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Erich L. Lehmann, The Lehmann Symposia, and November 20^{th} 1917

Javier Rojo[1]

Rice University

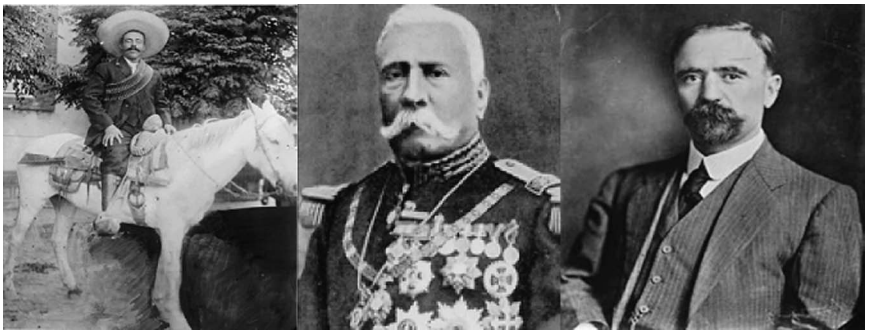
The Lehmann Symposia originated as a result of a conversation I had in the year 2001 with the, then, Director of the Centro de Investigación en Matemáticas (CIMAT), Victor Pérez-Abreu. We both felt that there was an urgent need to bring back into focus theoretical statistics and our proposed solution was a series of Symposia that could serve as a forum for some of the exciting theoretical work being done in statistics. The First Lehmann Symposium took place at CIMAT in May of 2002. Most of the participants were Mexican colleagues. The program can be seen at the site `http://www.stat.rice.edu/lehmann/1st-Lehmann.html`. The second Lehmann Symposium – `http://www.stat.rice.edu/lehmann/` – was held in May of 2004 at the School of Engineering at Rice University. Initially, the venues for the Symposia would alternate between CIMAT and Rice University. However, for various reasons, some being financial, it was decided to hold the 3^{rd} Lehmann Symposium in the United States.

The original plans for the Third Lehmann Symposium were to hold the symposium at the Mathematical Sciences Research Institute (MSRI) in Berkeley during the month of November of 2007. The Third Symposium, however, ended up being held at Rice University for a second time during May of 2007. See `http://www.stat.rice.edu/~jrojo/3rd-Lehmann/`. I co-edited webcasts of the Second and Third Symposia, and these webcasts are freely available to the public. They can be found at the following sites: `http://webcast.rice.edu/webcast.php?action=details&event=408` — second symposium, and `http://webcast.rice.edu/webcast.php?action=details&event=1057` — third symposium.

But why was the venue for the Third Symposium changed from California back to Texas, and why was the date changed from November 20^{th}, 2007 to May 16^{th}, 2007? There were very good reasons for holding the opening of the Symposium on November 20^{th}, 2007. For example, November 20^{th}, 2007 was the silver anniversary of the greatest big game of all time. See, for example: `http://www.alumni.berkeley.edu/KCAA_Multimedia/The_Play_1982.asp`. Another good reason to start the Symposium on November 20^{th} was to co-celebrate, with our Mexican counterparts, the start of the first major 20^{th} century revolution. The Mexican revolution started on November 20^{th}, 1910 to remove the dictator Porfirio Díaz who had remained in power for 30 years. This revolution led to the Constitution of 1917 and the start of the Partido Revolucionario Institucional that held power until 2000 when a candidate from the Partido Acción Nacional, Vicente Fox, won the Presidential election. Francisco I. Madero, with the help of Francisco Villa, took over from Porfirio Díaz.

The Constitution of 1917, signed in February 5^{th} of that year, is the current Mexican Constitution. The year of 1917, as it turned out, was a very significant

[1]Department of Statistics, MS-138; Rice University; 6100 Main Street; Houston, TX 77005; e-mail: `jrojo@rice.edu`



Francisco Villa Porfirio Diaz Francisco I. Madero

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year in the history of the world.

Some of the Significant Events of 1917

February 5 - The Mexican Constitution is adopted by the Mexican Congress in the City of Queretaro, and this Constitution continues to be the Mexican Magna Carta.
February 7 - The United States ends the search for Pancho Villa. The Mexican expedition, as it is known, was led by General Pershing and had the objective of capturing Francisco (Pancho) Villa who had crossed over and ransacked Columbus, New Mexico. Pershing was unable to capture Villa, and after several encounters with various groups, including the Mexican army, Pershing and his forces returned to the United States in February 1917.
February 24 - President Woodrow Wilson is presented with a deciphered German telegram – the Zimmermann telegram, in which Germany offers to give American territory back to Mexico, if Mexico will declare war on the United States.
March 31 - The United States takes possession of the Virgin Islands after paying $25 million to Denmark.
April 6 - As a result of the deciphering of the Zimmermann telegram, the United States Congress declares war on Germany.
April 11 - Babe Ruth pitches for the Boston Red Sox and beats the New York Yankees 10-3, allowing 3 hits. On January 5th, 1920, Ruth was traded to the New York Yankees and thus started the Bambino Curse for the Red Sox. The curse was finally broken 84 years later when the Sox defeated the Cardinals in the 2004 World Series.
April 16 - Lenin arrives in Petrograd.
May 17 - The paper "On the distribution of the correlation coefficient in small sample. Appendix I to the papers of "Student" and R. A. Fisher. A cooperative study", by H.E. Soper, A.W. Young, B.M. Cave, A. Lee and K. Pearson, (Biometrika 1917 11: 328-413; doi:10.1093/biomet/11.4.328), and the paper "I. Tables for estimating the Probability that the Mean of a unique Sample of Observations lies between $-\infty$ and any given Distance of the Mean of the Population from which the Sample is drawn" by "Student" (Biometrika 1917 11: 414-417; doi:10.1093/biomet/11.4.414)

are published. The former would include a criticism of Fisher's maximum likelihood principle that helped ignite a feud between Fisher and Pearson.
May 18 - The Selective Service Act passes the U.S. Congress giving the President the power of conscription.
July 4 - Petrograd Street demonstration - The Bolshevik revolution looms in the horizon.

Days of revolution - barricades at the Arcenal [i.e., Arsenal], Petrograd. The photo is taken from the Library of Congress under lot 2398, reproduction number LC-USZ62-25298, 1917.

November 7 - Bolshevik Revolution begins: The workers of St. Petersburg in Russia, led by the Bolsheviks and the Bolshevik leader Vladimir Lenin, attacked the ineffective Kerensky Provisional Government.
November 20 - Ukraine is declared a republic.

November 20, 1917 and Beyond

Amidst the shadows of war and civil unrest, a small burst of light began to shine in Strasbourg, France. Erich Leo Lehmann was born November 20th, 1917 – a mere 7 months after The United States entered the First World War.

Some years later, at the age of 16, he and his family went to live in Switzerland to avoid the Nazis. After five years in Switzerland, and two years in Cambridge, Erich L. Lehmann arrived in the United States in 1940 with a letter of introduction from the wife of Edmund Landau. Landau had passed away a couple of years earlier from a heart attack. The letter of introduction was for Richard Courant who was in New York and had been a colleague of Landau in Göttingen. After being asked by Courant if he wanted to stay in New York or live in the United States, Lehmann responded that he wanted to live in the United States and then followed Courant's advice to go to an "up-and-coming university" in Berkeley, California. Upon his arrival in Berkeley in 1941, Erich Lehmann met with Griffith C. Evans who had been a mathematician at the Rice Institute, now Rice University. Evans had been brought to Berkeley to develop the mathematics department that was in disarray. Evans was an excellent mathematician and many of his contributions as a

Erich Leo Lehmann in 1919.

mathematician and administrator have been recorded in Morrey [9] and Lehmann [8]. As an administrator, Evans was able to attract to Berkeley some of the best mathematicians of the time. With a broad vision for the mathematics department, Evans supported a three-week visit by R. A. Fisher to Berkeley. The visit did not go well. Reid [10] writes in her book that, despite a generous endowed lectureship whose terms required the lecturer to spend their time on campus to interact with interested faculty, Fisher spent the first five days of his visit in San Francisco and went back to England a day earlier "standing up a dinner in his honor". Reid [10] writes that according to Raymond T. Birge, chair of the Physics department at the time, "Fisher was the most conceited man he had ever met – 'and that is saying a lot with such competitors as Millikan et al!'" Birge put forth Neyman's name to Evans. Evans had never heard of Neyman but after some inquiring an offer was made. Neyman accepted and a few years later, after an offer from Columbia became available, was able to negotiate with Evans for the creation of a separate statistics department. These and other fascinating details may be found in Lehmann ([3–5], and [8]) and Reid [10] and other references in the bibliography.

During their first meeting, Evans offered Lehmann a probationary graduate student status and six months later a teaching assistantship in the Mathematics De-

Erich Leo Lehmann in 1924.

partment. With the advent of the Second World War, Evans suggested to change areas of study and consider a more useful subject. Either Physics or Statistics would be more useful than Mathematics. After completing the required course work, and after returning from Guam where he and Joseph Hodges had served, it was time for Erich L. Lehmann to begin work on a dissertation. A topic with a probabilistic flavor was proposed by Pao-Lu Hsu after consulting with Neyman. Progress was swift and as Lehmann prepared to write up some of the results, a reference led to other references that led to the painful discovery that the results so far obtained had been published a few decades earlier. At that time Neyman was invited as a member of a delegation to observe the Greek elections. Concerned with the disappointment of his student, and knowing that he might return until a few months later, Neyman asked Hsu to consider providing a new problem for Lehmann's thesis. Hsu suggested a new problem that he had thought about and planned to work on, and a problem for which he already had some preliminary results. Lehmann came to know about Hsu's generosity some time later and had hoped to thank Hsu personally after Hsu's return to Berkeley from Columbia, but this would never happen as Hsu opted to return to China. With Neyman in Greece and Hsu back in China, Neyman suggested George Polya as a surrogate advisor. Frequent visits to Polya at Stanford finally yielded a thesis. A new problem presented itself in that Polya

Table 1

Colin Ross Blyth	1950	Gouri Kanta Bhattacharyya	1966
Fred Charles Andrews	1953	James Nwoye Adichie	1966
Allan Birnbaum	1954	Dattaprabhakar V. Gokhale	1966
Hendrik Salomom Konijn	1954	Frank Rudolph Hampel	1968
Balkrishna V. Sukhatme	1955	Wilhelmine von Turk Stefansky	1969
V. J. Chacko	1959	Louis Jaeckel	1969
Piotr Witold Mikulski	1961	Friedrich Wilhelm Scholz	1971
Madan Lal Puri	1962	Dan Anbar	1971
Krishen Lal Mehra	1962	Michael Denis Stuart	1972
Subha Bhuchongkul Sutchritpongsa	1962	Claude L. Guillier	1972
Shishirkumar Jogdeo	1962	Sherali Mavjibhai Makani	1972
Peter J. Bickel	1963	Howard J. M. D'Abrera	1973
Arnljot Høyland	1963	Hyun-Ju Yoo Jin	1974
R. Murty Ponnapalli	1964	Amy Poon Davis	1977
Milan Kumar Gupta	1964	Jan F. Bjørnstad	1978
Madabhushi Raghavachari	1964	William Paul Carmichael	1981
Vida Greenberg	1964	David Draper	1981
Kjell Andreas Doksum	1965	Wei-Yin Loh	1982
William Harvey Lawton	1965	Marc J. Sobel	1983
Shulamith Gross	1966	Javier Rojo	1984
Bruce Hoadley	1966		

was not a faculty member at Berkeley. Fortunately, Neyman was able to return in time for the thesis defense. He had been asked to return to the United States as his services were no longer needed in Greece. In effect, he had been dismissed for insubordination. He had decided to investigate on his own the possibility that the elections had been rigged. It thus happened that in 1946 Erich L. Lehmann received the degree of Doctor of Philosophy. The title of his thesis: "Optimum Tests of a Certain Class of Hypotheses Specifying the Value of a Correlation Coefficient".

Erich L. Lehmann stayed in Berkeley as a young faculty member and the "Rest of the story" is well known. Besides his many influential publications, he was able to produce 41-plus Ph.D. students. Table 1 provides the names of the students and the year of graduation.

So why, then, was the date changed from November 20^{th} to May 16^{th}? After all, it would have been a great way of celebrating Erich's wonderful 90 years of life. But that is precisely the issue. To the reader who does not know Erich L. Lehmann personally, holding a conference on his birthday, a conference that is named after him, would seem only natural. However, those close to him know very well that he is very modest and an event like the Symposium held on his birthday, would be rather uncomfortable for him. He thought that the meeting would turn into a birthday celebration and he would not have it that way. The Lehmann Symposia should be true to its beginnings: A meeting to showcase good theoretical work. Thus, it came to be that the venue and the date for the 3^{rd} Lehmann Symposium were changed. As it was not possible to celebrate his 90^{th} birthday with the symposium, this volume is dedicated to Erich's 90^{th} birthday. I am sure that, given the opportunity, all his Ph.D. students listed above and colleagues around the world would join me in wishing Erich Leo Lehmann many more wonderful years! Our lives have been greatly enriched through our interactions, professional and social, with him.

Acknowledgements

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