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Special Issue Editorial:

A Call to Write the Nordic Information Systems Research Field History

Viewing the Scandinavian way through a career retrospectives lens

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Abstract. This special issue on *Scandinavian Researcher Career Retrospectives* (RCR) includes five articles from within the Nordic information systems (IS) research community. Two of the papers are from Finland (Iivari and Nurminen), two from Sweden (Flensburg and Lundeberg), and one from Denmark (Bjørn-Andersen with Clemmensen). Each of these articles illuminates the history of Scandinavian IS research, and its connections to wider contexts from their particular vantage point. Each paper describes a unique career trajectory, and reflects on its authors' values, aspirations, struggles, successes, failures and lessons learned. In this editorial we equate RCRs with academic autobiographies (Popkin

2007; Aurell 2015). Following the narrative turn of historiography in the 1970s, and the more recent biographical developments in the humanities and social sciences, autobiographies are gaining ground as a legitimate style of writing in academia at large. As the editors of this special issue, we agree with Aurell (2006) that academic autobiographies can truly benefit from being unconventional. We should aim to "Tell a good story!" (Porra 2015b) that reveals the wisdom and character of the Nordic IS academy as seen through the eyes of these individuals. Our hope is that as we collect more Scandinavian careers stories, they will reveal their own philosophical, methodological styles and content illuminating the Nordic peoples' wisdom of life in the context of using computers for the benefit of all humanity. With this special issue, we explore some broad ideas and concepts for furthering the collecting and writing down Scandinavian IS research field history. We submit that as Scandinavian minded IS peoples, we can benefit from adopting the richness of various categories of history writing genres, but in the end we must adapt their ways as we focus on telling our own story in our characteristic ways that emanate from our own ancestral past.

Key words: researcher career retrospectives, academic autobiography, Scandinavian information systems research field history, narrative research, storytelling, philosophy, methodology

1   Introduction

> Without a history, it is difficult to know who one is, where one comes from, or where one is headed. It is difficult to belong or have direction. (Bryant et al. 2013, p. 4)

> Written history is comparable to accumulating wealth. Stories are a form of affluence. They work like all investments in the infrastructure. (Porra 2015b, p. 8)

Ever since the early days of the field, the Scandinavians have had an important role in information systems (IS) research (Hirschheim and Klein 2012). In the pioneering 1960s, the Scandinavian scene became established around Börje Langefors and people affiliated with him (in Sweden), and Kristen Nygaard and his group (in Norway). During the 1970s, interest in information systems grew simultaneously in many parts of Scandinavia. A loose research community was established leading to the founding of IRIS (Information Systems Research Seminar) in 1978 (in Finland). In the 1980s and 1990s, various branches started to emerge, resulting in a *unity in plurality* (Iivari and Lyytinen 1998). Since the 2000s, the Scandinavian IS research community has become much more visible globally, offering and supporting a broader variety of research approaches and research values, and embracing a higher level of internationalization.

While many in the international IS community are aware of the seminal role that Scandinavian scholars have played in the evolution of the field, many are not. This special issue affords those in the IS field the opportunity to learn about how a number of key Scandinavian researchers have helped shape the field. The retrospective histories provide the reader a window into how Scandinavian IS history has been shaped, and how this has impacted the wider IS field.

These retrospectives are not histories from outside or from a God's eye view, but stories from within (Shotter 2006). These are people who have been the movers, the shakers, the first-hand observers of events as they have emerged. The authors in this special issue have either formally retired, or mostly retired, from their full-time academic position, affording them the luxury to be candid and open about the environments of which they were part. This openness is a hallmark of the Researcher Career Retrospective (RCR); which offers the reader insight into what is often a web of ambiguity, political correctness obscuring a myriad of underlying issues that often never see the light of day, and reflection on what might have been, or what might have been done differently.

This is a special issue about Scandinavian IS scholars written by Scandinavian IS scholars. The papers reveal how these authors see themselves and how they see their own careers. Although these papers are about the past, we make no effort to produce traditional history or to require rigorous use of historical research methods such as described in Porra et al. (2014). The amount of primary and secondary evidence varies from one author to another as well as how much of the historical context is revealed or recorded. One way of seeing these RCRs is as narratives about the past: writing down what has thus far largely been an oral historical tradition of the Nordic IS scholarship.

Our approach in producing this special issue is pragmatic. We believe that when we accumulate a number of Scandinavian IS scholar stories, we will be able to see the Nordic IS historical landscape more clearly. Until that time, it is important to allow stories like these narratives to live independently from one another without attempts to create unified views: "Pragmatic pluralism lets things exist distributively (James 1977). In a multi-verse, different stories and different kinds of stories about the past co-exist and evolve while never necessarily becoming reconciled." (Porra et al. 2014, p. 572). In this spirit, we seek stories that provide unique and perhaps even unusual perspectives on the past of the IS field told in the broader context of Scandinavian universities and the IS discipline at large. According to the pragmatic approach we see no need to work towards any one Scandinavian understanding nor do we feel pressure to choose amongst competing tales. These sorts of concepts are not at the heart of pragmatic, post-modernist history writing.

This RCR special issue has been two years in the making. This journey began with Lanamäki's idea in a *SCIS*[1] paper: "Maybe we need a Scandinavian Journal of Information Systems special issue on Scandinavian research career retrospectives?" (2015, p. 88). In that conference Lanamäki reviewed papers that he classified in the RCR genre; Robey et al. (2013) and Van Maanen (2015). At that time, he had already approached the two other editors to form an alliance for realizing the dream. Porra and Hirschheim were already highly experienced with writing history (Porra et al. 2005; Porra and Hirschheim 2007b; Hirschheim and Klein 2012) and writing *about* history (Bryant et al. 2013; Porra 2015a; Porra 2015b; Porra et al. 2014).

This special issue is a result of many social and historical developments in and beyond our field. Our IS field is now over half a century old discipline. This trajectory has brought up the need to document and reflect on our past. Indeed, it has already started to happen. For example, the Association for Information Systems has started its own history initiative (Zhang 2015). Several IS journals (*JAIS* and *JIT*) have published special issues dedicated to history (Bryant et al. 2013; Hirschheim et al. 2012). The importance of history has been recognized by the IS community. As Hirschheim and Klein (2012, p. 220) state:

Only by knowing and understanding the many streams which have shaped the current landscape can we collectively prepare for the discipline's future even if we cannot agree what the best future or futures might be. Perhaps a shared sense of history is more effective in helping with bridging the communication gaps than with obtaining consensus on preferred forms of knowledge creation. Isn't it easier for all of us to agree on what has been accomplished by the discipline in the past than on what we should do in the future for advancing knowledge creation?

Thoughts like these have provided the impetus for the special issue. Here we begin the documenting through the eyes of those involved in the early stages of the development of the field. In particular, we focus on the Scandinavian[2] involvement in the IS field. Whilst this is by no means a complete history of the Scandinavian IS movement, it is a start.

2   Exploring the idea of Scandinavian RCRs

One way of approaching Scandinavian RCRs is to see them from the perspective of historical research classification: RCRs typically have a single career as the unit of analysis and are often written in first person singular as autoethnographic tales. This research category often resembles a literature review as RCRs selectively build on the researcher's own publication history (Lanamäki 2015). The difference is that the story is not limited to what is said in previous publications, but brings forth a larger picture from behind the scenes. The outcome of an RCR offers particular details and insights that are meaningful in broader terms for the research community. The *professional odyssey* article by Robey et al. (2013) provides a good example for this genre in the IS field.

RCR's are not necessarily seen as proper historical research because they are not produced by applying the historical method and characteristic careful analysis of primary and secondary source evidence rigorously enough to fit the genre (cf. Porra et al., 2014). This is, however, also the strength of the RCR. These narratives rely heavily on reflection: the authors' recollections and perceptions about the significant events of their professional lives in the broader context of the happenings of their field. In this sense, RCRs can be positioned under biographies, even though biographies are more general stories of life and their interpretations (Possing 2017).

Another way of seeing the work published in this special issue is to step back from academic typifications and genre classifications and hold these personal stories of a few individuals up against a different objective. To us these are stories we tell from one generation to the next in order to communicate wisdom that cannot be found in any other way. What we wanted to do is very simple: put into writing some of the voices that constitute the Scandinavian IS field in a way similar to the recorded Viking stories or other native Nordic tales (cf. Page 1995). We can preserve more of our past if we don't pose too many academic categorical, methodological or format hurdles on those who hold the keys to the wisdom we aspire to record. We sought to avoid being like sailors who spend their time debating over the seaworthiness of their vessel and never make the journey. Moreover, when collecting history, the controls imposed by the academic peer review apparatus may in fact be our worst enemy. Who will get to decide what Scandinavian IS history will look like is worth pondering and taking seriously. Spending too much time catego-

rizing, classifying and criticizing tales that constitute the Nordic IS history, means surely losing the people whose voices we desperately need to hear to hold our compass: "Without a history, it is difficult to know who one is, where one comes from, or where one is headed. It is difficult to belong or have direction." (Bryant et al. 2013, p. 4)

Many notable international pioneers of the IS discipline at large have already passed on—perhaps most notably C. West Churchman in California and Enid Mumford in England—taking much of their original wisdom with them (Porra 2001; Porra and Hirschheim 2007b, 2007a). As the pioneers of the field are exiting, the need to make a serious attempt at documenting the field's history has become pressing (Straub 2015). The good news is that many are still alive to share their story. Specifically, from the perspective of this special issue, we believe that Scandinavian IS academics who started this field have their own stories that need to be told or risk losing our identity as the Nordic IS research field that began in the first half of the 20th century. We need to explore what it means to be a Scandinavian IS scholar and how this may be similar and different than being an IS academic somewhere else or from somewhere else.

We do know that as one of the IS field pioneers the northern countries have pursued their own characteristic ideas of what Scandinavian IS academia should look like thus developing their own distinct IS identity. Observed from the outside, Scandinavian IS scholarship has always been influenced by three fundamental aspects going hand in hand: (1) keen interest in the social and societal impact of information systems; (2) deep caring about human beings as technology users; and (3) high technical implementation competence. As a result of the Nordic values, Scandinavian IS research has always been founded on humanity, democracy, humility and skill. Thus, not surprisingly, the IS research field is a reflection of the Scandinavian societies in general.

In the same vein, there is no other vicinity in the world today where similar societal values would have penetrated the IS academy equally effectively. We can find similar research traditions in the United Kingdom mainly in its socio-technical IS research tradition but the socio-technical values are not necessarily widely shared in the British society in general. Moreover, in Great Britain the socio-technical school of thought did not necessarily put great emphasis on technical implementation skills outside the work such as Enid Mumford's (Mumford 1983a, 1983b, 1995, 1996, 2003). In the United States, which is commonly considered the world IS academic leader, neither the social concern nor the technical talent to implement information systems have been at the heart of the discipline's business school centered tradition. Because of reasons like these, we can expect that the stories about *The Scandinavian Way*[3] will be unique to the region and its peoples.

3   Opening the philosophical and methodological discourse

Traditionally studying the past has been of the domain of proper historians with their specific methodological inclinations and training (Porra et al. 2014). We acknowledge that as an academic field and as IS historians we are students of studying our own field's past. Perhaps it is

comforting to know that we are not alone. The study of history is rapidly expanding outside the history discipline amongst other disciplines that have become interested in their own ways of seeing their own past. Understandably, this development has led to the reexamination and adaption of the methods of writing history as disciplines adopt this field of inquiry. As a consequence of this expansion, history writing today is not founded on any one method. As IS historians, we can and should build on the wide repertoire of qualitative and quantitative methods we already know. It is also important, however, to explore new philosophies, approaches and methods that are novel to us as a field and individually speaking. As we explore these we compare them with methods we know and consciously or unconsciously adapt them to fit our methodological traditions. What works for a proper historian in the United States or in the United Kingdom, may not work as well for a Scandinavian IS researcher recording their own local history. This is as it should be since the goal is to preserve seeing diversity. And as Aurell (2006, p. 433) observes: "Unconventional or experimental approaches … result in more self-conscious autobiographies, which are, paradoxically, often more realistic and more revealing of the epistemological nature of life writing", in comparison to approaches emphasizing objectivity and detachment.

As IS historians, we believe that any research method adopted from other fields, no matter how well these other fields are versed in their own line of research, needs to be explored, investigated and scrutinized with the understanding that the world is changing in terms of what history is (Bryant et al. 2013; Porra et al. 2014). This means that every field has an opportunity and responsibility to form their own research traditions in recording their past. It also means staying open to the possibility that what has worked for other vicinities in recording stories of other people by people of different times may not work in Scandinavia for Scandinavians. What will work needs to be up to Scandinavians as historians and story tellers of their local worlds, circumstances and times. While this approach may seem radical, it is no different from what academic disciplines have done routinely in the area of qualitative research methods in general (Porra et al. 2014).

With this special issue, we want to open a scholarly philosophical and methodological discourse concerning what is desirable about RCRs amongst Scandinavians and Scandinavian minded IS researchers. The first step, which we have contributed to here, is to collect some RCRs by and about Scandinavian researchers. As we keep accumulating more stories like these, we will generate material that can be analyzed for its characteristic content and methodology. As we keep collecting RCRs and other forms of telling the tale of the Scandinavian IS field, we will learn more about what will constitute The Scandinavian Way. We are confident that in the process, we will record more of the unique characteristics of the Scandinavian IS field that Scandinavians themselves see as worth preserving, perpetuating, sharing and passing on to future generations. Scandinavia is a leader in many areas deemed important to the well-being of its people. For example, Scandinavia is known for its K-12 educational excellence worldwide. Against this backdrop, it makes great sense to look into the past of our higher education in order to learn how this excellence in early education has influenced our universities and academic fields such as IS. Accumulating histories will provide us with knowledge of ourselves that is essential in keeping our leadership position in areas where we have it and expanding it to areas where we can improve.

4 How can qualitative research methods, IS researchers already know, help in writing the Scandinavian IS story?

We believe that as Scandinavian and Scandinavian minded IS scholars, we are destined to explore academic horizons by conceptualizing new ways and discovering old ways of telling our own story. In writing down the past of The Scandinavian Way this means studying the entire spectrum of qualitative research philosophies, approaches, methods and techniques as described in Porra et al. (2014) in their four tiered research framework of historical research. With this special issue, in a small way, we embark on this mission to find out and record answers to the question: What makes Scandinavian IS research and scholars Scandinavian? This special issue is framed around RCRs, but we should not shy away from other equally valid qualitative research methods including the historical method, various hues of narrative research, ethnography, action research, phenomenological research and even grounded theory (to name a few potentially fruitful methods) as we explore what will work and what needs to be adapted to the lives and style of the northern peoples (broadly considered) as we study the evolving impact of information technology on humanity and write history of the field (historical accounts that reflect on the field's evolving scholarship) and history in the field (our understandings of substantive phenomena that are of interest to our disciplinary community) (Ramiller in Bryant et al. 2013).

The repository of the possible philosophical foundations, research approaches, methods and techniques are endless but the goal remains the same: "Tell a good story!" (Porra 2015b). What constitutes a good story, however, is a local concern. The content and meaning of this notion varies from one continent, peoples, culture, group, gender, language, dialect, profession, generation etc. to another. At the end of the day everyone has their unique story to tell for no one else had walked in their shoes along the same exact paths. Yet at the same time we may speculate that Scandinavian stories have things in common. For example, they are likely to share underlying values, ideals and themes. You can read in all these stories that their authors are committed to speaking their truth about their own careers as well as their surrounding circumstances. Honesty clearly surpasses any need for keeping up appearances. Perhaps this fact attests to Scandinavian rugged individualism and quiet confidence in every academic's right to make their own choices no matter how unconventional or unusual. A theme we can read in many of these stories is becoming one's own hero (Porra 2015a). Another theme is the openness about self-declared mistakes and failures even when these might raise eyebrows of some senior colleagues worldwide. The courage to set sail and find one's own way over rough seas is innately Scandinavian.

4.1 The theoretical lens continuum—personal truths versus global dogmas

Methodologically speaking, we could analyze the papers of this special issue as examples of qualitative research on multiple dimensions. One such dimension is how much the account is influenced by an a priori theoretical lens (Porra et al. 2014). At one extreme end of this continu-

um are positivist qualitative case studies that begin with theory and view the evidence through it so carefully that only conforming aspects of the past become visible. Although theories are most likely informing the authors of these RCR's albeit perhaps subconsciously, none of the authors adopt this type of an approach. Stories of this special issue are closer to the other end of this continuum where the authors stay tuned into the people and the happenings of the times on one hand and true to themselves on the other. Thus, these tales are more like phenomenological approaches to producing narratives. Their authors make an earnest effort to see and experience the phenomenon at hand (in this case an academic career) by letting the recollections and evidence of the happenings speak for themselves withholding judgment of their meaning until later stages of the writing (Creswell 2007). Although not perfectly attainable or even consciously attempted, the truths of these stories appear to emerge and develop on their own right. This way of dealing with one's own reality can lead to unusual and sometimes surprising accounts that seem to defy commonly accepted dogmas and aggregate truths we are all subject to in our own discipline. In other words, stories produced this way about our common past seem fresh and ring true.

This approach to the past makes us all capable historians (Porra 2015b). Today's IS history is pragmatic. It echoes Dewey's idea that history is a series of stages (Fallace 2010). Each stage incorporates the ideas of the previous one but consists of increasingly nuanced, socialized and democratically informed collective historical consciousness. From this perspective, history will be perpetually rewritten (Porra et al. 2014). Old events will be seen in new ways. New generations will tell the old stories differently, reexamine and reinterpret historical narratives and add their own.

If we don't allow individuals' realities to speak for themselves, we risk detaching ourselves from actual individual experiences which can lead to perpetuating unsubstantiated beliefs about the IS field. Such beliefs can act much like positivist theoretical lenses. They will narrow our vision by providing few accepted ways of seeing deemed correct by those in power. Only by frequently comparing the field's dogmatic perceptions against the backdrop of real people telling genuine stories about their own successes and failures in their own words and ways, can we navigate the myths and see clearly where we come from and where we may choose to be sailing in the future.

One greatly influential perception is publish or perish. With significant influence by the United States business schools, the IS field worldwide has increasingly adopted the conviction that the only successful academic career is one with a long publication list. This belief seems out of touch with reality since academic disciplines are necessarily founded on three pillars: research, teaching and service. If too much emphasis is put on just one of these pillars, the field will not prosper. Thus, it is essential for ensuring the future success of the IS field that individual academics choose career goals other than simply publishing. In this vein, we are presenting a contrarian Scandinavian tale about becoming a full professor after making a conscious choice not to publish. Stories like this by Flensburg, we submit, offer future generations a more realistic idea of their profession so that they can make choices that fit their values and personality and at the same time contribute to the well-being of the Scandinavian IS field.

Another myth that can narrow our vision is the idea that in the olden days, IS academic careers were somehow easier to achieve. If we don't investigate the past we may think that university environments were generally more supportive of IS professor careers and research than today. The stories you will read in this special issue reveal struggles, hardship and resilience to

live through difficult times and circumstances. They are tales of individuals becoming their own heroes fighting to secure their position and the future of the IS discipline in institutions that did not provide conducive environments including colleagues who were less than friendly and supportive. These are stories of individuals who made their career stick on a forever shifting sea of positions, colleagues, programs, colleges, universities and countries due to an unwavering commitment to their academic and personal values. Indeed, these stories, seem to suggest that Scandinavian universities have room to improve to become the academic environments they should be.

4.2 The subjective objective continuum—wisdom versus truth

Another useful continuum for analyzing the papers in this special issue is a subjective-objective continuum or whether the reality being explored in the paper is seen by its authors to mostly exist out there independently from the observer or whether the events are considered from a more subjective, personal vantage point (Porra et al. 2014). These considerations become more intense when there are several people involved in the production of the narrative and thus an autobiography or a memoir becomes a dialogue or even a group production. When there are several individuals participating in telling a story, we need to be sensitive to the ontological, epistemological, methodological and ethical stances of all persons involved whether they discuss or even are aware that what they believe about their reality, ways of seeing it and the past will impact what they write and how they write it. We can easily see how one's positioning on the subjective objective continuum will influence what is focused on in the tale. For example, those with more objective world views tend to rely more on external primary and secondary historical evidence in support of their story whereas individuals with more subjective reality convictions likely put more emphasis on their personal recollections, feelings and interpretations of the past.

As IS scholars, we often place high value on methodological rigor and the quality of the collected data. In the process, we tend to forget that all stories have their wisdom and that subjective, personal recollections are just as valuable contributions to IS history as proper history that claims objectivity, provided of course that both the authors and readers understand the premises of the tales they share (Bryant et al. 2013).

4.3 Producing and preserving the Scandinavian story

Observed at a metalevel, the process of writing stories about the past, like the ones in this special issue, can be seen as a double hermeneutic (cf. Porra et al. 2005). Authors of these papers (and to some extent we the editors) tell our story, which is part of the bigger Scandinavian tale. Whether intended or not, we write ourselves into the The Scandinavian Way according to our philosophical, ontological, epistemological, ethical and methodological inclinations. All of us authors then share what we have written down with the rest of the Scandinavian and Scandinavian minded IS academics hoping that our pieces will resonate with you and inspire you to join in to add your part into the Nordic IS history in the making. Our goal is to inspire and give you courage to be the *Scandinavian you* in an academic world that today, it often feels, is trying to force us to be

more like somebody else, somewhere else. For example, currently there seems to be significant pressure in the IS discipline worldwide to become more like our colleagues in the U.S. Business Schools. This special issue is part of our belief in the need for producing the Scandinavian IS field history in order to maintain and pass on a Nordic identity to future IS scholars because we feel strongly that it is worth knowing, preserving and perpetuating.

5   The meaning of conferences like IRIS as carriers of oral history

The publication of this special issue coincides with the 40th anniversary of the IRIS conference. Since the first IRIS was held in 1978, it claims to be "the oldest consecutive IS conference in the world". The event is organized as a working conference for Scandinavian researchers, although it is not uncommon to find attendees also coming from outside the Nordic countries. IRIS's special role in the history of the discipline is important since it offered the first formally organized opportunity for researchers in IS to get together on an annual basis. Prior to IRIS, there were IS researcher gatherings but these were largely one-off events organized outside Scandinavia typically under the auspices of IFIP or TIMS.

   In retrospect, conferences like IRIS in Finland have played a central role in forming and perpetuating the oral history of the discipline. Like similar conferences elsewhere, IRIS has had its faithful core participants who have come to personify the field in the eyes of newcomers. Over several decades, the audiences of these conferences have expected to see the familiar faces and hear them repeat their stories over and over again to each new generation of IS scholars. The problem the field is facing globally, as we mentioned earlier, is that increasingly these primary carriers of the field's narrative have passed on; e.g.; C. West Churchman, Enid Mumford, Jim McKenney, Rob Kling, Paul Gray; retired; e.g.; Frank Land, Juhani Iivari, Gordon Davis; moved far away from their original academic habitats; e.g.; Kalle Lyytinen and Lars Mathiassen; or reduced their travel for a variety of reasons. This means that the story of the discipline is in danger of being interrupted and forgotten. The increasingly international, global, young, diverse academic background audiences of today's conferences do not necessarily know the stories nor do they feel connected to the origins of the field. This is one more pressing reason why there is an ever-growing need for a written history of the IS field in general and the Scandinavian IS field in particular.

6   The development of this special issue

A Call for Papers was announced in 2015 and generated a number of expressions of interest. The editors discussed amongst themselves and with the special issues' Editorial Review Board which potential submissions should be encouraged for the writing of full papers. This, of course, was a subjective process based on our interpretation of which RCRs were likely to provide 'good stories' of the Scandinavian Way. When the submissions arrived, they were screened and assessed as

to how well they really fit the scope of the Call for Papers. A number of submissions were deemed unacceptable or unlikely to be satisfactorily revised in a reasonable amount of time. Those that passed the initial filter were assigned to one of the Editors of the special issue. From there, the Editors sent each paper to three reviewers from the Editorial Review Board for comments and suggestions. The reviewer and Editor comments were sent back to the authors. At this stage, several papers were dropped from consideration. For those continuing with the process, another round of revisions and editor comments followed. This developmental process was lengthy and detailed, but resulted in what was felt to be significantly better contributions. Of course, it is up to the reader to decide how valuable these contributions are for them. Nevertheless, we feel this Researcher Career Retrospective special issue should be the first of many to come.

6.1   Paper introductions

The special issue contains five papers:

In his article, Juhani Iivari identifies five streams of research that have been the basis of his career. Four of these themes were all part of his doctoral dissertation (design science research in IS development methods; Philosophy of IS as an applied/practical science; Comparative analysis of IS development methods and approaches; and IS evaluation and success). The fifth theme—implementation and acceptance of information systems and other IT applications—was a natural extension of the first four. At the end of his paper, Iivari reflects on his 35 years in academia and articulates several concerns. First is the eroding position of professors. The second is the dysfunctional consequences of competitive funding. The third is the need for research collaboration, especially international collaboration. The fourth is the tension of engaging in big research vs. small research.

Markku Nurminen starts from a premise that after he retired, he felt that his publications did not fully reflect on what he thought was his important accomplishments. In his retrospective he looks back, but also articulates what he feels he has not yet properly put into words. Nurminen states that his career-long development of Work Informatics has been his love. He describes his career trajectory, which started as a student in Turku, and via academic positions in Bergen and Jyväskylä ended back in Turku in a professorship. Nurminen discusses the sometimes challenging institutional conditions during which he has developed his idea of the humanistic perspective of systems development that he further steered into the orientation of Work Informatics.

Niels Bjørn-Andersen's paper was different from the other papers in this special issue in that it was not solo-authored. It is coauthored together with Torkil Clemmensen. This dual authorship facilitates a dialogic narrative, written in the form of an interview. The narrative starts from Bjørn-Andersen's childhood; continues to his first academic position in 1969 and onwards through decades of IS scholarship ending in the present and his retirement. The paper sheds light on various important events in Scandinavian socio-technical IS research as well as the broader IS developments internationally.

Mats Lundeberg tells his own story, starting as a student of Börje Langefors. Lundeberg narrows his narrative to the 70s and 80s, during which he developed the ISAC approach, and became a professor in Stockholm. Lundeberg divides his RCR into three time periods and reflects on each. In the first period he discusses the development of ISAC. In the second period he

presents the trials and tribulations of starting a new research institute—Institute V. In his third period he discusses the processes involved with moving Institute V to the Stockholm School of Economics. Lundeberg ends his reflection with a suggestion to change the name of the field from information systems to verksamhetsutveckling. We're not sure if this will roll off the tongue as easily as 'information systems'!

The last article is written by Per Flensburg. Of all the articles in this special issue, Flensburg's paper is most oriented on singularity rather than representativeness. Flensburg starts with stating how he considers his career to be an exception. Under the title *Becoming Professor. With Almost No Publications*, Flensburg tells the story of his career taking place in four different universities. In the last phase, he became a full professor at University West, even though he had almost no international publications. He argues that the value of his career has materialized mostly through teaching, and provides some reasons why he decided not to publish. He believes there should not be a set career path that all should follow in their quest to become a professor.

7   Final thoughts

As some final thoughts, we would like to note that working on this special issue has been interesting and rewarding. It helped us see that Scandinavian IS is unique with its own identity and story. As editors, we learned about The Scandinavian Way through the words of the published authors as well as from the papers that were not yet ready to be considered for publication. It was also inspiring to observe how authors experienced their writing process as a therapeutic exercise that resulted in the emplotment of their academic narrative identity (cf. Mattingly 1994; Shotter and Tsoukas 2011; Ricoeur 1991).

It is encouraging that more of the Scandinavian scholars' stories are being written down; e.g.; (Iivari 2015). Yet plenty of work remains to be done. Perhaps the most surprising observation of the Scandinavian IS tale so far is the near complete absence of women from the story. There were no women on the list of the first IRIS conference participants in 1978. In this special issue, all the authors of the papers are male. Amongst the submissions we received, there was only one paper written by a female author. Regrettably, the author had to withdraw the manuscript due to time constraints. It is worth pondering, why more women did not participate and how their stories might be similar and different from the ones here.

Moreover, women are not the only group missing in this special issue. For example, we did not receive papers from 'Scandinavian minded' authors from outside of Scandinavia. We also did not receive any submissions from IS scholars who live and work in Scandinavia but are originally from other parts of the world. Whilst we are appreciative of those who participated and generously provided their story for this special issue, we sincerely hope that the Scandinavian IS story will open up and broaden to be more inclusive of all voices.

Notes

1. The *Scandinavian Conference on Information Systems* (SCIS) has been organized in conjunction with the *Information Systems Research Conference in Scandinavia* (IRIS) since 2010. See Lanamäki and Persson (2016, pp. 122-123) for more information about the conference.
2. The notion of 'Scandinavian' in this special issue is broadly framed. We have a relatively open definition for Scandinavian to include academics whose careers have taken place wholly or partially in Scandinavia. This includes academics of Scandinavian origins; scholars from Scandinavia who have migrated to other countries and continents, and academics from outside Scandinavia who have worked in Scandinavia for significant parts of their careers. We also equate 'Scandinavian' with 'Nordic' in this context.
3. 'The Scandinavian Way' is a phrase that was, for example, used frequently during the 2015 IRIS conference in Oulu by the participants to refer to a shared view that a way exists in the IS field that is uniquely Scandinavian. The understanding of what this way is does not need to be explicitly expressed when amongst Scandinavians and Scandinavian minded researchers. It is noteworthy that the editors have not witnessed a similar phenomenon in the United States perhaps because the IS researcher community is broader and comes from many regions of the world and thus does not share a particular way comparable to that of the Nordic peoples.

Acknowledgments

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