Geography and Health
– A Nordic Outlook

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8. Spaces of birth in Greenland

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This chapter presents an account of how Greenlandic development is reflected in the spaces of birth. As an aspiring human geographer, I had the privilege to study this process in Greenland. The interaction between man, technology, and landscape is reflected with particular clarity in an island nation that lives comparatively isolated from the surrounding world. In my profession as a midwife, I became familiarized with the life situation of Greenland's population comparatively quickly. Thus, it came naturally to me to study this interaction through the conditions of childbirth. Personal observations and experience in an ethnographic approach took place during my residence and work in Greenland, December 2000 – February 2001. The interviewed midwives are referred to by their first names,with the exception of one who has been given the pseudonym 'Sara' because she preferred to remain anonymous.

Introduction

Almost 1000 years ago, since the first European set foot on land in Greenland and 280 years since the colonization of Greenland began. In Greenlandic, the country is called Kalaallit Nunnat, which means 'the Island of Humans' and the indigenous population call themselves Inuit. To date, Greenland has not been an independent nation but has belonged to Denmark, although it has been self-governing since 1979. Most of Greenland's surface is ice-covered, and the 55,000 inhabitants live along the coast of Greenland in small isolated communities.[20] These smaller communities are surrounded by areas made up of small fishing communities along the coastal fringes. Due to the harsh climate and rugged scenery, there are no roads in Greenland and the only way for people to travel long distances is by boat or plane. The capital and the city centre of Greenland is Nuuk, which has 16,000 inhabitants (Greenland in figures/ Grønlands Statistik 2013). The official language of the island is Greenlandic, with Danish as a second language. The main industry is fishing, the success of which is highly dependent on international prices and fluctuations in exchange rates.

The traditional Inuit culture

Essentially, the sense of community was the reason for Greenlandic society to expand geographically. Social formations consisted of between two and twelve hunter families living together in communities, which could easily move their settlements between locations. The settlement was a winter settlement, in places that later came to be known as *bygder* (villages), and when summer came, it was dissolved for moving to hunting and fishing camps, usually well away from winter settlement. The reason for such a scattered organization was to widen the hunting and fishing areas supporting individual households. Households were financially and technically self-sufficient, for which they relied on catching seals and whales. The**se** Inuit households lived in collectivist communities in which families and relatives lived in longhouses built of turf and stone. Such collectives guaranteed all individuals a function and security, and worked in a social system in which services and knowledge were exchanged. One characteristic

20. Greenland's total area is 2,166,086 km^2, of which 410,449 km2 is ice-free. The total coastline is 44,087 kms. (Greenland in figures 2013. Grønlands Statistik, [www.stat.gl])

of the balance between exchanges was that an intangible service could be exchanged for a material one. Hence, for example, a woman might have received birthing assistance from a *kamikk* (long sealskin boots) midwife in exchange for seal meat (Petersen 1992).

The most intelligent among the women in the community were trained to for the role of *kamikk* midwives. Traditionally, when Inuit women were ready to give birth they were moved to a special birth space, which was either a tent in the summer and an igloo in the winter. The custom of moving the woman giving birth probably had practical and hygienic reasons. By shielding the woman from other community members in the collective housing unit, she would have been left in seclusion during delivery, thus reducing the risk of later infections (Thomsen 1991).

The colonial period

During Denmark's colonial period,[21] Danish colonial administration was eager to preserve the fishing and hunting industry and authorize exports and imports through the federal royal trading company KGH, Den Kongelige Grønlandske Handel (Royal Greenland Trading Company). One reason for this was that the Danes wanted to try to preserve distinctive cultural characteristics among the Inuit. Despite colonization, the country thus remained in relative isolation to the West (Mortensson 1997). At the same time, Danish authorities wanted to improve the health status in Greenland by building a contemporary modern health care structure. Further, the few doctors in Greenland wanted to modernize the birth rate by Danish standards and therefore hired and paid *kamikk* midwives through the Danish state-run KGH (Krabbe 1909).

Danish **medical** doctors considered that *kamikk* midwives exposed mothers and babies to risks through the methods they practised. Dr Bertelsen, a medical doctor working in Greenland, writes that Greenlandic women gave birth 'in strange birth positions, e.g. squatting and changing position during the birth' (Bertelsen 1907, Bertelsen 1911). According to Danish medical standards at the time, it was common practice to assume a supine position for giving birth. Another medical doctor (Lecht), working in Greenland in late 1800s tried to deal with the procedures by issuing an instruction to all *kamikk* midwives on how birthing procedures should be performed. However, the midwives defied the doctor's instructions and continued with their traditional practices. Following an incident when a *kamikk* midwife pulled a baby out using a special 'string' attached to a hook, all *kamikk* midwives were suspended. (Krabbe 1909) The colonial administration eventually divided Greenland geographically into three major areas: North, East, and West. The population increased during the early 1900s, but was mainly localized in southern and western Greenland. The colonial administration found that due to population growth, households in East Greenland could no longer be self-sufficient within their traditional hunting area. This resulted in several evacuations of the population to areas under Danish colonial power. Nevertheless, most of the people of Greenland continued to live in small isolated communities. In the relatively big towns the colonial power was concentrated in the trading posts, of which Nuuk was the first and largest. As a consequence of population evacuations and the establishment of trading posts, the Danes designed and headed the administration of the country, which led to ethnic and social disparities in Greenlandic society (Mortensson 1997, Petersen 1992).

Geographically determined limits

One cause of high infant mortality during the colonial period was epidemics, such as measles. Epidemic childhood diseases did not exist in Inuit culture but were introduced to Greenland by the crews of Danish merchant ships. Given that the people of Greenland lived in isolation, the

21. Colonization began in the 18th century but was formalized in 1814.

diseases had major implications, and whole villages (*bygder*) almost died out (Petersen 1992). To improve the health of the population and to overcome child mortality the colonial power adopted two strategies. Initially, Danish doctors decided to send 'fit' Greenlandic women to Denmark, to the Royal Birth Foundation in Copenhagen. Besides learning the 'correct' birth technique, the intention was that they would also learn the Danish language (Krabbe 1909). However, the women who completed the training were relatively small in number. According to Doctor Bertelsen (1907), the reasons for the low numbers were linguistic difficulties and lack of cultural understanding. The second step was to build a modern hospital infrastructure, based on regional hospital units. One consequence of this development was that childbirth could only take place in these regional hospitals. However, large geographical distances, lack of roads, and inefficient means of transport made this impossible in practice. Most births therefore took place in the women's own homes. In his travelogue, Doctor Krabbe (1909) described the difficulty that doctors faced when travelling to the small communities: '*The doctor must enter into all twists and turns where settlements are to be found; when the route of travel along the contours of the country are taken into account, the journey will be about 96 miles.*'[22] The doctors travelled by ship along the coast, and in the northern regions around Uppernavik they used dog sleds across the ice. Due to weather and distances, physicians' treatment was often limited to written advice or medication carried by kayak. This meant that in remote districts *kamikk* midwives remained in charge of pregnancy and childbirth.

Johanna, a *kamikk* midwife

Due to her district's isolation, there was no medical help to be reckoned with for Johanna, a *kamikk midwife*, and therefore she had to rely on her experience and instincts. The only instrument she used was a wooden stethoscope, with which she listened to a baby's heartbeat. She said that since she was a central character in the community, she had an opportunity to 'keep an eye on the social situation of pregnant women and foetal development'. If necessary, she called the women to her home for a check-up. At that time, in 1945, a lot of *immiaq* (illicitly distilled alcohol, i.e. 'moonshine') was consumed: 'I went to the pregnant women's houses to see whether they ate properly. If a family used their money for *immiaq*, I had to go out shopping for them, so they could use their money wisely.' A doctor had overall regional responsibility for births, but was never present when they took place. Johanna noted that messages to the doctor at the regional medical centre were sent via a *kayak* postman, as neither radio or telephone services were available. Radio communication, which was introduced during World War II, meant a lot to Johanna, who could '*get prescriptions over the radio if a disaster occurred*'.

The modern period: 1953–1979

The UN's resolutions on colonies' right to independence affected the Danish Government as it did not want to become labelled as a colonial state. Consequently, Greenland's status as a colony was repealed in 1953 and it became an integral part of Denmark, corresponding to a Danish county. The Danish State initiated an intensive modernization plan with the principal purpose of creating an enhanced standard of living in Greenland. The country would be freed from governmental monitoring and control, and investments in infrastructure would stimulate private Danish capital (Schwedler 1999). This in turn required a massive supply of labour. Greenland would become 'Danified' in its societal structures, which was partly made possible by technological developments in transportation (Mortensson 1997). The development of transportation meant that a *birth clinic* did not necessarily have to be locally based in small rural communities *(bygder)*, and women could be

22. A traditional Danish mile is c.7.5 km, and therefore the quoted distance would have been c.720 kms.

transported by air to the nearest cottage hospital, either by air or by other means of transportation. *Kamikk* midwife Benedikte informed of an occasion when she had to travel by snowmobile to a village community because a woman had started to give birth too early. It was cold and her '*hands were frostbitten, when we went back by snowmobile across the ice and could not get over the edge of the ice in the harbour because it was so high*'. In order for Benedikte and the local doctor to gain an insight into how women's pregnancies were progressing, they made regular visits to the village communities by boat. When necessary, pregnant women were transported by helicopter from the village communities to the regional cottage hospital for examination and treatment.

The consequences of urbanization

The fishing industry in the more urbanized areas was dependent on the female workforce and required labour migration from the village communities. This fact, together with a growing stream of Danish labour (i.e. construction workers), led to many mixed marriages. The population increased dramatically during the period 1953–1979 and urbanization increased (Mortensson 1992). As a result of the pursued policy, settlements and smaller places of residence were gradually depopulated and deserted. Population growth and urbanization created a need to modernize the small cottage hospitals into minor modern technical hospitals, to enable them to carry out surgical procedures (Larsen 1992). Johanna said that she was '*relocated by force to the regional hospital in Aasiat when the village was evacuated for almost the entire population*'.

Pregnant women travelled by boat from the communities to the modern regional hospital three or four weeks before they were due to give birth and were given access to a room and hot food. Often, they had to take their children with them because their husband needed to work. Benedikte said that '*women sometimes defied the system and especially in the winter, they travelled back to their village communities because they wanted to be with their family when they gave birth to their children*.' The increased geographical concentration of industries constrained social contacts, and the harsh climate and long distances without road network reduced communications between families. As a result, dispersed populations were isolated in environments with a Danish policy for law and order (Mortensson 1992).

By the end of the 1960s, specialist surgeons from Denmark modernized the health care service in Greenland by introducing new technology. Benedikte, a midwife, thought that '*the social preparation was at least as important as the modern technology to achieve a good work performance*.' As women giving birth were part of a midwife's own local living environment, the midwife had a natural knowledge of them, both behaviourally and socially. In the birthing room she could therefore respond to their non-verbal cues. As a consequence, the women became confident and relaxed, which reduced their need for analgesics.

The rapid population growth and strong growth of the Danes' percentage of the population led to an increased division of labour between the Greenlanders and the Danish population in Greenland. This was expressed in *fødestedskriteriet* (the birth place criterion), as native Greenlanders were paid 15 % less than the Danes. The difference was legitimized by the need to keep the Greenland income growth at a low level to make export production profitable (Jonsen 1999). The training of the Greenlanders could not keep abreast with technological developments and the Danish language thus came to be a prerequisite for the road to education and influence. Hence, the Danish-born population, with higher levels of education, acquired a growing share of significant positions in society.

The developments resulted in a growing Danish upper class and a predominantly Greenlandic subclass(Mortenson 1992). *Kamikk* midwife 'Sara' was very upset that *kamikkjordemødrene* (kamik midwives) had been heavily suppressed. She stated that they had been treated

as '*less knowledgeable by the midwives trained in Denmark and some doctors, even though they performed the same work*'. 'Sara' informed that at times, the *kamikk* midwives could be on permanent duty for days or weeks, and they rarely had any vacations or leave. The Danish-speaking midwives worked under similar conditions but their status was higher and they were better paid.

The period of independence: Post-1979

The trained Greenlandic elite succeeded, by a peaceful revolution, in establishing home rule (*hjemmestyre*) in 1979. A key reason behind this success was World War II, which acted as a catalyst for domestic opinion. During the war, Greenland had been governed from Nuuk rather than from Copenhagen, and this had been seen as a national revival for the Greenland population (Schwedler 1999). The combination of returning Denmark-educated Greenlanders and the USA 'friendly' annexation during the war created a new Greenlandic identity. During the modernization period, this identity was reinforced by press criticism of the concentration policy and the birthplace criterion as well as the fact that the Faroe Islands received autonomy (Mortensson 1997).

Technology and specialization

Today, Greenland home rule still has major domestic problems. Although the import dependence of the modernization period has decreased, the trade balance has remained skewed. For this reason, Greenland has incurred a large amount of foreign debt, which has resulted in significant public sector savings (Grønlands statistik 2013). For self-governance, the modern health care structure means a continuous need for the importation of human resources and technical equipment. Specialist training for doctors and midwives is not provided in Greenland and the population is too small for the specialization required in modern health care (Mortensson 1999).

In Nuuk, the independent role of *kamikk* midwives increasingly disappears as the new self-government advocates a modern western hospital structure. Some young Greenlandic women travel to Denmark for training but rarely return. *Kamikk* midwife Grethe believed that the reason for their failure to return is that wages and working conditions are significantly worse in Greenland. Benedikte said: '*Greenland serves as some kind of lock chamber country for doctors and midwives who travel on after having gained some experience*.' The considerable staff shortages have resulted in a need to hire 'specialist midwives' for short-term temporary positions through private employment agencies in the Nordic countries dealing with temporary appointments. Such midwives are much better paid and have more regulated working conditions than other employees. 'Sara' said that *kamikk* midwives are employed when midwifery services cannot be provided. When there are more Western-trained midwives working, the *kamikk* midwives work more like assistants, despite having 20 years of experience in assisting mother in childbirth. The aim of self-rule is to stop the concentration, using population governmental strategies including elements of centralization and command economy.

Some governmental measures focus on uniform pricing and investment policies, and a tax equalization system between regions. The uniform price principle means that the same prices for commodities are maintained throughout the country. Major investments are being made in housing and in the fishing industry. One problem of such investment strategies is that Greenland, like many other small countries, will become locked in a technological specialization whereby skills transfer from the West become permanent rather than integrated into Greenlandic society (Jonsson 1999). In the health sector, population concentration and the increasing specialization of medical training has made it impossible to recruit doctors with caesarean skills to regional hospitals. As a consequence, many women have to travel to Nuuk to give birth. *Kamikk* midwife

Makkak said that the lack of permanent doctors at regional hospitals is another reason why patients often have to be evacuated by air to the central hospital in Nuuk. Unlike Danish midwives, *kamikk* midwives are not registered, and therefore physicians carry the legal responsibility for births. When such physicians only have short-term stand-in positions and no experience of childbirth, and when there are no registered midwives in regional hospitals, they prefer pregnant women to be transported elsewhere. This means that women are sometimes transported over a distance equivalent to the length of Sweden. *Kamik*k midwife Makkak had experienced major changes and more technology in present-day maternity care. Further, she says that in the regional hospitals, women are sent elsewhere '*as soon as there is the slightest problem in the pregnancy*'. `Midwife Grethe speculated as to why health care is becoming increasingly technocratic and suggests that in an increasingly technological society, people are afraid of the 'emotional pain'. She spoke of the existential pain that does not have an outlet for the life crisis that giving birth represents. Further, Grethe believesd that it is '*the price of modern civilization; one may wonder what the future will bring*'.

The social consequences of urbanisation

The increasing mechanization of the fishing industry is making women redundant and creating *job sharing* in terms of both gender and ethnicity in Greenlandic society. Shifts in production to prioritizing large factory trawlers have meant that the processing and preserving of fish takes place onboard the ships. One consequence of this is the centralization of regional fishing industries. Since the jobs in the fishing industry are declining, there is a need for jobs in the public sector (Schwedler 1999). For the population living outside the capital area, there is no ready access to midwives and physicians with surgical skills. Nevertheless, Greenlandic women are ordered to give birth at specialist hospitals. Benedikte states that midwives have stopped visiting communities when there are emergencies; instead, women experiencing problems with their pregnancy are transported to Nuuk. For "Sara', deliveries in Nuuk meant that '*there will be a lot of new people who have not grown up in the community*'. This will complicate her work, because she would not have an opportunity to know the women before they give birth.

Makkak said that many women are sent to Nuuk one month before the expected time of delivery, and '*it is inhuman, letting them travel that far.*' Only a few families practise family planning – 'the babies just come'. The localization in Nuuk and the larger regional hospitals involves a shift for the families, with a subsequent impact on their economies. Many men are fishermen, sometimes self-employed and while their wives or partners are away at a hospital they (the men) will stay at home to care for the children. This results in a loss of income for the family during the time when the woman is in hospital and the authorities will only provide financial compensation for the woman's travel and accommodation.

Makkak noted that '*if a man from Thule wants to be present at the birth, it will cost him c. 40,000 kroner in travel and expenses for rent and food*', and maintains that, '*it is mentally degrading for the women to be away for so long from their family.*' She refers to women from Angmagssalik in East Greenland, who were very reserved and angry with the system, yet at the same time prudent and reticent about expressing their feelings. Their concerns about their children and language problems affect their feeling of security in the birthing room, which complicated Makkak's work: '*It's harder to be a midwife during a delivery because women become tense and then the birth will slow down and become more difficult.*'

Conclusion

Urbanization and technological developments in Greenlandic society have come at considerable social and cultural costs. Although the formerly referred to *føderummet* (birthing room) has now become modernized in accordance with Danish standards, the prevailing geographical circum-

stances, specialized know-how and urbanization imply that women in Greenland still have problems in connection with giving birth that can be connected to class and ethnicity. Despite the intentions of self-rule to halt the population concentration, the major communities and the capital city, Nuuk, are growing at the expense of the rural districts. Half of the total labour force in Greenland is currently employed in the public sector, where the need to import medical specialists is increasing. The fishing industry is concentrated on large trawlers with few employees and requires personnel with advanced technical training (Greenland in figures 2013). Overall, this means continued job sharing, where Danish society holds the preferential right of interpretation in both the public sector and the private sector.

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Interviews with *kamikk* midwives Johanna Nielsen, Benedikte Siegestad, Makkak Thomassen, Grethe Lind and 'Sara' were held in Greenland in 2001.

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