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Nurminen's Column on IRIS: Part 1

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The First Years of IRIS

IRIS is the name of the annual meeting of people involved with Information Systems Research in Scandinavia. It has been circulating among the four Scandinavian countries Denmark, Finland, Norway and Sweden now already 20 years. In August 1997 the IRIS Association was established.

At the same meeting I was invited to give an opening address about the 20 years of IRIS history. For this presentation I collected and analysed quite a lot of material, and it seems that this material could also serve further interests than merely chronological curiosity. For example, it tells much about the Scandinavian School in Information Systems.

Several persons in the audience came and told me that the ideas explored in the presentation ought to be made available in written form. The volume of such a work is too extensive to be published as an article and too narrow to justify a monograph. I therefore suggested that I could write a series of columns for the Scandinavian Journal. I also wanted to make a reservation, that each column should be reviewed by a few key persons of the period in question. The Journal accepted my offer, and here comes the first item.

The history organises very naturally in periods of four years. This gives each of the four countries one event as the organiser. Thus the bias due to the organiser role is distributed evenly. The only exception of this rule is the first period, when all four events took place in Finland.

This part covers the first four seminars from 1978 to 1981. But before we can proceed to the events themselves, we

must ask the reader to a brief sightseeing of the Information Systems Research field in the Scandinavian countries before the first IRIS.

Before IRIS

The first IRIS took place in Tampere in 1978. But the scientific community in Information Systems Research was, indeed, existing in the Scandinavian countries already before that date. I want to point out three aspects which cannot be ignored when putting the birth of IRIS into context.

1. Börje Langefors was undoubtedly the leading figure from the 1960s until his retirement 1980 from the chair of the largest university department in Scandinavia (Stockholm University and the Royal Technical University. He had published THAIS *(Theoretical Analysis of Information Systems)*, which in its four editions (1966, 1967, 1970, 1973) was the bible of all Scandinavian researchers. In the beginning of the 1970s, Scandinavian Summer Schools were organised, in which Langefors together with Bubenko, Lundeberg, Sølvberg et al. were teaching THAIS and related issues. At least 1970 in Gimo, Uppland, and 1971 in Oppdal (Sør-Trøndelag) have to be mentioned.

Langefors identified the smallest unit capable of carrying information: it is not a data term, but an elementary message. These elements constitute larger units. The analysis should be performed in the opposite order, top down. All constituents of structural design were there in a systems-theoretical frame of reference. But information systems were not merely technical constructs for Langefors.

They were part and parcel of management.

As Scandinavian collaboration Nordforsk financed the project SCIP (1969 - 1973) with subprojects CADIS, CASCADE and ISAC. All of them were based on the ideas of THAIS. The project published the book "Systemeering 70". In 1975 the community celebrated Langefors' 60th birthday by publishing a Festschrift "Systemeering 75", in which (among others) the three subprojects mentioned above were contributing. It is worth noticing that the first predecessors of CASE-tools were developed within these groups already before graphical on-line-terminals were available.

2. Meanwhile, the critical school, also called the Collective Research Approach (CRA) was taking its first steps. The first labour union related action research projects had been carried out, NJMF in Norway, DEMOS in Sweden, and DUE in Denmark. The first decennial Århus conference was organised in 1975. The active role of labour unions helped their members to defend themselves against the implementation of harmful information systems.

The IS research community in Finland was not a part of this movement, and this probably explains, why the CRA had to wait a few years before getting full impact on IRIS, when the tension between the CRA and the Langefors school no longer was very sharp.

3. Finland was much better aware of the Langefors School than of the critical one. The main ideas of THAIS were given a deeper treatment within general systems theory, and this understanding of

information systems was put in the context by articulating three points of view: pragmatic, semantic and constructive. Thus the name was the PSC model. This was published in 1975 by professors Pentti Kerola (University of Oulu) and Pertti Järvinen (University of Tampere). This was crucial to the birth of IRIS, because these two scholars were the initiators of the first IRIS.

One interesting theme to follow is to record the doctoral dissertations. Before the first IRIS, in 1976 two dissertations were delivered. Hans-Erik Nissen (Stockholm) and Markku I. Nurminen (Turku) received their PhD degrees.

Where?

IRIS has its roots in Finland. Twenty years ago Pertti Järvinen and Pentti Kerola announced the first meeting asking the Finnish research community to reserve the days 21-24 of August 1978 for this important event. The IRIS 1 seminar took place at the campus of the University of Tampere, and it was evaluated by the participants as a success, because they decided to have another meeting next year.

The next seminar, IRIS 2, took place already before the Scandinavian holidays (July) at the end of May 1979 in the vicinity of Turku. Organisers were Timo Järvi (University of Turku) and Markku I. Nurminen (Turku School of Economics and Business Administration). The location was in the inner part of the Turku archipelago, in Dragsfjärd, in a small pension.

Eero Peltola of the University of Jyväskylä was the organiser, together with Kalle Lyytinen, of the third IRIS seminar. They found a Rantasipi recruitment center in Saarijärvi in the heart of the lake district of the middle Finland to serve as the location of this event, which was returned back to the period after the summer holidays and before the autumn term in August, which has remained the permanent timing for all the events in the future.

One more year the dream of finding organisers from other countries had to wait. In 1981 Pentti Kerola of the University of Oulu together with Erkki Koskela and other co-workers invited the IRIS community to the course centre of the local labour union just on the northern part of Oulu.

There was no permanent body to take care of the continuity of the seminar. Each year the agenda of the closing session included the explicit decision to continue or not to continue the sequence of seminars, each time with a confirmative outcome.

The participants of IRIS 1 were naturally invited. The closed community opened itself to outsiders only gradually: since IRIS 3 new participants could arrive, provided that they could submit a contribution.

Who?

The number of participants was first 14, and increased slowly to 16, 17, and finally to 19. The participating group was rather stable: 7 persons came back every year, the universities of Tampere, Jyväskylä and Oulu had ten or more participation events of the total 66. Altogether 23 persons can be found in the four lists of participants. People from other Scandinavian countries were rare,

■
M. I. Nurminen 49

but each of the four countries was represented, and the Stockholm University stands for 6 of totally 10 non-Finnish participations. In spite of this, already the first seminar called itself Scandinavian.

All 23 participants were male.

The distribution of participants according to years and countries was the following:

TABLE 1.

	1	2	3	4	Sum
fi	12	12	14	15	53
se	2	2	2	4	10
no	0	1	1	0	2
dk	0	1	0	0	1
Total	14	16	17	19	66

The most active departments in terms of total number of participations were (identified by the current internet names)

TABLE 2.

uta.fi	14
jyv.fi	12
oulu.fi	10
utu.fi	6
su.se	6
tukkk.fi	4
helsinki.fi	4

Finally, the most active individuals, which I will call frequenters, were the following seven, who came each year:

- Goldkuhl, Göran
- Järvi, Timo
- Järvinen, Pertti
- Kerola, Pentti
- Nurminen, Markku I.
- Peltola, Eero
- Tyllilä, Pekka

How?

From the very beginning most participants delivered contributions to be discussed during the seminar. These were collected afterwards to proceedings and published by the organising department. The working forms were informal, thanks to the small size of the seminar. Typically both plenary sessions and parallel working groups were used. The authors received essential feedback on their contributions, since it was expected that each participant arrive with written comments on each delivered paper. The discussions were documented and published in the proceedings. Often the working groups had a theme and an objective to create a report with conclusions—typically of summarising character. Also these reports were published. This intensity was made possible due to the small size of the seminar, and was doomed to disappear in the later years.

The dominant discourse was IS development methodologies. Three major schools were represented: PSC, ISAC, and Data Bases. The last one was one of the divergent approaches, and the group left IRIS to a large extent after IRIS 4, and initiated an annual meeting of their own. Behind PSC and ISAC was standing the huge Scandinavian pine, the THAIS by Langefors. As a back-office activity many groups were working on identifying the key concepts for the new

■
M. I. Nurminen 50

discipline, Systemeering, and formulating definitions for them.

What?

I have not (yet) made an exhaustive content analysis of the proceedings. Instead, I have decided to use a surrogate varible to represent the discussions. I have taken the references of all contributions and started the bibliometric analysis by identifying the most cited works. The top of this list confirms to a great extent the characterisation discussed above. A few additional observations may be done.

The discussion in all four meetings was focussed on systemeering and systemeering method(ologie)s, which also was the explicit intention. The specific theme of IRIS 2 was ISAC and of IRIS 4 the PSC model. Another passion was the definition of the basic concepts and their underlying assumptions. The IRIS tradition was relatively successful in solving the same problems which the FRISCO group addressed fifteen years later.

The stable group obviously wanted to quote contributions in the earlier volumes. Non-Scandinavian references are rare, the data base fraction being a clear exception. The reflective research characteristic of Scandinavian countries is already clearly visible in rather high scorings by three philosophy of science works: Bunge, Berger &Luckmann, and Kuhn.

The total number of contributions was 70 and the most fequently cited works were:

18 Kerola, Pentti; Järvinen, Pertti. Systemointi II: 1975.

16 Langefors, B. Theoretical Analysis of information Systems, 1966-1973.

13 Kerola, P.; Järvinen, P. PSC-systemeering Model and Its Influence on Basic Concept Structure of Data System Development. IRIS 1 Tampere; 1978.

13 Lundeberg, Mats; Goldkuhl, Göran; Nilsson, Anders. Systemering. 1978.

10 Iivari, J. Pragmaattinen Ohjaus tietojenkäsittelyn kehittämisessä, Lisensiaattityö, Oulun Yliopisto; 1978.

9 Goldkuhl, Göran. On the relation between explanative theories and prescriptive methods in systemeering, IRIS 2; 1979.

8 Kämäräinen, H. Notes on the PSC Model of Systemeering. IRIS 1, Tampere; 1979.

8 Senko, M. E. Conceptual schemas, abstract data structures, enterprise descriptions. 1977.

7 ANSI/X3/. Interim Report from the Study Group on Data Base Management Systems. ACM SIGMOD. 1975.

7 Berger, P. L.; Luckmann, T. The social construction of reality. 1967.

7 Bunge, Mario. Scientific Research. I The Search for System. 1967.

7 Kerola, P.; Klemola, M.; Kämäräinen, H.; Lyytinen, K., eds.: IRIS 1 ; 1978.

7 Kuhn, T. S. The structure of scientific revolutions. 1970.

7 Kämäräinen, Heikki. Tietosysteemi ja abstraktiotasoperiaate sen rakentamisessa ja kuvaamisessa. Tampereen yliopisto 1977.

7 Laine, H.; Maanavilja, O.; Peltola, E. Grammatical Data Base Model. Information Systems. 1979.

■
M. I. Nurminen 51

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M. I. Nurminen 52