

In Memory of Dr. Lars Lyberg Remembering a Giant in Survey Research

1944–2021



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On August 8, 2021, survey statisticians, survey methodologists, and survey researchers gathered virtually at the Joint Statistical Meetings of the American Statistical Association (JSM) to remember the amazing life of Lars Lyberg. This articles presents the comments and memories shared by some of Lars' closest colleagues at this memorial session. The co-authors dedicate this article to Lars in the hope that his work, his contributions, and his collaborative spirit will live on indefinitely.

Paul Biemer

Thank you, Brady West and Mike Elliott, for organizing both the JSM session and this article to celebrate the life of Lars Lyberg who was, as many who knew him would agree, a rare human being. Lars was very active professionally even in the last year of his life. He traveled extensively throughout his career, visiting as many as 50 countries – some many times. He was an *international man of action* by anyone's definition. But he was also my closest research associate and one of my very best friends. I co-authored and co-edited

more publications and books with Lars than I did with anyone else. I think that might be true for Lars as well. It is a great privilege for me to write a few words to honor his memory. I will cover both his professional and personal sides and provide a brief summary of the last thing he published which appeared in print just before his death.

Lars the Professional

Lars is probably best known as the founding editor of the Journal of Official Statistics (JOS) which he started 1985. JOS is an incredibly useful journal, not only to official statisticians but to all survey workers throughout the world. JOS stimulated many methodological improvements in statistical organizations worldwide and continues to be a very strong journal.

Lars had a wide range of professional interests that would classify him as a generalist. His work as JOS Chief Editor fed his interest in all things statistical. From 1985 to 2010, Lars read every article ever published in JOS – over 1,000 articles on a very large range of topics. He was a fountain of knowledge. He seemed to be aware of everything going on in the field. I learned something new from Lars every time I spoke with him.

Of course, he had his own pet interests as well – mostly centering on the theme of survey quality. His dissertation, which he wrote under the direction of the late Prof. Tore Dalenius at Stockholm University, focused on the control of coding error. He showed that triple coding with majority rule was inefficient. One could accomplish the same average outgoing quality limit using double coding with third coder independent adjudication. He showed that these two approaches were statistically equivalent. Lars believed this result to be among his strongest technical contributions to the statistical literature.

In the 1980s, he pioneered the field of automated industry and occupation coding. In fact, that is how I met him. In 1979, he was invited to the U.S. Census Bureau where I worked at the time to talk about his automated coding work. My supervisor, Dr. Barbara Bailar, who was good friends with Tore Dalenius, introduced us. I remember him being shy and quiet, yet full of energy.

In the 1990s, Lars caught the Total Quality Management bug from W. Edwards Deming whom he met in Stockholm some years earlier and greatly admired. Lars began promoting quality management principles and techniques such as statistical process control and Deming's philosophy of quality assurance. He developed many innovative metrics for monitoring data processing quality which he documented in the book he and I wrote together titled *Total Survey Quality*, published by Wiley in 2003 (Biemer and Lyberg 2003). In fact, a lot of his own work is summarized in that book. His chapters on data processing, interview mode evaluation, coverage error and nonresponse error are still very relevant today.

In the 2000s, Lars focused his research on Multinational, Multiregional, and Multicultural (3MC) surveys and developed methods for quality assurance and quality control for cross-national comparative studies. Lars would later focus on the so-called changing survey landscape which will be discussed in more detail subsequently.

Altogether, Lars co-edited or co-wrote 12 books which by itself is an incredible accomplishment. His English was impeccable, and he loved technical writing. He was also passionate about editing the writings of others. In fact, Lars was a master editor of technical writing. I was amazed at how he could sit for 10–12 hours per day for days on end, reading and editing the manuscripts for the books we wrote or co-edited.

Lars was a great educator as well and together he and I taught courses on total survey error all over the world. He never really retired and remained active in the field till the end. I could go on and on about Lars' professional accomplishments, but I want to document my thoughts about his personal side.

Lars the Man

Lars died way too soon, and his death has saddened everyone who knew him. Yet, when I think of Lars, I have to smile. His humility, wit, charm, and sense of humor is what drew you to him. He was never at a loss to find humor in times of stress and adversity. He loved to poke fun at himself too and there are many amusing stories I could tell you about Lars from all our travels and he would laugh right along with us. I don't think Lars had any real enemies, which is most unusual for a journal editor of 25 years!

Lars also loved American culture and visiting the United States. He was passionate about Orioles baseball, Credence Clearwater Revival, and vacationing in Sarasota, Florida where he and his spouse, Dr. Lilli Japoc, attended tennis camps. He loved the movie *Dumb and Dumber*, Southern cuisine and traveling to new places and cities in the US.

I'd like to end this discussion of his personal life with a moving story about him. Only a few years before his death, Lars reunited with his half-brother whom he hadn't seen or communicated with his entire adult life. It actually happened quite by chance. When their mother died, Lars was going through her things and found some old wedding photographs of his brother's father and their mother. Lars had never seen these photos before because his mother had hidden them away in an old dresser. Lars thought his brother should have the photos, so he sent them to him. That thoughtful act prompted his brother to reach out to him after many decades with no communication. They arranged to meet and immediately became friends. Lars and his brother visited each other and their families frequently after that and that was a great source of happiness for Lars at the end of his life.

Lars – The Final Chapter

I want to spend the remainder of this short piece on Lars Lyberg discussing one of his last published works. It is well-documented that Lars co-edited the book from the BigSurv conference that was held in Barcelona, Spain in 2018 (see [Hill et al. 2021](#)). Interestingly, the conference and book might not have happened if not for Lars because both were his idea. Offset in the box is an email that Lars sent to me dated March 4, 2014, while he was vacationing in Florida. Attached to the email was a proposal for John Wiley & Sons editor Steven Quigley. The letter is so typical of Lars I decided to reproduce it here. For various reasons, Lars had to decline being the lead organizer for both the conference and book, but fortunately, Dr. Craig Hill (RTI International) generously agreed to do it.

In 2018, AAPOR honored Lars with the Exceptionally Distinguished Achievement award which was a huge achievement. However, I think Lars would have been equally proud to learn that AAPOR honored him again in April 2021 with an Innovator of the Year award for his role in creating the Big Data Meets Survey Science (BigSurv) Conference Series.

By the way, Lars and his fellow baseball enthusiast and sometimes traveling companion, Dr. Clyde Tucker, would make frequent visits to Florida to attend the Spring

baseball training camps. At the JSM session honoring Lars, one of the memories Clyde shared was about their four-day round-trip car rides from DC to central Florida where they would stop along the way to sample the Southern cuisine. Among Lars' favorites were powdered donuts and Shoney's Friday night all-you-can-eat seafood buffets.

Lars and Lilli wrote a very interesting chapter in the BigSurv book that I would like to summarize here. Because it was one of his last publications, I thought I should bring it to your attention. It is also quite informative, and I would recommend it to those interested in uses of Big Data for official statistics. The chapter title is "Data Initiatives in Official Statistics" (Japiec and Lyberg 2021). This chapter contains very useful information on the topic of big data in the production of official statistics.

Lars was fascinated and energized by what he called survey methodology's *changing landscape*. In Subsection 9.2 of this chapter, he and Lilli provide a few characteristics that explain why the landscape is changing, including:

- Increasing data collection costs
- Declining response rates
- Rise of nonprobability samples, especially in hybrid applications
- Desire for "wdbqc" (i.e., wider, deeper, better, quicker, and cheaper) data (as described in Holt 2017)
- Need to combine multiple data sources

They note that, in response to these changes, national statistics institutes have begun to

- regard surveys as a last resort (Smith 2018) to be used only if other data sources are not available,
- rely more and more on available/found data rather than new collections (Japiec et al. 2015),
- mix data collection modes despite potential mode effects, and
- discover new and innovative uses of Big Data.

Lilli and Lars suggest several strategies that they believe will address these changes, including:

- Offering Big Data courses within survey methods curricula: skills are needed for handling Big Data including building and maintaining computation infrastructures for data handling, modeling for integrating nonprobability data, AI, programming languages for web scraping, and so on.
- Forming partnerships among universities, private firms and NSIs: bring in talent and skills that are not present in NSIs. Possibly incentivized by data sharing and mutually beneficial research.
- Publishing experimental statistics: statistics NSIs publish that are being tested; for example, statistics derived from citizen-generated data. When criteria are met, experimental statistics could become official statistics.
- Organizing hackathons: interdisciplinary teams work on challenges within time limits. Intense. Fosters cooperation with private firms and academe. Examples: combining multiple data sets to solve a problem or create a tool.
- Creating Big Data centers where the focus is on how to use new data sources to produce wdbqc statistics though collaboration with external partners.

- Cooperation across countries: countries in Europe are cooperating by sharing innovations and results from their BD research.
- IT infrastructure, tools, and methods: new investments are needed to handle and store BD. New methods are needed to do this efficiently such as online updating. GitHub software, etc.
- Many other useful topics are included in the chapter, including numerous examples of how Big Data has provided wdbqc statistics for official uses; quality issues that arise when working with Big Data; legal issues for official statistics; and a glimpse into the future landscape of survey methodology.

Lars was a giant in the field of survey statistics and left an amazing legacy. No one in the field can take his place. He will be sorely missed by his family, friends, colleagues, and students around the world. In addition to Lilli, Lars is survived by his two adopted sons – Carlos and Luis.

Ingegerd Jansson

Lars and JOS

JOS is an international scientific journal published by Statistics Sweden. As Paul noted, the journal was founded in 1985 by Lars. At the time, there was already a journal published by Statistics Sweden with most of the articles in Swedish. It did not live up to scientific standards and Lars did not like it. He got permission from the then director general of Statistics Sweden to start a new journal – essentially from scratch.

In the beginning, Lars did most of the work himself and he put a lot of work into JOS. As you know, Lars had a great capacity, but this is still an amazing achievement, to start a journal and build it to the reputation that JOS has. There was no internet at the time, and (due to the time difference) Lars would sit during nights calling people in the US and other parts of the world, asking them if they would review papers.

JOS had and has a broad scope, thus filling a gap between theory and application in official statistics. Lars was the editor-in-chief for an impressive 25 years. When he retired in 2010, it took two co-editors to fill his shoes.

In June 2015, JOS celebrated 30 years with an anniversary conference in Stockholm. Lars was very engaged in planning the program and the activities. It is a highlight in the history of JOS, and I hope and think it was for Lars too. We were celebrating *JOS*, and of course it was to a large extent also a celebration of Lars. The event was a success with plenary sessions, short courses, posters, a poster competition, and about 180 participants from 22 countries. We even got credit for the beautiful weather.

Lars and Statistics Sweden

Lars was employed by Statistics Sweden between 1966 and 2010 when he retired. He was the head of research and development for several years and before his retirement special advisor to the director general. He then continued as a member of the scientific board of Statistics Sweden.

Lars made a large impact at Statistics Sweden. Much of his legacy can be found in the way Statistics Sweden is and has been working with quality. He coordinated the TQM-

program at Statistics Sweden, worked with projects on nonresponse bias, and developed the first automated coding procedures at Statistics Sweden, only to mention a few examples.

Lars was also very engaged at the European level. He was chair of the ESS (European Statistical System) LEG (Leadership Group) on quality, and the Swedish representative in the development of ISO Standard 20525 for market, opinion and social research.

“Lasse”

Let me end with some more personal words. To all of Lars’ colleagues at Statistics Sweden, he was known by his nickname Lasse. When he retired from JOS in 2010, Boris Lorenc and I took over as co-editors in chief.

I have never been well-known in the survey research community, and at that time I was also quite new at Statistics Sweden. But Lasse must have seen something in me, and he gave me the possibility to prove myself. He believed in me and Boris, and he trusted us to take good care of JOS, his baby. He had confidence in us, and it made us work twice as hard to keep up with his standards and his excellent work. Not once did he interfere. There were spontaneous emails, or he would occasionally pop in when he was visiting the office and say: Great issue! Good work!

I am forever grateful that Lasse gave me the opportunity. It was typical of Lasse; he lacked all pretence and I know that there are plenty of people who share my experience how Lasse believed in them, encouraged them, and gave them opportunities. Not only did Lasse make great contributions to survey research himself, but he also used his own success to encourage others. That is true greatness.

Phil Kott

I did not know Lars nearly as well as the other speakers today. I knew him as the editor of *JOS*, where I had published several of my papers, and for which he had subsequently recruited me to be an associate editor. But that is not what I want to talk about today. The Joint Statistical Meetings were in Denver in 2008. The annual World Science Fiction Convention was also at the Colorado Convention Center over roughly the same span of days. I was registered for both; my wife, Hope, was only registered for the WSF Convention. The JSM got to be in that part of the convention center the WSF organizers wanted: where the giant blue bear stares into the center from outside (the walls are glass), and the talking escalator plays a loop of conversations full of party laughter.

Lars had a problem. Knowing he would be traveling to America, a niece or nephew asked him to pick up some Star Wars memorabilia, thinking America must have a Star Wars shop on every corner. Of course, it didn’t. From previous conversations at Survey Research Methods Section business meetings, Lars knew that Hope and I were science fiction fans. Perhaps we could help him. Hope had a suggestion: Lars could borrow Phil’s WSF name badge and search for Star-Wars stuff at the WSF exhibition hall. Lars loved that idea, so armed with my badge off he went.

He came back with wide eyes and an open mouth. The exhibition hall, in addition to hordes of books, magazines, posters, and t-shirts, contained warrior weapons and magic crystals of infinite variety, not to mention scores of folks in outlandish costumes. (I once

remarked that the only people at a WSF wearing makeup other than Hope were either in costume or cross dressers.) Sadly, however, no Star Wars loot was to be had. Star Wars, it seems, is for the mundanes (a no-prize for anyone who gets the reference; a smaller one for anyone who knows about no-prizes).

When I heard that Lars was near the end, I wrote him, telling him I was sorry that I would likely never see him again. I added that Hope still delighted in telling the Lars-and-Star Wars story. He wrote back: “Yes, I remember that exhibition vividly. Quite an experience. And yes, I am in palliative care and there is nothing more that can be done to cure things, just making me more comfortable. But I am in relatively good spirits. I have led a nice life, traveling around the world, having lots of friends, interesting job. I could not ask for more.”

Edith de Leeuw

For me Lars was foremost a wonderful mentor and brilliant editor. Without him I would not be whom I am today.

I first met Lars in 1987 at the 1st International Conference on Telephone Survey Methodology. I was a young PhD student and presented my very first paper to an international audience: a meta-analysis on data quality in telephone and face-to-face surveys. I was terribly nervous, but the conference organizers, of which Lars was one, were all extremely welcoming and supportive. During that conference, I learned to know Lars better; he took the attending students under his wing. We worked and had fun at the same time! Soon in 1990 a second international conference was organized by Lars and his friends, this time on measurement error in surveys. Again, I had the great honor to attend. That was – to paraphrase the iconic ending of the film *Casablanca* – the beginning of a wonderful apprenticeship.

Lars organized many conferences. He also wrote and edited many books. And I was immensely proud, but also in awe and to tell you the truth had some sleepless nights, when Lars as conference chair asked me to join the organizing committee for the International Conference on Survey Measurement and Process Quality in 1995 and later invited me to join the team of editors for the resulting monograph. I had never done something like this before, but Lars knew how to reassure me and introduced me into a new world: organizing and editing. He always taught by example; he was patient, conscientious, constructive, generous and kind. Lars never seemed to be tired and was always willing to travel far for editorial meetings. So when we had to do the final editing, his fellow editors wanted to save Lars some travel and mentioned Sweden, thinking of a hotel in Stockholm. But Lars being Lars proposed Utö, a beautiful island in the archipelago of Stockholm: when you must work hard make it a joyous occasion! This is how I remember it. During the daytime we were inside and painstakingly did the final editing, and in the long summer evening we went out walking and enjoying the nature of this beautiful island. Always led by Lars!

Of course, one cannot talk about Lars Lyberg as mentor and editor without talking about JOS. As previously noted, Lars founded JOS in 1985 and was its chief editor for 25 years. Lars used to tell a great story about the first issue. One day he came to the office and found his secretary in tears over her typewriter: she had to type out the first rejection letter in the history of JOS and she felt so sorry for the poor author. We no longer are in tears when we

write rejection letters, but Lars taught us to be always positive and helpful and write constructive rejection letters.

In 2005 at the 20th birthday of JOS, Lars' colleagues and friends decided to thank and honor Lars with a special journal: *Journal of Obnoxious Statistics* (JOBS). JOBS is both a heart-felt thank-you to Lars Lyberg as editor and a spoof, which means that the contributions are funny (at least we hope so), but not necessarily scientific, nor reproducible. In fact, our main inspiration was the *Annals of Irreproducible Results*. All contributions are completely made up, very funny, and completely serious. An example is the discussion of 'the-walking-of-the-dog bias in household travel surveys'. 45 authors contributed to this one-time journal and Svante Öberg, at that time director general of Statistics Sweden, wrote the introduction to this very special issue. How serious the authors were is illustrated by the fact that at least one author has his contributions to JOBS listed with his official publications (on his university's official website) and another cited his contributions in the reference list of a scientific article. JOBS was printed in a limited edition of 100 copies of which the first 50 were signed by Lars Lyberg personally for the contributors, and of course Lars himself was presented with the first copy. JOBS is still available online at <https://edithl.home.xs4all.nl/jobs.htm>.

Lars was a very loyal friend. He taught me to be generous towards my students, to work hard, to always do your utmost and more, and not to forget to look at the bright side of life. He also taught me to be open to everyone, like the character in his favorite children's book the cat Pelle, whose best friend was a dachshund. Thank you, Lars, for being a mentor and friend!

Frauke Kreuter

You can only dream of having left the legacy that Lars has, in this field or in any other field, either directly through what he has done or through the way he has empowered others through mentorship and general support. The number of people he motivated is especially remarkable considering he worked in a statistical office – not an academic institution, where that is usually part of the job description.

Lars brought together not only different people, but entire continents, perhaps even the entire world. Data quality was important to him throughout his career, and with the added European perspective, he always reminded us not to forget the challenges (and opportunities) that come with multinational, multiregional, and multicultural contexts. I will add some quotes from others in memory of Lars.

Quality

In terms of quality, Lars has always carried on the legacy of Tore Dalenius and his thoughts on process optimization. Lars broadened the perspective and made sure that we look at the whole data generation process and its need for optimization. His strong commitment to introducing quality into the European Statistical System, but also into all other data collections, was evident in the many presentations Lars gave at meetings around the world and in the conferences he co-initiated (e.g., the Quality Conference or the Nonresponse Workshops). The fact that these conferences still take place shows how important these topics were and still are.

When you hear others talk about him, there is no question that he influenced thinking and really made us think through his work in Europe and the U.S. He was the one who reminded us to think at a higher level, to think about frameworks and the whole structure, not just its parts.

In a talk he gave in 2009, this is illustrated: he wasn't shy about pointing out that these things were difficult, but he always pushed for that framework. And that, to me, was so typical of Lars. "Looking forward and looking back" was a theme in many of his talks. He always reminded us that we can learn from the past, but we should move on.

Lars had very strict ideas about quality, but he always looked not only for a framework, but also for solutions to practical problems, and gave advice and guidance on what should be done.

I quote from the same 2009 presentation, but it is only one example of many, that he always ended his presentations with practical next steps, pointing out what things we need to do, and as far as quality is concerned, he gave everyone some homework. Top management needs to be engaged, experts need to be ready, process control needs to be in place. And he also reminded us to stand by our mistakes.

Lars would strive to bring people together in the remote areas of Sweden. That was always a highlight. Once, at one of the Nonresponse Workshops, one of the activities was to introduce people to the church boats. Apparently, you can solve any problem together when you row together.

The fact that he did not limit the quality task to people, but in addition had his cat, Gaia, read the book "Implementing Six Sigma", does not surprise me at all. It was really a passion, this topic of quality, not only in multilingual, multicultural surveys. Thanks to Stephanie Eckman (RTI International) for sharing this memory with me.

3MC

At some point in the last ten years, he said to me: "It is urgent to create a 3MC subdiscipline within the survey research family so that these strands can come closer and have a common set of shared values and research principles, an academic curriculum, a professional organization, a journal or a named set of publication outlets, and advance work in various knowledge domains." To move in this direction Lars urged Stockholm University, with which he was associated, to do more in education in this direction, and he gave numerous short courses to advance these ideas. The turmoil in the last year around the globe made this even more urgent.

We have already heard that he edited *JOS*, organized all these conferences, and wrote incredible amounts of papers. One wonders how he could have done all this . . . but there is more. Lars was on just about every advisory board of an international data collection survey that there is. The Programme for the International Assessment of Adult Competencies (PIAAC) study, the Programme for International Student Assessment (PISA) activities. . . in some capacity Lars was involved in all of these efforts.

He managed the balancing act between recognizing that it is important to have processes in place to ensure quality and knowing that there are limitations in certain countries that you must keep in mind and find solutions for. He contributed a lot to the *Cross-Cultural Survey Guidelines*, and if you have not seen this report yet, I recommend you go to the University of Michigan website where you can find it (<https://ccsg.isr.umich.edu/>). It is an incredible resource that Lars spent a lot of his time on.

Ending on a personal note, I want to remind all of us that he really felt that we need to keep in mind the diversity of people, voices, cultures, and the like when we do these data collections, and that if we ignore that, we're not going to get quality data. I think that's a particularly good reminder when we're trying to use big data sources and machine learning – whatever comes out of that – because again, it is important that we do not engage in unfairness and bias because we do not have data from everybody, or we do not have data in the right way.

Dan Kasprzyk

Much sadness in the survey research community will be associated with the year 2021. As we have heard today from the speakers in this memorial session and from many individuals at the time of his passing, Lars Lyberg was an extraordinary person who touched many people in many countries – a truly international leader in survey research.

Statistician, survey researcher, mentor, collaborator, editor, conference and workshop founder, and organizer are all characteristics of Lars that supplement his personal qualities of generosity, kindness, openness, professional dedication and integrity, and untiring energy.

Professional Collaborations

His wide range of interests fostered personal and professional relationships around the world – 50 or so advisory committees. His professional world was survey research and the improvement of the quality of official statistics. And he stood out as a leader in those worlds – within Sweden and the world. I am very proud and happy to have known and worked with Lars.

I met Lars via the old way of communicating – via regular “snail” mail. I was on the staff of the research and development program planning the Survey of Income and Program Participation (SIPP) in the late 1970s. The program developed a series of experiments and survey methods tests during its 5-year existence. And Lars reached out to me – a neophyte survey researcher – around 1980 and asked me about our survey methods tests and experiments – what we were doing, why, what the research expectations were for the survey program, and, of course, results.

I was surprised by him reaching out to me and a bit daunted that someone from Sweden would have an interest in what we were doing. Out of his initial letter to me, Lars and I established a relationship that was strengthened when I became the lead staff person on survey research for the SIPP in the mid-1980s and when I visited him and his staff at Statistics Sweden. Our professional interests overlapped and, as a result, I got to know Lars as the generous person and collaborator that he was.

His professional life was focused on survey research and the measurement and improvement of the “quality” of survey statistics. As others have mentioned, he took his cue from Tore Dalenius, his mentor and doctoral professor, who recognized the role of nonsampling error in sample surveys.

One of Lars' first projects at Statistics Sweden in the mid to late 1970s was to develop an overview of the statistical problems at Statistics Sweden and how to deal with them. So even early in his career, Lars developed a big picture/broad perspective on statistical and survey methods research.

One can look at the topics in any reference book on survey research, such as the *Handbook of Survey Research* (Marsden and Wright 2010), or the topics in any book that describes the development and conduct of a sample survey, and compare those topics to the topics that engaged Lars' interest and see that the issues he cared about were broad, wide-ranging and exhaustive of the survey methods processes. "Survey Methodology" as described by Groves and his colleagues in their book, *Survey Methodology* (Groves et al. 2004, 30), "seeks to identify principles about the design, collection, processing, and analysis of surveys that are linked to the cost and quality of survey estimates." Lars' work and interests reflect that, and we, as a research community, are much better for it.

I greatly appreciated the friendship and professional interests we shared. Lars' energy, sound advice and knowledge were deep and substantial, and I benefitted in my professional life – as an associate editor for *Journal of Official Statistics* (JOS), getting an understanding of Statistics Sweden, as a co-author of conference manuscripts, and as an internal reviewer for sections of conference monographs –through the many successes that Lars had in his professional activities.

Lars and JOS

The survey research community certainly benefitted from Lars as a collaborator and editor through his founding of JOS and as Chief Editor of that journal for 25 years. At the time of its founding there were few academic publishing opportunities for research on survey methods. During his tenure as founding "father" and Chief Editor, he said he read every article that was published in that journal (1985–2010).

The success and continued publication of JOS owes much to Lars' infectious work ethic, his large international network of friends and scholars, and his dedication. Lars worked diligently on expanding the scope of his international network of colleagues to help make JOS a success. Any of us not involved in the founding of such a publication likely take for granted the appearance and establishment of a journal such as JOS. But this could not be and was not an easy task. Soliciting manuscripts, finding qualified referees and associate editors, reviewing submissions for appropriateness, and managing the budget for such an enterprise required dedication, persistence, thoroughness, time, and energy. And as many of you know, doing this within the constraints of employment by a government agency that likely questioned the journal budget allocations each year can be difficult. I am certain the agency, despite its long-standing support, asked Lars many questions related to costs and that Lars in his capacity as chief editor and founder argued strongly, well, and successfully for the publication and continued ongoing support for JOS. And now we have a journal, available and read worldwide for over 30 years.

JOS provided Lars with an opportunity to get to know leaders in the field of survey research. And Lars' easy going but extremely hard-working personality ensured his steady and continuous dedication to organize conferences on survey methods topics. The survey research methods community benefitted immensely from Lars organizing several special topic conferences that were cosponsored by, among others, the American Statistical Association's Survey Research Methods Section and served as a model for other special topic conferences. In addition, Lars also was a founding organizer of several international workshops that focus on particularly thorny sample survey topics.

Conference Organization

The special topic conferences were unique in that each provided a significant overview of the current state of professional knowledge on the topic and, as we are all aware, each resulted in a book of papers published by John Wiley & Sons. The papers, themselves, represented the state of the art on the topic. In 1987, Lars was one of the co-organizers of a conference and book on “telephone survey methodology” (Groves et al. 1988). This topic was broken down into chapters on coverage, sampling, nonresponse, data quality, computer assisted telephone interviewing, and survey administration. Lars handled the survey administration section of the monograph.

Lars then took on co-organizing a conference on “measurement errors in surveys” (Biemer et al. 1991), resulting in another Wiley publication. Lars focused his editorial efforts there on the role of interviewers and data collection in general. Nonsampling error was always an interest of Lars and another conference and book emerged on survey measurement and process quality (Lyberg et al. 1997) where Lars focused his editorial efforts on post-survey operations and quality.

The combination of state-of-the-art survey research conferences on nonsampling error topics and his initiation of several international workshop forums, the oldest being the International Workshop on Household Survey Nonresponse, seems to me to be just steppingstones to understanding his real interest – survey quality. It is as though all his efforts led to writing on survey quality (Biemer and Lyberg 2003) and total survey error (Biemer et al. 2017). There were, of course, other conferences, books and workshops that Lars was involved in. And even in 2020, he co-edited the conference volume on “big data” (Hill et al. 2021) and the *Handbook of Computational Social Science, Volumes 1 and 2* (Engel et al. 2021).

He never really stopped contributing – always being on the cusp of new issues in survey research. In one of his last correspondences with me, he expressed his disappointment in not being able to do more, even though he was ill at the time. He said he had much more he wanted to do – more research topics, more professional interactions on the difficult problems in surveys. But we know all this about Lars – his unabating interest in all things survey research and survey quality.

My point in mentioning a few of these conferences and workshops is to remind us of his extensive interest in encouraging and developing a research literature in survey methods.

Personal Reflections

We owe much to Lars. The methodological impact on survey research by Lars’ efforts is significant. Not just through his own writings but by his encouragement of statisticians, young statisticians, to author papers for the conferences he helped initiate and organize. Similarly, his initiation and participation in informal workshops among practical working statisticians made it possible for many “working” applied survey statisticians to share their experiences and approaches and consider publishing their results. Through his extensive contacts world-wide as well as high energy activity level and editorship of JOS, he was able to encourage much cross-national fertilization of ideas and survey research.

We met 40 years ago through a series of letters and developed a personal friendship and professional relationship that was rewarding and stimulating; Lars was always willing to

discuss with me and others any survey methods topic. He was exceptionally optimistic about the future of his profession.

He was a helpful collaborator and mentor and advisor to many. But besides all this, he was a good person who helped advance survey research. I will miss his kindness and easy-going manner, his helpful discussions and willingness to exchange ideas, and our times we spent together, but I have fond memories of the times we shared.

We, as a community of survey research professionals, have lost a leader and a friend, but are very thankful and grateful to Lars and his many accomplishments. His life and achievements left us in a better place.

Michael Elliott

When I heard the sad news of Lars' passing, I wanted immediately to organize a memorial session for him. Like so many others, I came to know Lars early in my career, since one of his hallmarks was an unerring sense for meeting and mentoring young statisticians and survey methodologists. I didn't know him as well as some of the presenters, but he still had a substantial effect on my career. His founding and stewardship of JOS provided a critical outlet for survey research and helped cement the field of survey methodology in the latter part of the 20th century. It also published part of my thesis work that was the source of a substantial part of my methodological research career. And Lars also offered me my first opportunity to be an associate editor, which is a critical if underappreciated part of career development for a scientist.

But what I remember most about Lars was his good nature and spirit. It was hard to be unhappy or stressed when hanging around with him; his low-key positive energy, the twinkle in his eye, always made me feel that whatever challenge we might be discussing could be met. It will be very sad not to see him at the next Joint Statistical Meetings, but I feel fortunate to be part of a profession that allowed me to meet and work with him. His influence will live on through the journals he worked with and the junior researchers he mentored.

Brady West

As the most junior person in this entire distinguished group of scholars, I'm quite thankful to have been a part of this memorial session. I sincerely thank all of the contributors for their kind words and willingness to share their memories of Lars. I also don't want to pretend that these are the only people who collaborated closely with Lars and would have wonderful things to say about him; we could only invite so many people to this memorial session, and our hope is that these words will give you an idea of the profound impact that he had on the survey research community.

To me, as a new student in survey methodology from 2008–2011, Lars was simply a legendary name that I saw on everything I was reading. Our first real interaction was at one of the International Total Survey Error Workshops (in Vermont, I believe), when I was talking about the notion of adding analytic error to the TSE framework. He was quite intrigued by the idea and my suggested approaches to studying this issue, and he approached me with the same warmth and quiet excitement that others have elaborated on earlier. I was frankly shocked that such a legendary figure was willing to talk to me about one of my ideas, and we continued to interact at professional meetings after this point. I was truly fortunate to work with him on planning the international TSE conference in

2015, and subsequently on the edited volume that came from that conference, *Total Survey Error in Practice*. I could get a clear sense of his editorial dedication from our hard work on that book, and I enjoyed every meeting that we had to discuss it.

Lars will be sorely missed. We hope that his spirit will live on in all of our work.

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