Indigenous Women in Scandinavia and a Potential Role for ICT

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INTRODUCTION

From a distance, the Sámi Network Connectivity initiative (SNC) does not necessarily appear as anything but another technical research project with certain science-fiction (sci-fi) connotations. It is aimed to create Internet connectivity for communications-challenged terrestrial settings using a protocol currently being developed for communications in space. However, while being a highly technical project, SNC emerged from an unexpected setting: an Indigenous women's initiative to save their traditional livelihood from threats of social and economic drain and to create better opportunities for women and youth to remain within the traditional community.

The first step towards the formation of SNC was taken in June 2001 when a group of women reindeer herders in Sirges Sámi Village in Jokkmokk, Norrbotten County in northern Sweden decided to start a gender equality project, Kvinna i sameby (KIS).¹ To the Sámi, reindeer herding serves not only as an economic base but also as a foundation for reproduction of cultural values. Already in the KIS planning stage, Susanne Spik, the project leader, contacted the Division for Gender and Technology at Luleå University of Technology (LTU) to invite scientific assistance from the early stage of the project. LTU is the regional technical university for northern Sweden and is situated in the Norrbotten County capital of Luleå 200 km southeast of Jokkmokk. Promoting women's possibilities to remain in reindeer herding and the traditional Sámi community, especially social and technical conditions for work and business development, were the focus in the discussions. An associated but separately funded project was subsequently formed by LTU researcher Maria Udén. A solution to the project requirements came from a guest researcher at the computer science department, Avri Doria, an Internet systems architect. In spring 2002, after initial discussions with members of the Interplanetary Networking Research Group (IPNRG) at the NASA Jet Propulsion Lab, she contributed the proposal that came to be referred to as Sámi Network Connectivity. With a decision to accept this project, the establishment of SNC as both a technical idea and a concrete gender-based project became a prime goal for the cooperation between the women in Sirges and the scholars at LTU, and continued after the KIS project ended in December 2003. The SNC objective is to provide connectivity where other sources are not available, while making the local population part of the development of the technical system. To develop the technical solution space of SNC, the Sámi Network Connectivity proposition gained research funding from the Swedish national agency for innovation systems, Vinnova, for the period 2004 to 2006. This funding is distributed through the Vinnova program "New communication networks."

BACKGROUND

Being a technical project, it is not obvious how SNC relates to the understandings of the sex/gender and gender equality concepts, as these are maintained in women's movements and feminist theory. SNC is a result of a women's movement among the Sámi and will be shown also linked to the current feminist movement in academia. More than a unified position of gender issues, the common motivating factor shared by all participants in the SNC is a shared appreciation of grass-roots participation in technology development. To feminist researchers in science and engineering, formulating critiques of their mother disciplines is not a sufficient goal. The vision and expectation is to be able to present theoretical and methodological alternatives (Keller, 1992; Mörtberg, 2003; Trojer, 2002).

This has strongly affected the research scope of gender studies at LTU, where the presence of engineers, mathematicians, and systems and computer scientists has been substantial from the start. The SNC project is one among other activities aimed at changing the relations between gender and technology initiated in this environment. Internationally, the LTU research scope is consistent with aims and considerations expressed by, among others, Evelyn Fox Keller. It is characteristic, however, that feminist researchers engaged in science and technology continue to acknowledge difficulties in taking the step from observation and critique to presenting functional alternatives to/within them. Keller (1992) put the question of feminist interventions in science and their possible success as follows:

In short, feminist theory has helped us to revision science as a discourse, but not as an agent of change. And it is this latter question that I want to press on now. Since it is demonstrably possible to envision different kinds of representations, we need now to ask what different possibilities of change might be entailed by these different kinds of representations? (p. 76)

Though more than a decade has passed since Keller expressed these concerns, feminist methods for effectively acting as agents of change in science and technology are still barely developing, even in the field of Information and Communication Technologies (ICT), which have indeed generated a large body of feminist studies during the late 20th and early 21st centuries. Reasons behind this lack of progress are thought to be located in various social, cultural and economic factors, all of which are affected by symbolic, as well as material connotations, of sex/ gender (Bratteteig, 2002; Mörtberg, 2003; Trojer, 2002). In this respect, the significance of the networks between engineers/scientists and the individuals and organizations that request and make use of their products and results, the patrons, must not be overlooked. These networks tend to be male dominated not only on the experts' side but also on the patrons' (Cockburn, 1985; Keller, 1992; Trojer, 2002; Udén, 2002).

CHALLENGES AND POTENTIALS

Sámi Lifestyle Today, its Challenges to ICT and the SNC Solution Space

Even if Sweden is indeed one of the world's most "Internet-connected" nations, the districts of concern to the reindeer herders are not as well off in this respect. The level of service and ICT access is significantly lower than in Swedish society at large. In 2002, The Swedish National Rural Development Agency investigated the infrastructure available in the Swedish Sámi herding communities, especially the summer lands. Among other reasons, the summer lands were chosen for the investigation as they are especially valuable for keeping the children's link with Sámi culture, and for both cultural and social reproduction in other respects. It showed that the majority of residents' camps in the summer lands have very little or no access to infrastructure, including post delivery, telephone and roads (Glesbygdsverket, 2002). Given that Sirges and its neighbor, Sámi Villages, to a large extent, operate in a large, 9,400 km² connected area of natural preserves and other protected areas, it is understood that installment of fixed infrastructure, such as major masts for mobile communications, are not wanted. This area of wilderness is known as Laponia, and listed by UNESCO as World Heritage. To the reindeer herding Sámi in Sirges and surrounding villages, Laponia is not wilderness, but their cultural landscape.

Today, the Sámi are an indigenous minority population incorporated within the Scandinavian and Russian national states, and their traditional lifestyle is challenged by conflicting demands. Many of these conflicts stem from the fact that maintaining economic and social sustainability makes it necessary to be part of modern society, which puts demands on being, more or less, resident in a fixed location, while their traditional lifestyles—in particular, reindeer herding—continues to require a more nature-based lifestyle and semi-nomadicity. (Haetta, 1993;

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