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But how do we know it?

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Abstract

To be Scandinavian in one's IS research - or not to be – cannot be a dichotomy. There must be different degrees of this attribute, perhaps there are multiple dimensions to characterise the Scandinavian character. Some of these dimensions are briefly outlined below.

Key words:

SJIS, template, styles, publishing

Introduction

In the beginning of the 1990's I was a member of the editorial board of the SJIS. As the pioneering group we had repeated discussions about the Scandinavian profile of the journal: what makes an article qualified for publication in this journal? Of course, all papers should be high-level research papers, but what makes the Scandinavian? Since then I have been thinking the meaning of the *Scandinavian Approach*.

Probably the Scandinavian Approach is not a dichotomy, perhaps we can distinguish different levels or even different ways of being Scandinavian. Confronted with a provocation by Jesper Simonsen I decided to formulate a few of these levels and/or dimensions.

Anything Goes

In the editorial board of the SJIS the decision was to be minimally restrictive. Scandinavian is, by definition, any piece of research performed by a citizen of any Scandinavian country (Denmark, Finland, Iceland, Norway, Sweden). For multiple authors it is sufficient that at least one fulfills this requirement. Even a temporary affiliation at a Scandinavian research community is qualifying, too. Even if this is liberal, it excludes the majority keeping the journal Scandinavian. But it does not present any requirements to the topics or methods of the research, if the authors are sufficiently Scandinavian.

In the editorial board we all understood that there might be a core of particularly Scandinavian approaches. We had, however, difficulties in formulating this special attribute, not only because we had different views but also because it is really hard. If it were easy, this debate about this would have been finished long ago.

Cross-References

A scientific community is characterised by a continuous dialogue among its members. This constitutes and maintains its identity. The dialogue of a research community can be traced by looking at the references in the publications. It can be expected that the members of a community quote the works of the (other) members more frequently than the outsiders do. Therefore, if I would like to belong to the Scandinavian IS research community, I should use Scandinavian references and be quoted by other Scandinavian authors.

Unfortunately, I do not know any quantitative data about the reference practice. But during my period as the member of the editorial board I was able to identify at least one group that used practically no references to Scandinavian authors. I gave this group the nickname *Harvard Filial*, because both problems and methods were imported from the U.S. mainstream research. This implied also that most references were found in this community rather than Scandinavian research. It was interesting to find out that two researchers from two Scandinavian universities did not quote the works of each other even if they made research on the same topic.

If it would be necessary to identify Scandinavian research that is not close to the core of the community, this Harvard fraction would be one of the most obvious candidates.

Emancipation

The reference statistics did not say anything about the issues addressed in the research. One of the most prominent trademarks of Scandinavian research has been the brave action research-oriented projects performed together with trade unions. This radical approach was extremely important because it openly declared that the introduction of information technology always is value-dependent. Suddenly it was clear that most IS development projects were run according to the interests of the management and the owners of the companies. The choice of workers or users as the main interest group turned out to be an equally legitimate point of departure. Consulting was replaced by action research. What is Scandinavian here is the interest for democracy even at the working place.

In parallel with this radical school of research we had a more moderate one, often labeled as socio-technical. In this school, the key issue was often formulated in terms of consequences of IT.

The liberating message was that the consequences are not determined, but we do have a choice. This opportunity gives us the possibility to some extent to avoid undesired consequences and to promote desired ones. The connection between these two is that the radical approach to promote the users' interests was supplemented by conceptual attempts to formulate the mechanisms of impact in terms of consequences. Yet these two genuinely Scandinavian approaches seemed to be in an open conflict with each other for a long period, even if both had the spelled out intention to prevent undesired consequences for the primary interest group users.

This emancipatory interest has been also theoretically manifested in many contributions. The framework by Burrell and Morgan includes two dimensions, one of which is the degree of radicalism of change in organisations. Most interpretations of this classification do not qualify the approaches of BPR (Business Process Reengineering) as representatives for the radical change even if the BPR people often promise a revolution. Obviously it is not very easy for a researcher to state what is good or bad in the object area of the research. This leads us to a critical reflection on the domain of change and the desired direction of it.

Technical or Social, or Both

The consequence discourse was unable to explain the mechanism that information technology might have. The well-known Leavitt's diamond tells that everything has an impact on everything. This does not help very much. The complexity of information systems does not make it easy to predict, what will be the consequences of a certain decision during the design phase. This uncertainty is copied or even amplified in the attempt to prevent undesired consequences. Therefore, we need to use iterative-evolutionary and participative principles in information system development.

These are with no doubt two other flagships of Scandinavian approaches, even if they do not at all specify what should be done. Rather these principles give advice on by whom the work should be done and how it should structured. But the same principles could be applied in any other industry.

I am afraid that we cannot get more specific answers to the question "What should be done?" unless we give a more substantial answer to the issue on the essence of information system. What kind of creature is it? Already the analysis of the word *consequence* (or impact as well) implies that the information system is understood to be a technical system that has some consequences to its context.

The direction of the causality includes a hint towards technological determinism, but the declaration of an information system as a technical system is important here, because many scholars have wanted to reverse this notion by saying that the information system essentially is a social system that is just technically implemented.

But how can a computer-based system be a social system. The first answer goes to the interface to the context. The system should support the activities of its users. This line of thought is likely to imply that the ultimate criteria for the success or failure of the introduction of a new information system have to be found in the context, not within the system itself.

Another answer finds the social character of the information system inside the system. The rules and data storages are derived from the professional skill and knowledge of the future users. If this transformation process is carefully and sensitively performed, the system itself is socially permeated and therefore has the capability of giving good support in most actual use situations.

Context in Focus

This formulation *Context in Focus* is a paradox, because the context is relative to the actual focus. If we suddenly move the focus to the previous context, it becomes to the focus and can no longer be a context.

Yet it seems to me that many researchers in our discipline have tried to transcend this paradox and to do the undoable. They have demanded that people doing IS development should pay more attention to the context. What are those aspects in the context that should be taken into

account? It is interesting to find here approximately the same list as we had in the discourse on consequences. People's work processes and practices, users' skill and knowledge organisational issues, coordination and cooperation in the first places.

The main difference with the consequence discourse is that the emphasis lies more heavily on the context side. The intended change is primarily the change in the context and the development and introduction of information systems are important but not only means for this purpose.

The primacy of context is not an exclusively Scandinavian quality. For example, Steve Alter, San Francisco, has taken the work system as his point of departure in analysing information systems and their development. This kind of swapping between IS and its context includes a hasard, because the legitimacy of IS research is jeopardised if it is moved to the context of the work system. What will happen to our discipline? Will it wither away?

The problem is not trivial. In my understanding, a set of fundamental issues has to be addressed. They deal with the essence of the core concept *information system*.

Critical Issues

The first issue is related to the *subject issue:* do we regard the IS as a subject that can be an actor on its own. The assumption of computer subject is rather common, even if the characteristics of this subject are extremely seldom made explicit. Even if the IS subject gives a trivial solution to the problem of a technically implemented social system (what turns the technical system to be social?), it probably creates more problems than it solves. Much analytical discussion is needed. For example, IT artefacts do enable, favour or restrict some actions, but does this make them to actors of them?

The second issue is related to *reductionism*. If we take one information system, can we divide it into two separate subsystems with the same functionality? As the result, previously internal couplings would become external in order to mediate the coordination between the subsystems. If this reduction is not possible,

what is the reason to it? If it is possible, can we continue the de-integration? Until what level?

The point of the reductionism issue is that it undermines the ontological status of IS concept. What yesterday used to be one system, can tomorrow be a network of twenty interrelated subsystems. If there was a IS subject yesterday, who will be the actor(s) tomorrow and what are their intentions?

The third issue is the separability of the information system and the work system – or human activity system. If we are skeptical towards the IS subject, we can embed the information system use and functions as an inherent part of human activity, provided that we can apply reductionism. This kind of embeddedness provides another explanation to the essentially social character of technically implemented information systems. Such a framework opens new avenues for IS research without loosing its own identity.

I want to challenge the participants of this debate to articulate their opinion about these three critical issues as potential constituents of the Scandinavian approach.

This is an invited debate paper. Therefore, all references are omitted. The statements are based on personal interpretations and formulated less carefully in order to promote debate. Yet the conclusions are conservative.