematical for his purposes. His evidence justifying a quick switch to Mathematics was largely informal, but he conveyed a conviction which turned out to be well-founded. In the subsequent years he completed a fine piece of work and enhanced the life of several Mancunians.

His thesis was probabilistic in character, although we did try to bring it to application; I recall that we visited Cadbury's in Bournville together. At this time there was a revived interest in the optimisation of experimental design, and it was this theme that Stratis took up. It led him into the complex of associated topics (matrix combinatorics, probabilistic inequalities of the Bonferroni and Kolmogorov types) to whose development he has so fruitfully contributed since.

After completion of his thesis Stratis spent some years in the USA and Canada, but it seemed right for him to return to Greece. This he did by accepting a chair, first at the Aristotle University of Thessaloniki and then at the University of Athens. During these years he stimulated more than a generation of students, both intellectually and with the warmth, humanity and energy which I know so well. It gladdens one to see a fine colleague and a good friend so rightly honoured by his own country and yet, in his maturity, so little changed.

## Bodh R. Gulati

Dr. Stratis Kounias has been one of my best professors that I have met during my academic career. I came in contact with him in 1966 when he joined the University of Connecticut at Storrs. I was a Ph.D. candidate at that time. I attended some of his classes and was very much impressed with his presentation of the material. Every lecture I attended in his class was an eye-opener, a valuable experience and I learnt a lot from him. He has been a God-given gift for me and I have always been grateful to him.

My only regret was that he stayed at the University for two years and then moved to McGill University in Canada. I visited him few times in Canada and he was very helpful in my thesis. He uplifted my spirits and gave me the inspiration I needed most. We did publish few papers in International Journals.

Unfortunately, I lost my contact with Professor Kounias in 1978 when he moved to Greece and now I am really excited to find him. I understand that he has since retired and I wish him well.

## Michael Stephens

I am pleased to add my tribute to Stratis Kounias. I know that there have been and will be admiring references to his work in statistics, both as researcher and professor. I shall reminisce about my encounters with Stratis over the years.

I first met Stratis in the mid-60s, when we met at Johns Hopkins. Stratis was not too happy living in the United States, and so I helped him get a position at McGill in cosmopolitan Montreal. We shared an office for several years. It was the time of the junta in Greece. Our office was plastered with posters, and Stratis made me sign a pledge not to visit Greece until the junta was defeated. I should say that I did two years of classical greek at school, read Euripides and Herodotus, and don't remember a word. But I had visited in 1954, invited by two Greek students whom I taught in London. I saw 'Romeo and Juliet' in a beautiful park in Athens, and certainly I wanted to visit Greece again. But I dutifully signed, the thought of daily facing the wrath of Stratis proving beyond my stamina. Little did I know that that pledge would not be redeemed till a new century had begun.

During that time at McGill, Stratis was of course active in the Greek community in Montreal, and a group staged a demonstration in a church to protest the visit of an emissary from the Greek embassy in Ottawa. This resulted in a blow on the head for Stratis (which I am sure improved his research capabilities) and his being carted off to the police station. We had to bail him out so that he could teach his course, not the sort of thing which often happens to dull academics. On the day the junta fell, Stratis was in France, and word reached me that he went immediately to his homeland along with (well, not exactly with) another great patriot, Melina Mercouri (I don't know if it was a Sunday). I can imagine the joy for Sonia and Stratis to see their country, and to join in the rejoicing.

But I must not leave Montreal days without remembering the Kounias' hospitality, lovely dinners and Sonia's excellent cooking. Finally, the two children, George and Sophia, were raised in Montreal and I hope will ever remain a little bit Canadian. I moved around, finally settling in Vancouver, and Stratis went to Thessalonika. We rather lost contact, although I did hear that Stratis had run for (and maybe won?) a position at the University which was voted by the students. I believe he ran as a communist. Nothing surprised us who knew him, but I am sure his interpretation of communism, if he had ever tried it in Soviet

Russia, would have meant more blows to the head and a long stretch in a gulag somewhere east of Omsk.

So my next encounter with Stratis was in a darker time. I was giving a talk in Montreal, and Stratis walked in. I stopped to shake hands 'with my favourite communist', and noticed a rather subdued Stratis. After the talk he told me of George's accident; he had brought him back to Canada for rehabilitation and so that he could finish his degree at Concordia. George finished, and I understand that he has made a good life for himself, including playing in an Olympic team. Sophia finished at McGill and has a career at the University of Athens.

At that time there was a characteristic Stratis-incident. He decided to visit friends in the US, but was turned back at the border because (quelle horreur!) they had him on the computer, a well-known Greek communist.

And then the years passed, until I was fortunate to be invited to speak at the Greek Statistical meeting in Rhodes in 2005, 51 years since my first visit, and some 35 years since I signed Stratis' pledge. Perhaps he had something to do with the invitation. It was a wonderful visit, the talks (and the dancing), meeting Professor Cacoullas after many years, and also meeting a younger generation of Greek statisticians. But of course the highlight was to meet Sonia and Stratis again, and to find them in such good health and spirits. They kindly drove me to their lovely village, showed me where Stratis used to court Sonia under her window, another Romeo-and-Juliet story, and took me to the village square, where the entire village seemed to come to shake the hand of their former town councilor. I understand that Stratis had run for parliament several times, but alas without success. He was thinking of restoring an old stone building on their property, and then renting it. I hope Evelyne and I could become tenants one summer. But-- does that make him a capitalist after all? Never - Stratis is the true Liberal- a believer in maximum freedom but in a fair-minded society. Would that there were more like him!

Stratis also took me to see a friend who cut marble, and I asked for some of that beautiful white stone as a memento. Then when I got home, here arrived a box full of beautiful pebbles from Stratis. They must have been sent at great expense; they sit on agilt tray in the middle of the dining table, a reminder of a long friendship. Evelyne and I wish Sonia, Stratis and their family good health and good fortune for the years to come.

## Kounias' Publications

### Books (in Greek)

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- [2] Probability , Theory and Exercises. Thessaloniki 1985 with Chr. Moyssiadis.
- [3] Probability I, Theory and Exercises. Thessaloniki 1985 with S. Kalpazidou.
- [4] Linear Programming, Theory and Exercises. Thessaloniki 1983 with D. Fakinos.
- [5] Introduction to Statistics. Thessaloniki 1985, with K. Bagiatis, E. Bora-Senta and F. Kolyva-Maxaira.
- [6] Theory of Probability , Classical Probability, Univariate Distributions. Thessaloniki 1995 with Chr. Moyssiadis.
- [7] Notes on Sampling. Thessaloniki 1986.
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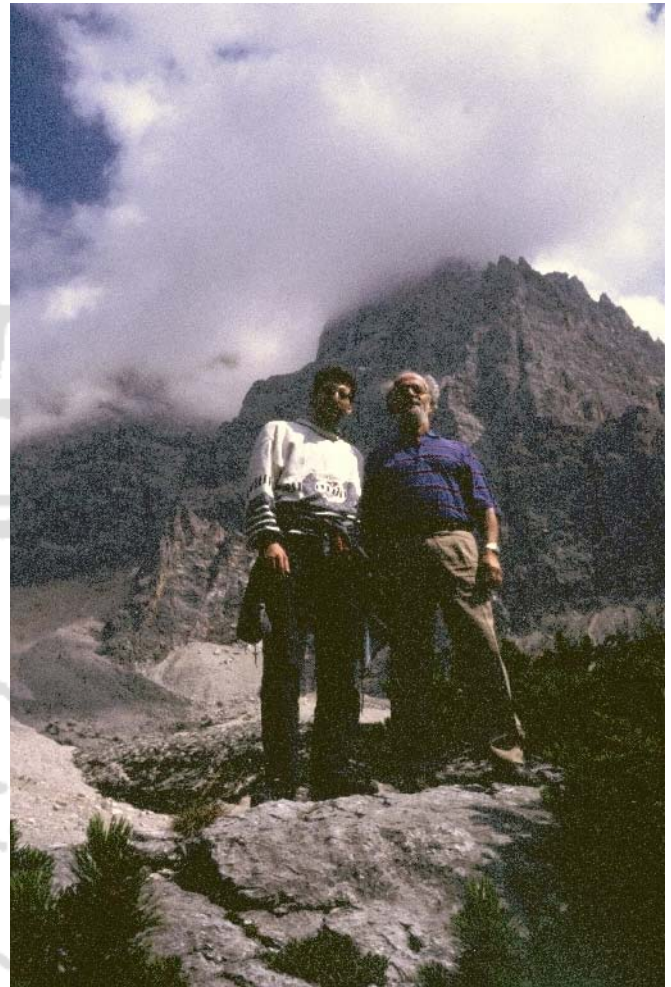
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With L. Salmaso at Dolomites, Italy.



FIG. 5. Stratis Kounias and George Styian in Tampere, Finland, June 1987.

With G. Styian in Tampere, Finland





