

A Great Mind

Paul Vitányi
CWI and University of Amsterdam

March 28, 2008

1 First Contact

I may have met Jorma Rissanen in the flesh for the first time in Japan on Mount Fuji, in the Fuji Center for Training and Education, a marvelous facility for small conferences on the slope of Fuji-San, where an IEEE Workshop was organized in 1993. Jorma turned out to be a dapper, ramrod straight, wiry and muscular, little man with sand-colored hair that stood straight up on his head. Talking with others, he stood straighter than ever and defiantly looked up, and either got bored or said “gosh, that may well be true; I may have to look into that.” His size is a source of worry to him, not in the last place because it prevented his dream come true. As he told me many times over the years, in his youth he was an intrepid soccer player. But he became a scientist instead. Spending most of his career at IBM Almaden Research Center, he has been the main stay of the IBM soccer team, practicing almost daily, until his retirement at the age of seventy.

Lucky for Jorma, he has been supported and guided by his lovely wife Riitta. “Riitta is infinitely wise. Sometimes I go against her counsel, but she is always right and I live to be sorry.” Jorma gave evidence: “Let me tell you a story. There was a meeting in Khwarizm, south of the Aral Sea in central Asia, where Al-Khwarizmi came from. Riitta told me that I was stupid to go there, and why should I want to go there anyway? Nonetheless I went. The first evening I had something to eat that didn’t agree with me. The remainder of the meeting I spent in the bathroom, and couldn’t talk with anyone. Riitta was right again.” Jorma told about Linkoping University “they offered me a professorship at the University. Riitta said ‘don’t go, what do you want there?’ I went nonetheless, no doubt driven by ambition. But I felt miserable there. After a year I quit. Riitta was right.” If I quote Jorma, it is from memory. Nothing I can write will do justice to his inimitable style, lucid, brief, to the point, and disconcertingly honest, both in writing and in the spoken word. Thinking about Jorma I have many fond memories; to group them may be easiest by tying them to various beverages. My present circumstances where the consumption of alcohol is a hazard, excuses this greediness, much like Evelyn Waugh states in the Preface to ‘Brideshead Revisited:’

”It was a bleak period of present privation and threatening disaster [...] and in consequence the book is infused with a kind of gluttony, for food and wine, for the splendors of the recent past, and for rhetorical and ornamental language which now, with a full stomach, I find distasteful.”

2 Sake

At the meeting in the Fuji Center for Training and Education, the limited hotel facilities in the Center itself were not sufficient to house all participants. So many were staying at the excellent Sun Green Fuji Hotel in nearby Hakone, Japan and Tokio's rural countryside for hiking and going to the 'onsen', the open air thermal baths. Among those so favored were Jorma and me. This meant that one had to get from the Center to the Hotel and back. After a memorable evening in the Center where with the rolling thunder of a Taiko drum group, led by a supreme female Taiko drummer which is unusual, we were transported back to the Sun Green Fuji by a small bus. Jorma, however, was invited by a group of distinguished Japanese scientist in their limousine. Being in conversation, Jorma invited me too. I, however, suggested it was more cozy to take the minibus. "I cannot do that," Jorma said, "because it does them honor to drive me home in the limousine."

Back in the Sun Green Fuji we looked for a bar to discuss things, but there was no bar. So back in the hotel room with Joe Suzuki and some other Japanese whose names have escaped me, we called room service and asked for sake. It turned out that sake was only served together with a meal. "How much sake with 150 dollars of sushi?" Turned out to be a lot of sake and exciting conversation till deep in the night.

In Melbourne, Australia, at a meeting organized by the indefatigable David Dowe, and possibly David Wallace and Kevin Korb, called by the improbable name of ISIS'96, we met again. Jorma held his own against characters like Marvin Minsky and Ray Solomonoff. At one of the first nights I went to dinner with Jorma and a small Finnish contingent led by Henry Tirri. We ended up in a Japanese restaurant. Conversation was amiable and heated, but being jet-lagged I cannot remember details. Anyway, the sushi was sprinkled with sake; and more sake as the evening progressed. Next day I had cause to regret this. Around midnight the place wanted to close; we were the last guests. On the way out the entire Japanese staff and waitresses formed a queue to the exit, and bowed us reverently farewell. "So much sake" murmured the waitresses softly.

In the DIMACS Workshop on Complexity and Inference in 2003 we had occasion to visit a Japanese restaurant again; sushi and sake galore. Ray Solomonoff and his wife Grace, who are very cunning in these matters, had figured out that if one became a member of the Honors Club of the Hilton Hotel were we all stayed, one had the right to a beverage of his choice in the bar of the hotel. The bar was usually deserted when we came in, and the bartender got very happy by the unusual choices we made, Daquiri, Tropical Sunrise, and so on. He consulted his cocktail manual, and provided ever better concoctions, to Jorma's delight.

3 Beer

In Kopenhagen at a tutorial meeting organized by Peter Johansen at the Datalogisk Institut of Kopenhagen's Universitet (if I spell it right) Jorma was accompanied by Riitta. As was often the case, Jorma looked for a friendly trusted face. We three spend most evenings together, and, as Jorma told me "Riitta likes you. That is all I need." I liked Riitta too. She often has a marvelously malicious sense of humor which is rare to come by. We drank several beers together, in or close by Tivoli. In Jorma's tutorial, in an ancient lecture hall, he held forth over the philosophy and the sublime qualities of the minimum description length principle (invented by him) for doing statistical inference. One of the members of the audience objected "but the statisticians say ...". This was grist on Jorma's mill. He shouted triumphantly, with brightened eyes, one of his favorite homelies, thus silencing the opposition. I recall that the outing and dinner

of this meeting were to a remarkably pretty old-fashioned wooden house-restaurant probably near a lake. There, in the old-fashioned very light dining room we had an excellent dinner with Riitta, Jorma, and me at a table for three.

In Barcelona in 1995 I invited Jorma to give a keynote lecture. He graciously accepted and brought Riitta. We drank beer and wine and at the conference dinner, in some dark setting if I recall correctly, Riitta said to me with a dangerous gleam in her eye “I don’t like your friend, ...”

In November 2002 Ursula Gather organized a small workshop in Statistics at the University of Dortmund. “Apparently the statistical community is finally starting to appreciate these ideas,” Jorma wrote. The meeting took place in a small hotel with meeting rooms so that the participants could mingle and meet in the bar and at dinner. Jorma had his heyday. Most of the participants were German scientists of leftish persuasion. Gleefully he said “Riitta and I voted for George W. Bush.” After an appreciable silence “And before that for Ronald Reagan.” After a rather deeper silence he explained “The terrorists of nine-eleven have to be treated harshly. The French and Germans were really cowards not to support the attack on Afghanistan. Especially the French are bad. Bush renamed ‘french’ fries to ‘freedom’ fries, and ‘french’ toast to ‘freedom’ toast, to show the French what was what. Riitta and I only talk about ‘freedom’ fries and ‘freedom’ toast. There was an embarrassed silence among the German scientists, which endured while they were struggling with the conflicting emotions of admiration for the great scientist Jorma Rissanen and the surprising political insights he had just offered.

4 Wine

Dagstuhl Castle, the German facility of the state Saarland to foster Computer Science by facilitating the organization of small live-in week-long seminars, has, apart from excellent served meals also excellent drinks. Situated in the forests near the Saarland village of Wadern, the castle invites nature walks and great conversations. There is also a fitness room and exceptionally large sauna facilities. Experience has it that although some groups don’t use the latter at all, some groups use it intensively every day. The beer is of three types, with the Bitburger “bitte ein bit” one of the favorites. But here I want to talk about the wines. By far the best, and capable of competition with the finest restaurants, is the ‘Chante Alouette’ Saint Emillion Grand Cru. I was introduced to it by Steve Smale, and have drunk no other wine at Dagstuhl since. In the spring of 2003, at the Centennial Kolmogorov Seminar, in honor of the 100th birthday of that great Russian mathematician, I met Jorma again. Also present was a contingent of Russian mathematicians and computer scientists, primarily from Moscow, and constituting a group that is known as the ‘Kolmogorov school’, even though the namegiver has long passed away. One other information theorist of Russian extraction was Boris Ryabko, a good friend of Jorma from Novosibirsk. In the evenings there was sauna, enthusiastically taken by the Fins like Jorma, Henry Tirri and Petri Myllymaki, myself, and the odd Russian like my co-author Kolya Vereshchagin and Boris. Jorma watched approvingly the antics of Kolya, who, after a sauna session, plunged with a great splash in the man’s height tall wooden tub of ice-cold water. Taking a sip of his beer and reclining on the relaxing after-sauna beds, Jorma asked me “what was this all about, the talk this fellow, making the big splash, gave this afternoon?” “Well,” I said “actually it was about that paper of him and mine which you told me you refereed.” “Gosh, I would never have guessed.” “But”, Jorma said “it gets increasingly hard to understand other peoples work, especially if they are young and eager.” He added “This was also remarked by Stanislaw Ulam in his autobiography ‘Adventures of a Mathematician’ where he said ‘I feel like an old boxer; I can still dish it out but I can’t take it anymore.’ ”

Suddenly, the lights went out and came flickeringly on again. Slightly later a fireman in a lot of clothes, contrasting with our nudity, came in telling that a sudden freak-tornado had blown away the roofs of the annex and the library, and for security reasons they were shutting down the sauna. It appeared, that Kolmogorov on the centenary of his birthday had called forth the winds. A few participants—not us—had to leave to a nearby hotel since their bedrooms were now open-air. Later in the dining room, enjoying a glass of Chante Alouette, Jorma turned to Kolya and asked “What was your name again? I understand you are Russian and belong to that group over there” pointing at the Kolmogorov school sitting at another table. He explained, with a straightforwardness most of us, alas, tend to lose over the years “I have noticed that this group, maybe from Moscow, doesn’t want to interact with the other Russian, my friend Boris. Why is this so? Do they feel themselves too good, being from Moscow? But I can tell you that none of them are anything compared to Boris or his work. They are not worth to tie his shoe-laces. Can you explain to me why this group behaves so?” Kolya’s explanation didn’t satisfy Jorma, but he had made his point and returned to the glass of Chante Alouette.

5 Wodka

The Finnish group in Helsinki regularly invited me to give a week-long seminar or short course for credit for the students of Helsinki University and Helsinki Institute of Technology. Indeed, the university conferred to me the inscribed Medal of Helsinki University for services delivered. I usually made it a condition to have the timing coincide with Jorma’s short lecture courses at the same university, so that I would have congenial company. Indeed, they took care that both of us resided in the magnificent Scandic hotel in the center of Helsinki. It turned out that the Scandic was owned by the Hilton group, and since both Jorma and me were members of the Honors Club, we both merited a number of drinks per diem. However, this being Finland, no cocktails but bottles of beer. In fact, so many bottles that we couldn’t drink them. Unofficially, our hosts were the COSCO group, led by Henry Tirri, now Nokia Research Fellow at Nokia. This group resides in an uncommonly beautiful location, a new office building made almost completely of glass in a restored section of harbor buildings. In fact, Henry’s office had completely glass walls, being 3 or 4 meters high, and one could use them as blackboard using a marker pen. There I explained some work on Kolmogorov’s structure function to Jorma and Henry, writing on the glass outside wall. This was a possible new approach to the foundation of MDL used by Jorma in his new book published by Springer in 2007.

Generally, after hours, we were taken to a nearby upscale pub in this see-sun-clouds restored harbor quarter. Henry tossed a credit card to the barman at the end to pay for our desires. An important part of the visit was dinner at a Russian restaurant. In Helsinki this is the epitome of luxury, and the pinnacle of the Russian restaurants is the Shashlik restaurant. There, we had many a memorable evening. The Shashlik has at least twenty types of wodka of which I remember the lemon wodka, the pepper wodka, and the cranberry wodka. The menu had several non-correct items of which I vividly remember the bear-meat. One started with a platter of titbits on which the bear sausage stood out. The conversation, of which I remember little because of the wodka, was mainly about university politics in Finland, and how to deal with them. Also how to organize payment of the incredibly expensive meal.

6 Margaritha

After visiting and working with Ming Li in Santa Barbara I decided to drive up to San Francisco and visit Jorma on the way. But first I was going to Big Sur and stay there in the pretty Riverside Campground an Cabins in one of their red-painted cabins among the redwood trees, bordering the softly murmuring Big Sur river. This is in the middle of the purest stretch of California coastline, along the picturesque meandering Route 1. There are only a few isolated restaurants and motels in the wild nature; every city or village is hundreds of miles away. This makes for small numbers of people; if you go to Pfeiffer's Beach, featuring in many a movie, you will not find much company except the birds and the sea dwellers. There is Arthur Miller's house, now a small museum among the rocks and the redwoods. One restaurant is the famous Nepenthe, perched on the side of a rock above the Pacific Ocean. Customers waiting for dinner to be ready sit outside near a giant open-air fire, or perch along the railing overlooking the falling rock and the Pacific. Opossums sneak by and try to make off with the odd food-scrap. Perching along the railing, sipping a Gold Margaritha, and reminiscencing with other customers, makes life feel as good as it gets. So I called Jorma and told him I was delayed. Next day I called again, being delayed once more. Jorma tried to entice me to leave Big Sur and come to San Jose referring to Riitta and making everything in his home in San Jose sound extra good. To no avail; and in the end my time was up, I was still in Big Sur, and had to make haste to catch my plane in San Francisco. So I called Jorma and told I had to take a rain check. Rain is water. Little did I know.

7 Water

In Spring 2006 I was working with Ming Li at the University of Waterloo, Waterloo, Ontario, Canada. One evening I didn't feel well. Thinking it was a mild food-poisoning I went to bed early, only to wake up in the middle of the night being paralyzed. I was, with difficulty, able to reach the phone and call Ming telling him I needed an ambulance. I was admitted in the small and nice local 'Grand River Hospital' in between the Amish people. "Sir, you are having a stroke" the doctor on call in the admission ward told me. Later many people send me cards, flowers, and best wishes, to go with the thickened water I was allowed to drink. No get-well gift was bigger than the giant fruit-and-food basket I got from the faraway COSCO group and Jorma. No email was more complimentary and fortifying than Jorma's.