CONSTRUCTING COMMUNITIES

The establishment and demographic development of sawmill communities in the Sundsvall district, 1850-1890

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Till minne av min farfar
Frans Bergman
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Abstract

This dissertation studies the establishment and demographic development of the sawmill communities that emerged in the Sundsvall district during the latter half of the 19th century. The intention is to highlight the importance of the sawmill communities and their resident populations by discussing community construction from a demographic perspective as well as socially and symbolically. Based on church registers, this is a longitudinal study that includes information from 31 individual sawmill communities.

This study has shown that the establishment and demographic development of the sawmill communities was not an instant process that necessarily followed the construction of the sawmill industries. The prerequisites of the geographical locations and year of establishment influenced population development, but the speed and size of the settlements were individual to each mill site. More prosperous times for the industry during the 1870s resulted in that migration increased consequently leading to quickly populated communities and larger registered core populations in residence.

Migration to the sawmill communities from within the parishes was infrequent and the geographical backgrounds revealed that an extremely small proportion of the populations had been born within the district, implying a migratory hesitation among locally born. The sawmill populations were male-dominated due to the large groups of temporary workers inhabiting the communities, although, adult males barely made up one-third of the registered populations. The largest demographic group was children aged 0-14 years. The strong presence of children and high proportions of married individuals suggests that the sawmill communities were family dominated. Long-time settled families had usually formed kinship networks with other residents.

This dissertation concludes that while time was important for the development of the sawmill communities, so were the registered populations residing in these communities. Residency would have been key in claiming belonging to the sawmill communities and to be considered as a real sawmill worker. Residency, family and kin therefore contributed to the construction of community structures, geographically, socially and symbolically.

Keywords
Sawmill, sawmill worker, Sundsvall, 19th century, community, population development, migration, internal parish migration, barriers, residency, demographic structure, family, kinship networks.
History has always fascinated me. I grew up with a 13th century church ruin just around the corner and with my grandfather’s stories of his life and the generation before him. My vivid imagination saw mystery in these stories which resulted in an endless tirade of questions. My grandfather just smiled, he had finally found the captivated audience he so long had wished for. As I grew older I became driven to know more, to do my own research. Although, if anyone would have told me ten years ago, when I first came to Umeå, that I would end up writing a dissertation in history, I doubt I would have believed them. Still, here I am, the journey has come to an end and the result has been transformed into a book. It is a tangible evidence of 4,5 years of my life.

The road from thought to finished product has been long, even though I sometime feel as though it all began yesterday. These years have been an interesting experience. It has been educational and tough, not to say stressful. I am not beyond admitting that I, at some moments, have wanted to throw my computer out the window and that I have cursed profusely at my research subjects and rejoiced over the fact they were already dead. That being said, it has also been fun, believe it or not. No matter what anyone may think of Swedish sawmill workers, they were an interesting group of people.

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Chapter 1

INTRODUCTION

The Sundsvall district in north central Sweden became the epicentre of the Swedish sawmill industry during the second half of the 19th century. Located in a rural environment, these industries did not only introduce technological improvements but would also become the starting point of a new type of settlement, the sawmill communities. These communities emerged from, and were based on, a combination of older traditions, structures and patriarchal values that met with new perspectives and understandings of social interaction and employment rights. They were not only geographically separated from the agricultural villages, but they also included social and symbolic components that would have had just as great, if not even a greater importance to the inhabitants. The social environments that emanated from within the communities and from above due to the sawmill owners, helped to consolidate diverse and heterogeneous sawmill populations, and the sawmill workers as an occupational group.

It could therefore be argued that the people that settled at the mill sites had an important part to play in the overall industrial and structural development of the areas around the industries. Stable population cores did not only enable community structures to become more pronounced, a residential workforce also provided a basis for industrial expansion and profits by making work more efficient. This means that while communities were important for the development of the industries, the populations played an imperative part for the construction of those communities. Population and development were therefore intertwined; the residents did not only propel development but would have demanded it.

George Alter wrote that it always has been “easy to underestimate the power of community in early industrial cities” and surprisingly little is known about the development of the sawmill communities and their residents. Despite that there would not have been any settlements to speak of had not people migrated to these areas and been willing to stay. Few studies have focused on the early development of the mill sites, such as their prerequisites and registered residents prior to the construction of the industries. Demographic research has usually been confined to the development of individual mills or included all inhabitants of an entire industrialised parish without specifically singling out the sawmill po-

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pulations. This means that there are still areas regarding the sawmill industry, especially the importance of the sawmill communities and their development that has remained unexplored. The Sundsvall district offers the perfect area for conducting such a study as it can provide information not only from one but 31 individual sawmills.\footnote{The study includes 30 steam powered sawmills built between 1849-1890 and one water powered sawmill that had been constructed in 1793.} This study will delve into when and how the sawmill communities were established and developed demographically, as well as who the populations were and what it meant to live within these communities.

1.1 Aim

The aim of this dissertation is to study the establishment and demographic development of the sawmill communities in the Sundsvall district between 1850-1890. The intention is to highlight the importance of the sawmill communities and their resident populations more than what previously have been done in earlier studies. This will be done by discussing community construction, not just from a physical aspect, but also from a social and symbolic perspective. This dissertation is therefore divided; it includes the establishment and development of residential communities and the development of a sense of community among the populations.

The study will utilise both longitudinal demographic perspectives and local cross-section studies to exemplify the sawmill populations on a more individual level. The integration of a more general perspective with specific local perspectives will add important components to understanding the process of the establishment and development of these communities. This will allow for a more comprehensive picture of the sawmill communities and their populations to emerge.

1.2 Structure and questions

A difficult question when studying the sawmill communities is how the demographic perspective is to be approached. The establishment and demographic development of the sawmill communities was a complex process that involved many different aspects contributing to establishing functioning communities in their own right. The developments were individual to each sawmill and given their own prerequisites in the form of geographical location, year of construction, population proximity and owner. These differences would also have affected the sawmill communities’ developments.
Furthermore, the sawmill communities were not only a tangible place, but also held a symbolic capital for its residents, which also would have influenced community development. As birth could not have been a decisive factor determining belonging in the sawmill communities, other unspoken agreements had to be made between the residents on what it should be based. Belonging was usually twofold. It included a mental component, a certain mindset among the residents, but also being physically present and residing on the site.

While chapter one will present earlier research and the theoretical perspectives, chapter two through eight have been divided into five specific parts, dealing with the different aspects of the establishment and demographic development of the sawmill communities. Chapter nine will thereafter summarise and discuss some of the most important results of the study.

A. Historical context and structural development
Chapter two aims to present a brief background to the development of the Swedish sawmill industry, mainly focusing on the 19th century. It is important to connect event and context in order to fully comprehend the development of the sawmill communities. Under what circumstances did the new steam powered industry evolve? What were its prerequisites and how extensive was its presence in the northern parts of Sweden?

Intertwined into the demographic development is also the sawmill communities’ structural and social organisation. Chapter three provides a brief background to the sawmill communities’ physical and social environments. How were the communities structured and organised and under what circumstances did the sawmill populations live and work? The social structures played an important part in community construction and the presence of the popular movements brought with it social changes that would influence social interaction within the sawmill communities and eventually help in the consolidation of the workers as an occupational group.

B. Population development and migration
Chapter four studies the general population development that occurred during the second half of the 19th century, with a special focus on Västernorrland County and the Sundsvall district. Before delving into the demographic properties of the population development, it is important to differentiate between the individual sawmills and see when the first settlers arrived to the mill sites and study the registered populations during the time period. Especially interesting is to analyse
aspects that could have influenced population development such as population proximity, year of construction and expansion possibilities.

Chapter five focuses on migration to and from sawmill areas. Community construction in the Sundsvall district was highly dependent on migration to populate the communities as more employment opportunities and more workers forced the sawmill owners to construct more workers’ quarters. How was the migration to and from the parishes and the sawmill areas characterised? Chapter five also aims to study migration to and from sawmill areas on a sublevel, focusing on internal parish migrations and the migratory relationship between sawmill areas and agricultural areas within the individual parishes. How was internal parish migration to be characterised, especially migration between agricultural and sawmill areas?

C. Residency and registration
The aim of chapter six is to study residency and official registration within the sawmill communities. This would have had a great importance for the sawmill populations’ claim of belonging as this seldom could be claimed through birth or ancestral presence. Church registration made a clear distinction between permanently settled and temporarily settled populations in terms of official residency and community belonging, because it is only the officially registered inhabitants who can be counted as actual residents. Still, the sawmill communities included many different types of residents, official and unofficial, permanent and temporary residents, and the sources used have helped to identify some of these workers. How many workers on site were actually officially registered and where did they live? Would residency have been equally important to all inhabitants in the communities? Those who were settled, how long did they stay?

D. Demographic structures
Chapter seven aims to delve into the sawmill communities’ demographic structures and the status of the communities as male dominated. How were the sawmill communities distributed demographically between the officially registered men, women and children? Were there any differences between the populations in non-sawmill areas?

This chapter will also analyse the presence of family and children within the sawmill communities. Is it possible to talk about the sawmill communities as family oriented? How many men and women were married? How many would have had children present in the households? Did any of these aspects change during the time period of the study?
E. Family and kinship

Chapter eight continues the discussion from chapter seven regarding family and kinship. The aim is to delve into their importance and presence within the sawmill populations within a specific cohort of workers. Practically, family and kin made up the structure of the core populations and they symbolised the communities’ internal population structures. The family made up an important social unit around which much of the communities’ social life was organised. The family, kin and social networks mediated “the experience of collectively, of community,” which would have made their contribution to the development of the sawmill communities imperatively. Family and kinship networks would have facilitated individuals’ recruitment, migration, marriage and assimilation. To what extent was kin present within the sawmill communities in the Sundsvall district? What role might kinship and kin networks have played? Were there any noticeable differences between individual sawmill communities?

1.3 Previous research

Research regarding the Swedish sawmill industry has mainly focused on the industry itself and has included everything from recruitment, migration, to work procedures and living situations. Jointly, the research offers a comprehensive description of the development of the Swedish sawmill industry. Population development during industrialisation was intertwined with industrial development and expansion and this affected all matters such as community, residency, family, kinship, migration, employment and recruitment. They played important roles during industrialisation. Much of this research has focused on northern Sweden, specifically the coastal regions, where the Sundsvall district has had a prominent feature. This has helped to put the development and establishment of the sawmill communities in a historic context and supported the analysis of what kind of communities they actually were.

This section aims to review previous research within different research fields relating to industrialisation and the Swedish sawmill industry. The purpose of this exposition is to highlight the three main structures relating to the sawmill communities’ demographic development: migration, family and kinship. Family and kinship provided important structures in the community and would have

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been an important aspect of community life. They promoted a sense of security and belonging and would have been valuable in the shaping of the industries through recruitment. Migration research has shown that the industrial areas recruited and employed large groups of workers and that these mainly were young single men, while others suggest that family migration to the sawmill areas was nearly as frequent, and if not more important, especially in relation to the construction of proper sawmill communities. Research regarding kinship suggests that family weakened during industrialisation in times of frequent migration, other results have indicated the opposite; that industrialisation strengthened the family unit.

The Swedish sawmills
- The sawmill communities

The sawmill communities became an important symbol of a new era, a new type of life and experience. Håkan Berglund-Lake wrote that the sawmill communities from the beginning had been constructed as a common sphere for the sawmill workers and their families. He claimed that people were drawn towards industrialised areas not just because of the economic benefits, but from a sense of community that arose out of the togetherness of belonging associated with these areas. It was a community of equals that included those with similar life situations and differentiated them from others who were excluded from it. Even after only having spent a short period in the community, the workers had acquired knowledge that outsiders did not have and would have had no possibility to share if they did not become members themselves.

Anders Norberg even argued that migration would not have dissolved the sense of community and kinship networks. Although many workers lost their interaction with people from back home, it was highly compensated with other kinds of relationships. In fact, Norberg claimed that the sense of community and belonging would have survived migration and wrote that there were often larger groups of migrants from the same place who migrated together. In a sense, they brought 'home' with them, which created a sense of security in the new environment.

The workers and their families in the sawmill communities were joined through their work and residency in a social and economic unit. This feeling of “us” and “them”, which was created in relation to surrounding environments, was not the

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7 Ibid. p. 11.
8 Ibid. p. 128.
10 Ibid. p. 80.
same as that found at foundry estates or in agricultural villages in pre-industrial settings. This new “us” was not all inclusive but cut through the communities and divided itself horizontally between different groups from within. Communities where the population had been settled for several years usually developed a local sense of “us”, which subsequently regarded any newcomers suspiciously. It could take years before becoming accepted and standing on the sidelines was frowned upon, belonging required involvement in community affairs in one way or another. This local “us” and “them” is something that would appear to have been common for many smaller communities all around the world. The introduction of popular movements would, however, have loosened the horizontal groups as it introduced other means of identification.

- Settlement and residency

Actual presence within the sawmill communities would have played an important role in community construction, which related both to consolidating individuals with different backgrounds into a population core as well as developing the communities’ social environment. Anders Brändström, Jan Sundin and Lars-Göran Tedebrand studied time of settlement in Sundsvall and Linköping. They found that while only a small group of migrants remained settled, the majority never stayed for a long time. The result also showed that “the town was characterized by a constant turnover with only a small, stable core [...] we therefore define ‘urban’ and ‘settled’ as those persons who spent a minimum of five years in an urban environment before migrating again.” Migrants who had been residing in town during that period of time have to be viewed as residents or at least “as having


12 Anders Brändström, Jan Sundin & Lars-Göran Tedebrand, “Two cities. Urban migration and settlement in nineteenth-century Sweden,” The History of the Family, Vol. 5/No. 4, 2000, p. 416. Wally Seccombe found similar patterns in British cities during the 19th century. He wrote that “urban influx also fostered subsequent moves within the cities [...] The combined effect of all forms of mobility was a remarkable residential transience.” For example, a quarter of all residents at specific addresses in Manchester in 1868 left within a year, “and 40 percent within two years.” In Liverpool the same year, 40 percent had left within the year and 50 percent had departed within two years (Wally Seccombe, Weathering the storm. Working – class families from the industrial revolution to the fertility decline, London 1993, p. 133).

13 Brändström, Sundin & Tedebrand 2000 p. 416. The article also makes a distinction between urban and rural migrants, claiming that urban migrants usually stayed for a shorter time than rural migrants. While urban migrants became more mobile during heavy industrialisation, rural migrants became more stable (Ibid. p. 425).
been adopted into local urban society. The migrant who stayed more than five years should therefore have considered themselves to have been settled and belonging to the local community.

Lotta Vikström found that migrants who arrived to the town of Sundsvall during industrialisation were more prone to remain for longer periods than migrants who arrived prior to the industrial boom. Among the pre-industrial migrants, men were more inclined than women to move more often, but among the migrants during industrialisation both genders “found reasons to stay for more extended periods.” Vikström suggested that the shorter stay for migrants in pre-industrial times confirms the tradition of circular migration over shorter distances. She wrote that drop in short-distance migration “over time might illustrate the decline of circular migration that frequently operated in pre-industrial times and in these parts of Sweden.” The migration pattern in the town of Sundsvall displayed that regional and local migrants were outnumbered by migrants having moved over longer distances.

- Husbands and wives

Leaving behind the agrarian lifestyle meant that the family members were assigned new roles. Within most working families the ideal of the husband as the sole breadwinner had by the end of the 19th century been firmly established. “Being able to obtain high enough wages to support one’s family became a hallmark of masculine respectability [...]” If a man made a decent living his wife could stay home with the children and they would not need to borrow or be forced into

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14 Ibid. p. 427. Between 1800-1869 “in the case of blue -colour workers, fewer than a third remained in Sundsvall for more than five years.” Less than one in five remained in town for more than five years, social class notwithstanding, while more than two-thirds remained less than a year between 1870-1879. The out-migration continued to be high and in-between 1886-1896 “still a third of the population left the towns less than a year after arrival” (Ibid. p. 425. Lotta Vikström, Gendered routes and courses. The socio-spatial mobility of migrants in nineteenth-century Sundsvall, Sweden, Umeå 2003, p. 132).

15 Vikström 2003, p. 126. Albert Blumenthal found in the frontier mining town of Mineville that most residents who had stayed in the area had not done so because they had shared a particular love for the place, but rather because of positive circumstances or expediency (Albert Blumenthal, Small-town stuff, University of Chicago Press 1932, pp. 34-40).

16 Vikström 2003, p. 97.

17 Seccombe 1993, p. 114. Work in the factories was created around male workers and the ideal of the man as the breadwinner of the family was connected to masculinity. Men could achieve this by being a good provider for his family and perform physically demanding labour (Sonya O. Rose, Limited livelihoods. Gender and class in nineteenth-century England, University of California Press 1992, p. 130). Being a man and manly “was to be honourable and respectable, which meant being brave, strong, and independent.” The image of the ideal worker was often contradictory to people’s actual experiences (Ibid. p. 15).
debt. Wives therefore needed to become economically creative to perform smaller miracles with their husbands’ small incomes as this would be crucial for the family’s economic survival. For many families working mothers were an economic resource and the deciding factor between complete poverty and a manageable situation. It was not unusual that wives were forced to find a supplemental income to the husbands’ wages. Some husbands and wives even shared responsibility, both as providers and in the household. Hareven found in her studies of American industries that “some men, especially those who worked with their wives in the same workroom, appreciated their wives desire to work.”

Growing social opinions during the latter half of the century, however, claimed that women working outside of the home had negative repercussions for their children, undermined their femininity and the masculinity of the husbands as the families’ provider. As a result, the importance of women’s work in the home would have increased during the industrial period in 19th century Sweden, according to Birgitta Skarin Frykman. Still, as the primary caregiver, responsible for the well-being of her family, the wife gained a powerful position within her family. This, in turn, resulted in that the home increased its symbolic meaning and that motherhood became increasingly idealised. The ideal women were, according to Reinhold Olsson, a woman who managed to keep her family out of debt, keep a clean home, clothe her children in neat and clean garments, keep house to serve her husband and who worked to supplement the family income without leaving the confines of the home.

18 Secombe 1990, p. 115.
20 Skarin Frykman 1990, p. 184. It seldom generated sources though, which means that female employment usually is underestimated.
22 Leonore Davidoff, Megan Doolittle, Janet Flink & Cathrine Holden, The family story. Blood, contract and intimacy 1830-1960, London 1999, p. 27. Secombe noted that married women were vulnerable to accusations of not performing their duties and ignoring the well-being of their children (Secombe 1993, p. 199). In the Belgian town of Verviers, Alter found similar attitudes towards female work. “The large-scale employment of women and children in a non-domestic environment became a cause of concern, and government inquires reviled poor working conditions, long hours worked by children, mixing of sexes at work and a catalogue of horrors” (Alter 1988, p. 7).
24 Olsson 1949, pp. 86-87. Skarin Frykman 1990, pp. 241, 242, 289. According to Skarin Frykman all of these aspects helped to strengthen the traditional role of women during industrialisation.
It was an ideal that was difficult to live up to. Being the wife of a worker was not easy. Louise Tilly claimed that women in general had few chances “to develop concepts of themselves with individual needs” during industrialisation.25 Being married, managing a home and raising a family was a woman’s duty and were deeply intertwined into a large part of their identity as women.26 In a diary note from 1923, the wife of a worker in southern Sweden wrote about her life as a worker’s wife, which witnesses the hopelessness many workers’ wives would have shared over the years.

These days after Christmas have been terrible grey and depressing, everything is normal but still I feel down. It is probably due to a lack of – yeah, lack of what? It is not possible to sit here and make a list. There are those who lack their daily bread, I have bread. And still, still I long for – for what? Somebody to talk to that think alike? That somebody does not exist. A book that I really like? We cannot afford it. Go to sing and music gatherings sometime? Maybe once a year should be enough. Many, many people does not need more than food and water. Why can I never learn that a wife of a worker does not need more than that?27

- Friends and neighbours

As many residents within the sawmill communities would have lacked extensive networks of kin, this would have made social interaction between friends and neighbours an important aspect of community life. Marilyn Strathern stated in her study of Elmdon that domestic reciprocity between close friends and neighbours, to help and support one another in the daily household management, was fairly common.28 They watched each other’s children, assisted one another in domestic chores such as washing and baking. This would have strengthened community belonging and a feeling of unity and solidarity, at least among the workers’ wives and daughters.29

There were usually strong collectives of women within the working communities, whose influences affected both housewives and employed women. The collectives that arose were a result of the groups’ homogeneity, which included

26 Davidoff 1999, p. 85. Everything she did was to emanate from the need and welfare of her family (Olsson 1949, p. 89).
everything from shared residences to life experience and hard work. These aspects played important parts in the collective female group in the industrialised communities.\textsuperscript{30} Being an accomplished mother and housewife helped the families in their search to gain respectability. It also helped women gain a positive identity and the respect of other women in the community.\textsuperscript{31}

It was important, however, not to exert oneself too much. Björn Horgby claimed that status quo was an important factor that needed to be nurtured and upheld by all. People needed to stay within the socially accepted norms.\textsuperscript{32} Maintaining a friendly face with the neighbours was imperative, especially if one wanted to reap the rewards of companionship and small acts of mutual aid; it was essential to conform to local standards and expect to be included in the gossip.\textsuperscript{33} Smaller communities lacked privacy due to their size and residential situation. Everyone knew everything about everyone.\textsuperscript{34} Although, Elizabeth Bott suggested in her study of British working class families that being the target of gossip was not necessarily a negative thing. It could be “a sign of belonging to the neighbourly network.” Not all gossip suggested belonging and acceptance, failure to socialise with neighbours would have exposed people to being gossiped about. Those individuals would have been considered odd and would eventually have been left alone, which would have lead to no gossip and no companionship and resulted in not belonging.\textsuperscript{35}

\textbf{Migration}

\textit{Migration during 19\textsuperscript{th} century Sweden}

Migration was one of the cornerstones in the construction of the sawmill communities and industrial development, but it was not only a phenomenon linked to industrialisation. Pre-industrial migration may have had a circular, short-distance characteristic, but it had occurred frequently within the local communities, especially among the lower classes. Martin Dribe found in his research of southern Sweden between 1829-1866, that 80 percent of the individuals over 25 years were


\textsuperscript{32} Horgby 1993, p. 168.

\textsuperscript{33} Elizabeth Bott, \textit{Family and social networks. Roles, norms and external relationships in ordinary urban families}, London 1971, p. 67. Blumenthal 1932, pp. 112-113, 128-130. Blumenthal wrote that there was also a fear of gossip; people did not want to be included and when they were, it was something that was complained about (Ibid. pp. 142-143).

\textsuperscript{34} Blumenthal 1932, pp. 48, 128-140.

\textsuperscript{35} Bott 1971, p. 67.
born within a 15 km radius of where they worked. Dribe identified three types of migrants; children leaving home for the first time, families migrating together and work related, circular migration among servants; the latter being the most common.

Migration was usually the consequence of voluntary or involuntary actions leading to different life decisions dependent upon external circumstances. Economic fluctuations may have lead to unemployment or to more advantageous employment opportunities in other areas. It should not be assumed though, that the economic conditions between villages and towns varied too much, implying that it was not the reason behind pre-industrial migration. Instead, early migration should be understood as a response to economic hardship and the lack of security, rather than the differences in wages between countryside and town.

Personal tragedies, such as the death of a loved one, may have forced migration upon an individual or family due to a loss of income. Still, reasons for migration varied in regards to age, marital status, the number of migrants, social status and presence of social and kinship networks. This was true for migration in general and was not linked to either rural or urban migration. Youths and unmarried in-


[37] Dribe 2003, p. 66. Dribe and Lundh described the servant tradition as an exchange of children between families and villages. Over time, the tradition of servants changed and would become more of a class-phenomenon than a part of every peasant youths’ experiences (Dribe & Lundh 2002, p. 8).

[38] Dribe 2003, p. 135.

[39] Ibid. p. 16.

[40] Dribe described two general stresses behind migration in the pre-industrial community, economic and demographic stress. The outcome of both stresses would have developed differently depending upon the age, size and social status of the family (Martin Dribe, *Leaving home in a peasant society; economic fluctuations, household dynamics and youth migration in southern Sweden 1829-1866*, Lund 2000, p. 99). Economic stress related to fluctuations in the local economy and was caused by having less money to spend. This could, if not dealt with, lead to starvation and death. It was usually those with the least resources who were most affected by economic fluctuations. Because migration patterns in Dribe’s research display that most family migrations were conducted within the local area, it must be suggested that the strategy could not have been as effective as if they would have left the area (Dribe 2003, pp. 20-28). Demographic stress influenced and shifted the balance of the family structure, usually the result of a death within the family. Assigned roles had to be reassigned based upon new circumstances to cover the needs of the family. If there were no older siblings to accept parental responsibility, the family had little chance of surviving as a group (Dribe 2000, pp. 26, 72). Demographic stress therefore increased family mobility (Dribe 2003, p. 135).

[41] Ingrid Eriksson & John Rogers, *Rural labour and population change. Social and demographic developments in east-central Sweden during the nineteenth century*, Upp-
dividuals were usually more inclined to migrate than older and/or married family members.42

Robert Ostergren found in a study of Rättvik in Dalarna, that “much of the local family migration was kinship related, in that it involved a move from the farm of one spouse’s parents to the farm of the other parents. Such moves were commonly undertaken as an adjustment to change in the economic situation of one of the linked households.783

Migration was an investment even though the cost of migration usually did not outweigh the cost of staying or the uncertainty of finding employment elsewhere. Migration therefore had both direct and indirect gains and losses.44 Dribe claimed that the decision to migrate should “be viewed as a joint decision.”786 Family played an important part in migration decisions, whether only one member of the family left home or if the entire family were uprooted.46

During industrialisation migration would come to play a larger, but different part in population movements. It would take on such proportions that it would affect the structure of society.47 Migration over longer distances had previously been connected with high costs, but an emerging infrastructure and increasing labour demands lowered the costs and made longer migration, especially for families, more attainable.48 Ingrid Eriksson and John Rogers wrote that migration usually went from rural to rural, or rural to urban and/or industrial areas. It was commonly undertaken in stages or chain-migration. The result was the transference

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42 Eriksson & Rogers 1978, p. 199.
44 Dribe 2000, p. 104. While Dribe saw migration decisions as family decisions, Davidoff noted that the concept of household strategies can be questioned as they make “assumptions about the household as a unified social actor” (Davidoff 1999, p. 34).
45 Dribe 2003, p. 26. Eriksson & Rogers found in their study of Åsunda in east central Sweden that family migration appears to have increased and become more significant during the second half of the 19th century. “In 1846, 39.0 % of all migrants moved in family groups; in 1870 48.8 % and in 1895 57.9 % did” (Eriksson & Rogers 1978, p. 201).
46 Eriksson & Rogers 1978, p. 185. Michael Todaro claimed migration was a “selective process affecting individuals with certain economic, social, educational and demographic characteristics [and] relative influence of economic and non-economic factors may vary not only between nations and regions but also within defined geographic areas and populations” (Michael P. Todaro, “Rural-urban migration, employment and job probabilities: Recent theoretical and empirical research,” Economic factors in population growth, Ansley J. Coale (ed.), London 1976, p. 368).
of people from “less densely populated rural areas to more densely populated ur-
ban and industrial areas.” Industrial and urban areas in general would become the 
recipients of large streams of migrants and migration over longer distances
increased. Vikström suggested that an increasing frequency of migration over longer distances showed that migrants had “thoroughly considered their choice of destination.”

- Recruitment and migration

Migration to the industrialised areas was tightly linked to recruitment and em-
ployment opportunities offered in these areas. Swedish industrialisation and mig-
ration could, according to Lars-Göran Tedebrand, be divided into three phases.
The first phase was characterised by a high demand for labour and results indi-
cated a consistent flow of workers from the local communities, parishes and clo-
sest provinces. It was mainly characterised by male migrants and occurred over shorter distances. During the second phase, industrial production increased and the demand of a continuous flow of labour supply was still considerably high. In-
migration to the district had decreased slightly and it became more common for people to migrate over greater distances. During the third phase, which took its beginning during the early 1890s, the district experienced increased population stagnation. There were no more expansions and the demand for labour successively decreased. In-migrants from further away became fewer while out-migration and emigration continued to increase.

Recruitment processes and industrial organisation would have had an impact on the sawmill families and their household structures. The recruitment strategies were usually connected to the mills’ overall economic situation and to the

50 Ibid. pp. 199-200. Short-distance migration tended to occur more frequently and was by nature circular and more common within the agricultural areas. Long-distance mi-
gration tended to be more directed to urban and industrial areas (Ibid. pp. 178, 180).
51 Vikström 2003, p. 127.
52 Lars-Göran Tedebrand, "Demografisk stabilitet och förändring under det industriella genombrottet", Historieforskning på ny vägar. Studier tillägnade Sten Carlsson, 1412-1977, Lund 1977, p. 255. Björn Rondahl wrote that in the beginning of industrialisation, most industries found sufficient workers among the local populations. Sawmill work was seldom more than a supplemental income. Closeness to the agrarian community made it easy for agricultural workers to move between the different areas, taking employment where it was offered without having to settle at the mill site. Most would live within walking distance and went home every night (Björn Rondahl, Emigration, folkomflyttning och säsongarbete i ett sågverksdistrikt i södra Hälsingland 1865-1910. Söderala kommun med särskild hänsyn till Ljusne industrisamhälle, Stockholm 1972, p. 29).
53 Tedebrand 1977, p. 256.
54 Ibid. p. 260.
composition of local unemployment levels. According to Ove Lundberg, regional recruitment should have had crucial importance for the development of the saw-mill industry in the Örnsköldsvik area. Different employers utilised different employment strategies, making different geographical decisions on how employment opportunities would be promoted. Some employers advertised in newspapers and sent out agents to procure workers, others relied upon a local labour force and hiring through kinship and social networks. Others did not need to either publish advertisements in papers or send out agents as they experienced a never-ending stream of new and willing migrants in search of employment. Björn Rondahl presumed that the seasonal workers went home with tales of work, which would have induced more from the same areas to return the following year. He found in his study that seasonal migrants arriving from Värmland to the sawmills in Hälsingland, usually arrived in larger groups who continuously returned each season.

Recruitment to the industries depended upon communication as a vital part of spreading information about possible employment opportunities. Seccombe wrote that British employers relied heavily upon workers’ kin networks to find suitable workers to hire, usually as a favour to loyal workers. It was unusual for different generations from the same family to be employed simultaneously. Strathern wrote that the most important way of securing employment would have been between father and son and stated that there would have existed a certain degree of job inheritance. Ostergren found similar tendencies among workers connected to Matfors sawmill and the practice of work being inherited from one generation to the next within the same households. Seccombe suggested though that this was a pattern that had started to decrease by the end of the century, at least within British industries.

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56 Ove Lundberg, Skogsbolagen och bygden. Ekonomisk, social och politisk omvandling i Örnsköldsvikområdet 1860-1900, Umeå 1984, pp. 7, 93.
58 Rondahl 1972, p. 115.
60 Strathern 1981, pp. 76-77.
62 Seccombe 1993, p. 89. In 1869 “roughly three sons in four entered their fathers’ occupation and by the turn of the century this had decreased to one in two sons. The declining number of father/son teams is explained as the work having lost some of its splendour and had much to do with the son’s own will than it had to do with employers refusing to hire.”
Tamara Hareven described the situation within American industries and indicated that family played an important role in both recruitment and employment as the family was “labour recruiter of its own members for factory work.” She suggested that employers found it preferable to hire entire families and their kin because they could easily use their workers’ existing kinship networks to find reliable workers. Kin would act as brokers between kin and the employer in arranging the best possible employment.

Rural [...] and urban families functioned as crucial intermediates in recruiting workers from the countryside in the early phases of industrialization. The very success of the early industrial system depended on a continuous flow of labour from the countryside to the newly industrializing centres, which usually followed kinship lines.

Family recruitment had according to Hareven, been “indispensable to the early development of the industry” in New England.

- Migrant types

Robin Flowerdew claimed that there had existed two specific types of labour migrants, the speculative and the contracted migrant. These two types of migrants could easily be applied to the Swedish sawmill industry. The speculative migrant took a chance by moving and did not have employment secured at the final destination. The second type was the contracted migrant who had secured employment before departing and was thus able to support himself upon reaching his destination. It is difficult to speculate as to which of these migration strategies was most successful. The need within the industries changed depending on the season and not even a promise of work may have resulted in employment.

The presumption that males would have dominated in-migration lacked support within Timrå parish according to Norberg and Åkerman. They pointed out

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66 Hareven 1990, pp. 221-223.
that even if in-migration to the sawmill areas was fairly proportional between men and women, out-migration were dominated by women. They linked this to a failure of attracting a partner and lack of employment opportunities.\textsuperscript{69} In fact, migration would have been totally dominated by families. This migration was a part of chain migration, which had taken place under a longer time, thus stressing the importance of long-range migration in relation to the sawmill industry.\textsuperscript{70} Cornell also noticed that the early industries attracted families to settle at the mill sites.\textsuperscript{71} The full-time employed sawmill workers usually had their entire families working in the sawmills to some extent.\textsuperscript{72} It was families who made up the core of the working force at the sawmills during the 1860s and 1870s. Family migration would therefore have represented a large part of the early migration towards the sawmills.\textsuperscript{73}

This is also supported by Tedebrand’s findings that imply there was the strong family migration that functioned as the greatest equaliser in migration differences between the sexes prior to 1890. He stated that there would have been an exceptionally high proportion of married workers during the expanding phases of industrialisation.\textsuperscript{74} Tedebrand found evidence that industrialisation had stimulated family growth, something that continued to be strong throughout the 1880s combined with a high marriage frequency. As the industry experienced a recession during the early 1890s, the families’ earlier central role and its position within the sawmill community would have weakened. He wrote that it was obvious that the families’ importance in the sawmill community could not be stressed enough.\textsuperscript{75}

- The sawmills and local agricultural populations

The sawmill communities became important economic enclaves in the rural landscape and the employment opportunities that the mills would have generated should have been an attractive option for the local agricultural populations. The industrial areas held a certain appeal and Mats Rolén noted their attractiveness when it came to finding better paid work; even to the extent that it sometimes had negative effects on farming.\textsuperscript{76} It is therefore assumed, according to Rondahl, that

\begin{itemize}
  \item \textsuperscript{69} Ibid. p. 113.
  \item \textsuperscript{70} Ibid. p. 97.
  \item \textsuperscript{71} Lasse Cornell, Sundsvallsdistriktets sågverksarbeteare 1860-1890. Arbete, levnadsförhållanden, rekrytering, Göteborg 1982, p. 226.
  \item \textsuperscript{72} Ibid. p. 118.
  \item \textsuperscript{73} Ibid. pp. 225-226.
  \item \textsuperscript{74} Tedebrand 1977, p. 257.
  \item \textsuperscript{75} Ibid. pp. 261, 258, 269.
  \item \textsuperscript{76} Mats Rolén, Skogsbygd i omvandling. Studier kring befolkningsutveckling, omflyttning och social rörlighet i Revsunds tingslag 1820-1977, Uppsala 1979, p. 30.
\end{itemize}
industrial work would have been attractive to the local populations. At Söderala industrial area in Hälsingland, Rondahl found that even though the industrial areas were characterised by a circulation of people, the industrial area mainly attracted workers from remote areas and not from the local villages. The frequency of internal migration between local villages and the industrial areas were low. He concluded that there apparently was a rural/industrial barrier hindering migration between agricultural areas and industrial areas.77

Tedebrand claimed in his dissertation that the population gains in the industrial areas in Västernorrland were dependent upon in-migrants from outside the county. It was therefore to be expected during the 1870s and 1880s that the majority of the populations in the sawmill communities would not have been born in the district.78 In fact locally born men from the agrarian villages seem to have been underrepresented at the sawmills. Berglund-Lake even stated that the industries in the Sundsvall district employed the fewest local workers than any other industrial area in northern Sweden.79

The situations should have been different at the sawmills. At Matfors sawmill during the first half of the 19th century almost three quarters of the workers were born locally, while the foundry employed few men with local roots. Ostergren also detected a difference among the seasonally employed workers. Almost all workers came from the parish prior to 1850, but by 1860, this had decreased to 64 percent.80 Seasonally employed workers residing in Tuna parish decreased even further during the 1870s to "slightly more than a third." Some sort of barrier had, according to Ostergren, been raised between the industrial and agricultural economies, but the reasons behind this remained unclear.81

Norberg made a direct reference to the presence of a rural/industrial barrier in his study of the population in Alnö parish in Sundsvall.82 He defined it as a feeling of hesitation and resentment among the local population when it came to the prospect of mingling with in-migrants.83 This was made especially apparent in relation to marriages; the study clearly showed that the local population was hesitant in marrying in-migrants. The local population in Alnö also showed a similar hesitation when it came to employment at the local sawmills and moving to the sawmill communities. The study showed that the number of families living at the

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77 Rondahl 1972, pp. 41, 63-64.
78 Lars-Göran Tedebrand, Västernorrland och Nordamerika 1875-1913. Utvandring och återinvandring, Uppsala 1972, p. 115. By 1890, 52 percent of the population in the Sundsvall district was in-migrants.
79 Berglund-Lake 2001, p. 29.
80 Ostergren 1990, pp. 43-44.
81 Ibid. p. 46.
83 Ibid. p. 65.
mill sites in Alnö increased between 1860-1910, but few originated from the local villages in the parish.\(^\text{84}\) Norberg also found evidence for a population increase in the villages and claimed that migration more so tended to go from the mills to the local villages than the other way around. He concluded the presence of a rural/industrial barrier in Alnö parish.\(^\text{85}\)

Likewise, Cornell raised the question of a barrier in his dissertation about the sawmill industry in Sundsvall. He saw the ever growing recruitment of workers to the mills increasing the demand of produce and other social services, which was provided by the local populations of the parish. Although Cornell did not give a definitive answer to its actual presence, he only speculated that there might have been a barrier and that the causes to the observed phenomenon might be linked to the supply and demand of labour demands within other parts of the community, which may not specifically have been related to the sawmill industry.\(^\text{86}\)

**Family and kinship**

* - A weakened family?

Leonore Davidoff wrote that the most widespread belief about the historic family was that they had gone through a very dramatic and significant change during industrialisation. The ideal image of rural life implied several generations living and working together, close to neighbours and relatives. Kinship “knit people together and gave them social support and status, and timeless rituals associated with birth, death and marriage cemented these ties.” Industrialisation supposedly changed all this and the family became divided as manual labour was transformed from a joint family enterprise into an individual venture.\(^\text{87}\)

Angelique Janssens suggested that the strong family oriented values and solidarity that many families and kin felt for each other had been shaped in a pre-industrial past when families had worked together in a collective. The sense of solidarity continued to shape the lives of families as they entered the industrial community. “Industrialisation in its early stages did not destroy these values, people rather made use of them in various ways to address circumstances viewed

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\(^\text{84}\) Ibid. p. 82.
\(^\text{85}\) Ibid. p. 78.
\(^\text{86}\) Cornell 1982, pp. 298-299.
\(^\text{87}\) Davidoff 1999, p. 17. E.P. Thompson, for example, claimed that relationships between family members were put off balance as women became wage earners and the children were brought into the mills. One of the major consequences was that work and life became separated and that the family was torn apart every morning by the factory bell (E.P. Thompson, *The making of the English working class*, Harmondsworth 1981, p. 455).
as problematic or otherwise unacceptable." Although, Hareven wrote that when
the family relocated to the industrial communities, it had to face new challenges
that would affect all family members. Everyone had their own schedules and times
to keep.59

It is impossible though to know what process of industrialisation really influ-
enced family patterns and how.90 William Goode stated that family patterns could
not be predicted from economical and technological innovations only.91 Nor could
it really be known what influence industrial employment may have had on the
lives of the workers, according to Ostergren.92 Goode asserted that the Western
family systems had had an effect on industrialisation, but that change regarding
family patterns had occurred already prior to industrialisation as a way of prepa-
ring the lower classes for life in the factories.93

David Sabean stated that “ties of kinship were strengthened in time of ‘moder-
nization’ in order for families to deal with the social and economical developments
emerging.”94 Goode suggested that kinship structures among British families star-
ted to disappear during the first stages of industrialisation.95 It may be argued
though, according to Seccombe, that the industries’ economic insecurity and wor-
kers’ constant migration made it difficult to “keep families together and ensure
their residential permanence, particularly among the lower strata of society.”96

- Family and kin

Kin networks and forming alliances helped to create a sense of community and be-
longing and were equally important in the rural and urban communities. Michael
Anderson wrote that most people deliberately chose to live close to kin and many
tried to, suggesting that for these individuals, family and kin provided strong sig-
nificant functions.97

88 Angelique Janssens, Family and social change. The household as a process in an in-
89 Hareven 1982, pp. 6, 166.
91 Ibid. p. 25.
94 David Sabean, “Aesthetics of marriage alliance: Class codes and endogamous marriage
in the nineteenth-century propertied classes,” Family history revisited. Comparative
perspectives, Richard Wall, Tamara Hareven & Josef Ehmer (eds.), University of Dela-
95 William Goode, The family, Englewood Cliffs, N.J 1964, p. 59. Goode claimed that kin-
ship structures usually were weaker in cities than in rural areas.
97 Michael Anderson, Family structure in nineteenth century Lancashire, Cambridge
People learned to identify with specific groups and individuals, which suggests that the actual level of kinship sometimes had little to do with factual kinship. Nor did close blood connections necessarily depict an accurate situation. There were, as Strathern pointed out, an “ambiguity about the extent to which relatives by marriage are counted as ‘relatives’ at all.” People would not have included relations of an in-coming spouse as kin, an attitude most likely also applicable to offspring of second marriages. Some relatives were just classified as being closer than others. It would be difficult and too costly to include all of one’s relations and that is why kin were classified as close or distant. “No special terms mark out the more distant circle of kin – they are visualised simply as weakened forms of nearer relatives: distant ‘cousins’, remote ‘aunts and uncles’.” There were no set rules as to which kin were included or excluded, their residence and physical closeness notwithstanding. In that respect, the village could function as a boundary “in such a way as to diminish the maintenance of ties beyond it.” Strathern was thus implying that most villages created clear borders and did, despite frequent interaction between different villages, become isolationistic in some respects. Because even though kin connections among the residents in the village were regarded as contributing structure to the community, it was viewed both negatively and positively. Strathern noted that kinship ties were easily experienced as a boundary by outsiders and non-kin. This was usually enhanced by a certain degree of self-awareness from the village core, which most likely would raise barriers against outsiders, confirming a notion of division within the population and between villagers and non-villagers.

- Kinship networks

Kinship networks would have been an important, if rare, presence within the saw-mill communities and the kin present would have been important to migrants as they were the only social insurance they had in a new place of settlement. The importance of kinship for the working class communities was, according to Seccombe, noted by the way in which children were encouraged to call neighbours auntie and uncle. Families tended to form their own sense of loyalty within their

100 Ibid. p. 4.
101 Ibid. p. 71.
102 Hareven 1990, p. 226.
103 Seccombe 1993, pp. 138-139. Seccombe claimed that in lack of social and kinship structures in the community, people were never late in establishing new networks. Although, these allegiances did not have to be made permanent in order to be helpful and functional, temporary liaisons could prove just as useful. New contacts would be formed
respective networks, which facilitated to provide aid to kin in times when they required help. Consequently, “the strength of locally based kinship networks lay in their stability; the strength of long-distance kinship networks was in their fluidity and continuous reorganisation to meet new needs.” Kinship as well as social ties would therefore provide bridges broadening individuals’ networks.

Migration would affect families’ connectedness towards their kin and while some may have chosen to remain in the place where they were born, others never stayed long in one place. The connectedness within the network depended upon how the family related to their kin. While some may have chosen to “introduce their friends, neighbours and relatives to one another,” other families may have chosen not to, or been unable to do so.

Mobility reduced family and kin to what appeared to be fairly closed groups, thus producing “an image of closure” with clear cut-off points. People who left were thus no longer considered a part of the communal belonging. Individuals who migrated frequently were less likely to have maintained networks with extended kin and friends. Short-time settlement would have made it more important to make new temporary connections in the place of residence than trying to keep contact with older networks. Bott wrote that such allegiances may have been as difficult to maintain as those within the own kin network would have regarded as more important, especially if a migration occurred frequently.

Bott claimed that connectedness between kin would have grown stronger if they had been able to help each other occupationally. She distinguished between two types of networks, close-knit and loose-knit networks and argued that close-knit networks were more likely to develop if husband and wife remained in the area where they had grown up. This allowed for daily interaction between kin in a shared social setting. Smaller, close-knit networks were frequently encountered in certain rural areas of industrialised communities with stable populations. Networks tended to become loose-knit if individuals did not interact with kin directly. The family unit would have been forced to work together in a different way as substitutes with neighbours and work colleagues during the migration process and these relationships could be made permanent through marriage between two families in a new area of settlement (Ibid. pp. 60, 19, 87).

104 Seccombe 1993, p. 60.
105 Hareven 1990, p. 226.
106 Seccombe 1993, pp. 138-139.
109 Bott 1971, p. 75.
110 Ibid. pp. 94-95.
111 Ibid. p. 75.
112 Ibid. pp. 124-125.
113 Ibid. p. 92.
than they would have done if they would have had kin close by. Having no outside support to rely on, they would seek to strengthen their relationship but also to try to establish relationships with individuals outside the kin circle.\footnote{Ibid. pp. 94-95.}

Strathern wrote that local in-migrants would have had closer contact with their kin than other in-migrants from more remote areas. Relationships between residents of different villages remained highly personal.\footnote{Strathern 1981, pp. 156-157.} Strathern and Blumenthal both suggested that people paid little attention to the contacts of others.\footnote{Ibid. p. 174. Blumenthal 1932, p. 211.} Bott also reached a similar conclusion, stating that networks were highly individual and the connectedness within the networks depended upon the individual members of the kin network.\footnote{Bott 1971, pp. 97-98.} Thus, type of kinship networks would not only differ between families and communities, but also within communities.\footnote{Ibid. p. 104.}

Mark Grenovetter studied the existence of what he called strong and weak ties between different groups and stated that “the major implication […] is that the personal experiences of individuals are closely bound up with larger-scale aspects of social structure, well beyond the purview of control of particular individuals.”\footnote{Mark S. Grenovetter, “The strength of weak ties,” The American Journal of Sociology, Vol. 78, No. 6, 1973, p. 1377.} Grenovetter claimed that even though strong ties within close-knit groups were important, weak ties bridging different close-knit groups were actually more significant to the individuals as it connected smaller close-knitted groups with each other by means of relaying information.\footnote{Ibid. p. 1365. Acquaintances are comprised of low-density networks while close friends were included in densely knit networks (Mark Grenovetter, “The strength of weak ties: A network theory revisited,” Sociological Theory, Vol 1, 1983, p. 202).} Without weak ties, information would have been confined to news from within the close group of friends. In the same way, without weak ties, information from within the close-knitted group could not be shared with others. Weak ties thus enable information to reach more people and would therefore have been an important resource in making mobility opportunities possible. Grenovetter suggested that by changing jobs, the individual did not only move between networks but would also have created a link between the networks; a link of the same kind “which had facilitated his own movement.”\footnote{Grenovetter 1983, pp. 202, 205. Grenovetter 1973, pp. 1369-1373.} This would imply that strong ties have an inherent weakness.\footnote{Grenovetter 1983, p. 204.} Still, strong ties also had a high value as they can motivate individuals to be of assistance and would, according to Grenovetter, have been more available.\footnote{Ibid. p. 209.}
Bott stated that loose-knit kinship networks were most common in areas with large population turnovers. The position of the family and kinship networks may have had a weakened position in industrial areas with an emphasised seasonal character, but these circumstances may also have strengthened the family unit if they had no kin close by. Family and kinship might have had a stronger position within industrial communities that had larger settled populations, but this may also have weakened the family unit to the advantage of larger kinship networks. It is, however, likely that the family unit as such would have played a greater and more central role for migrants than for settled populations.

- Kinship and migration

Janssens claimed that family played a key role in the process of migration and in the process of adjustment afterwards. "In many instances the family network functioned as an agency directing and facilitating migration." Kin ties, whether ‘real’ or ‘fictive’ were important source of material and emotional support during the migration and settlement process. Migrants who settled had better prerequisites to maintain their kin networks and forge new ones, especially if kin lived close by and worked together. A family who commanded an effective kinship structure could forge ahead of families and individuals who were not so fortunate.

Goode claimed that even though kin networks could contribute to individuals’ mobility, this would be more linked to a lack of kin. Robert Bieder indicated in his study of Benzonia, Michigan that kinship ties and persistence were strongly linked to each other. Kinship ties in the community meant a greater likelihood for longer and permanent settlement. Bieder found, for example, that people who married outside the local community were more prone to leave while those who married within the community were more likely to stay. Those who married within established kinship networks showed an even greater tendency not to migrate. Bieder’s results suggest that kinship ties acted as a barrier in regards to

125 Bott 1971, p. 104.
126 Ibid. p. 75.
129 Bott wrote that if the husband was “engaged in an occupation in which his colleagues are also his neighbours, his network will tend to be localized and its connectedness will tend to be high” (Bott 1971, p. 105).
130 Goode 1964, p. 59.
131 Goode 1965, p. 12.
migration. “Only those who could not marry into the extended family networks, regardless of their wealth, perceived opportunity in migration.”

Ostergren referred to previous research by R.J. Johnston on populations in Yorkshire which had shown that more organised kinship networks would have been resistant to migration. More disorganised networks would also have had a larger tendency to migration because of a lack of networks and weaker personal ties to the community. However, Ostergren could not find any such tendencies in his study of Rättvik in Dalarna, but rather saw signs of the opposite. Dribe and Lundh claimed that attachment to the parish of residence seems to have been an important factor behind the propensity to migrate. It was enough for one of the spouses to have been born outside of the parish for the decision to move further away from the current place of residence to increase. This lessened the probability that they would migrate within the parish of residence. If both husband and wife were born in another parish Dribe concluded that the place of birth did not lessen the tendency of migration; rather it influenced where they migrated and settled down.

1:4 Theoretical framework and definitions

Defining community

Community is a complex concept and there is really no straightforward way to define all aspects of community as there are differences. Peter Hamilton wrote that community can be viewed as a concept in the studies of human society or as an ideological notion. Anthony Cohen distinguished between two fundamental archetypes, traditional communities where everyone knows everybody and communities characterised by a greater anonymity. Graham Crow and Graham Allan even implied that communities could be imagined. While geographic communities were bound to a specific place, social communities could reach far beyond
the geographical boundaries and were as the symbolic communities more related to a specific mindset than any physical place.  

Subordinate to geographical communities were occupational communities that had arisen in a specific place around a specific industry and they were traditionally close-knit communities; leaving a “heavy imprint on local social relationships.” As a concept then, community “provides both a means of encompassing a wide variety of social processes and an idea which [...] refers to symbols, values and ideologies [...] People manifestly believe in the notion of community, either as ideal or reality, sometimes as both simultaneously.”

Defining the sawmill community
The sawmill communities were strongly linked to the notion of occupational communities, as they were established and developed around one industry. They were not generally traditional or close-knit. The sawmill communities were migrant communities, as the majority of the populations would be identified as migrants.

As proposed by Cohen, these communities would therefore have been characterised by greater anonymity, at least in their initial stages.

The sawmill communities were products of their time. They were geographically, socially and symbolically constructed around industries characterised with high population turnovers. The sawmill communities and its populations were therefore not fixed but behaved as living organisms, forever expanding and retracting as in- and out migration frequently changed the population structures. To understand the sawmill community as a concept it needs to be deconstructed. It is mainly supported by three intertwined structures.

1. The sawmill communities as specific geographic locations
The sawmill communities were communities in the sense of a specific geographic location, a locality, a physical place separate from the agricultural communities. Berglund-Lake claimed that the residential situation within the sawmill communities separating the sawmill workers from the agricultural villages would have created a mental barrier between the agricultural and the industrial areas. This in turn would have created a physical, geographical and symbolic boundary and distance to the surrounding environment. As Cohen implied, by definition then,
“the boundary marks the beginning and end of a community” encapsulating the identity of the community and the individual that is required for social interaction. The sawmill communities should, however, not be viewed as closed off by defined geographic borders. The residents continued to have connections to the outside world, both through kinship and social networks.

In practice [...] town and country were often united into one kinship network with reciprocal exchange of services, and, indeed, reciprocal transfer of members. Indeed, the relatively short distance which many migrants had come made the maintenance of this kind of system a relatively easy affair.145

2. The sawmill communities as social units
The sawmill communities were a social organism with specific social systems that co-ordinated both work and private life. Strathern wrote that a community often is imagined as a social unit, “although, there is more to this than just some vague in-group feeling.”146 Blumenthal claimed that in time the community would have taken on the functions of “a large family group; becoming intimately bound up with the residents life that for him to reject it is for him to disown a large part of himself.”147 Feelings towards areas and villages beyond the specific community border would only have been coloured by individuals’ personal emotions and preferences.148 Blumenthal also highlighted this and wrote that one of the “most unique element in the social life of a [...] small community is the prominent part played by intimate personal relations.”149

Different types of social systems would have helped to solidify the outside view of the industrialised areas as communities and not just geographic areas populated with unrelated individuals.150 As the communities grew and kin and social networks would have become more firmly rooted within the populations, this would have caused both families and communities to have been more consolidated with clearly defined social systems, structures and borders. This would have strength-
ned the community further within its defined area, but also set it apart from the surrounding environment in a way that it previously may not have been. The core population would in this respect have played an important part of the sawmill communities' social systems.151

Social organisations provided important structural environments in which new arrivals could meet the core population. New in-migrants wishing to establish themselves in the areas would have had to create temporary or permanent liaisons with the core population by means of networking. Networks created through families', neighbours' and communities' organisational life thus provided social systems and means of interaction in the sawmill communities. Involving oneself in these organisations and social gatherings would have given migrants a feeling of solidarity and belonging as well as a feeling of providing a useful service, allowing for quicker adjustment and acceptance into the community.152

3. The sawmill communities as symbolic communities

The sawmill communities would have instilled in their residents a sense of belonging and even identity, most likely linked to some form of occupational pride.153 Cohen argued that “whether or not its structural boundaries remain intact, the reality of community lies in its meaning and perception of the vitality of its culture. People construct community symbolically, making it a resource and repository of meaning, and a referent of their identity.”154 This would also have created clear divisions between different parts of the community against one another, which would have facilitated the establishment of boundaries that would dictate who you were and who you were not.155 Berglund-Lake wrote that the classification of others rested on a notion that there existed a core of individual experiences and although encircling the workers, did not reduce or enclose them.156 This would have allowed for a common set of symbolisms to establish and become the glue

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151 “The persons met by one long in residence stand out as persons with definite life-histories which are so intertwined with his own that when he thinks of his own past he thinks of it largely in terms of relations had with these persons” (Blumenthal 1932, p. 105).

152 Strathern 1981, pp. 226–227. Grenowetter claimed that weak ties were important for communities and “vital for an individual’s integration into modern society.” For weak ties to be between closely dense groups there was a need for the community to include a level of organisational life that provided the inhabitants with a context in which they could meet. Thus, communities needs both weak and strong ties and are reinforced and dependent upon both (Grenovetter 1983, pp. 203, 229).

153 Skarin Frykman stated that the hierarchy within the sawmills strengthened good work ethics and pride at the same time as it divided the working class from within. However, the division should not be exaggerated as most workers, despite their place in the hierarchy, still shared the same lives situations (Ibid. p. 212).


155 Skarin Frykman 1990, p. 223.

that held the communities together and made identification within the community and between workers possible.\textsuperscript{157}

Identity and belonging would have to be viewed differently when discussing the first sawmill generation and their relation to the sawmill community. Having been born or brought up in the sawmill communities would have created a new generation of sawmill residents who lacked their parents’ agricultural or migratory experiences.\textsuperscript{158} They would have been able to claim belonging to the communities on account of birth, something their parents had not been able to do. They would therefore have had a completely different outlook on life and work than the previous generation, having lacked their parents’ experiences of agricultural or urban life. For this generation, the notion and identity of the sawmill community would have been more profoundly instilled in their consciousness.

\textit{Figure 1:1 Theoretical framework}

Together, these three approaches of defining the sawmill communities would have continued to support and maintain the reproduction of functional communities, structures and systems. Defined boundaries, a common occupation and close living would have increased attachment to the area and promoted a strong sense of identity.\textsuperscript{159}

\textsuperscript{157} Ibid. p. 12.
\textsuperscript{158} Ibid. p. 169.
\textsuperscript{159} Marilyn Strathern, “The village as an idea: constructs of village-ness in Elmdon, Essex,” \textit{Belonging. Identity and social organisation in British rural cultures}, Anthony P. Cohen (ed.), Manchester University Press, Surrey 1982b, p. 251. In Mineville, Blumenthal found that the heterogeneous population had over the years developed a local heritage closely linked to the area itself without having discarded their past. It had “taken on a peculiar cast in its constant interaction with the local context” (Blumenthal 1932, p. 31).
Defining the sawmill population

The most important community definitions within the sawmill communities is the division of the population between registered and unregistered residents. One of the key features of the overall concept of the sawmill community is that the settled and registered residents formed a population core. Strathern wrote that communities such as Elmdon usually had a core of families who regarded themselves as the important and permanent basis of the community.\textsuperscript{160} This was a definition based on kinship and provided the population with a base that guided social interactions.\textsuperscript{161} Their view of themselves as the “real” villagers was a part of a social system widely accepted by all the residents in the community.\textsuperscript{162} Blumenthal found a similar structure within the frontier mining town of Mineville, a group known as the four hundred. These were families who represented the social core of the community; it included the communities’ founding families, but was also based on the family breadwinners’ position within the mining industry.\textsuperscript{163}

Within the sawmill communities there would have existed two different population cores: the primary core including residents with a long-time settlement and a secondary core including all registered residents. The temporary residents and the unregistered would have been included, but not to the same extent. This would imply that some residents within a community would have belonged more than others. Strathern stated that “they are strangers not only outside but inside as well. Moreover, there is a rough agreement among all residents both as to the saliency of the villager/stranger oppositions and the kind of person to whom they apply.”\textsuperscript{164}

For Elmdon, birth was seen as an important factor in determining belonging to the core population.\textsuperscript{165} It became a synonym of belonging; the link between individual and community connoting “both kinship and place.”\textsuperscript{166} Residence in the village would therefore also have been imperative to “consolidate claims made

\textsuperscript{160} Strathern 1981, p. xxiv.
\textsuperscript{161} Strathern 1982a, p. 74.
\textsuperscript{162} Strathern 1981, p. xxxi.
\textsuperscript{163} Blumenthal 1932, p. 159.
\textsuperscript{164} Strathern 1982b, p. 255. One interesting aspect of this is that even though there was a distinct physical difference and distance between the permanently and the temporarily settled, as if the in-migrating temporary workers wanted to belong. Did these migrants really see the efforts worthwhile when they knew that they had a limited presence in the area? Strathern wrote that the difference between real villagers and in-migrants may not have been a one-way communication between permanent and temporary settlers. It would also have been important for the in-migrants to communicate that they did not belong (Strathern 1981, p. 14).
\textsuperscript{165} Strathern 1981, p. 9.
\textsuperscript{166} Ibid. p. 13.
on the grounds of birth.”

In the early sawmill communities claims of belonging could not be made on account of birth, at least not within the majority of the communities developed after 1850. Residency especially would have therefore become symbolic to belonging. Symbols such as residency, primary core belonging and secondary core belonging were effective because they were not imprecise. They gave clear statements on belonging that people easily could accept and apply to their surrounding, which ultimately landed them in already defined social structures with a preset social status. This would have been imperative in a migrant community.

Marriage to a family member within the primary core would have been more symbolically important than a marriage alliance to a secondary core family, and would have implied a stronger degree of belonging. The different types of cores would therefore denote different levels of attachment and status. “Family, then, provides a principle of association that defines a social set to which people belong. Social relations between sets are influenced by the perception of the worth of the other families; the stereotype of the family is more important than an assessment of the individual.” A contrast between different kinds of membership status among residents will be a reminder of status mobility (or immobility) “of ties and contacts beyond the confines of one’s present circumstances.” From a personal point of view, different networks then offer different possibilities of choice. By marrying into a core family the migrant became a member of the core through association. Strathern suggested that “the system of familial association seems to operate within a context of considerable local mobility.” The strength of the sawmill communities would therefore have been the long-time residents who had spent their entire lives or the longest parts of their lives in the communities.

Another important feature mentioned as symbolic structures in relation to the sawmill populations, especially the primary core, was the sawmill generation. Sawmill workers belonging to the sawmill generation were of a different breed than earlier generations, having known no other life than what they had expe-

167 Ibid. p. 12. Cohen did also suggest that the experience of membership was important to experience a specific culture, or in this case community and that membership was based on a frequent occurrence in a rather mundane, everyday context, which provided the dynamics of social interactions (Cohen 1982, p. 6).
168 Cohen suggested that the sense of belonging would have been “evoked by whatever means come to hand,” and as residency would have been most tangible within the sawmill communities; it is also what would have meant the most (Cohen 1982, p. 6).
170 Strathern 1982b, pp. 265-266.
171 Blumenthal 1932, p. 32.
rienced in the sawmill communities. With the sawmill generation, sawmilling had transformed from a seasonal and temporary employment to full-time employment to becoming a lifestyle.

*Relationship between employees and employers*

The sawmill industry and its owners in 19th century Sweden were interested in expansion, export and profit. These general goals would have influenced the attitudes towards the employees. With the establishment of the sawmill communities, the sawmill owners clearly stated an intent of wanting to control everything that had anything to do with the mill sites. The communities, their organisation and structure were not only economically beneficial to work efficiency, but also a tool for social control. The sawmill communities were therefore not completely free communities. Ericson claimed in his research of mechanical industrial estates in southern Sweden that those real, concrete patriarchal environments arose when the employers were forced to assume the responsibility of their workforces’ social welfare.

The social control of the Swedish sawmill communities display some similarities with the “mission of moral” utilised by British industrialists, but were perhaps more so connected with actual social structures within the communities. The sawmill owners wanted to implement ideological communities around their sawmills, communities and residents, based on work, obedience and gratitude. In a way they were successful, but not really in a way that they might have anticipated. Geographically closed off communities opened up the possibility for likeminded to meet and enabled the continued development of the workers’ movement. Forming allegiances was an important tool in collective action.

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172 British industries went through several changes as the industrial development progressed. Larger industries meant less personal contact between employer and employees, which created a wider gap between the two groups. Many industrial employers transformed from the “benevolent” father and master into a more “ruthless” employer driven by outside economic demands and profits. This was, however, nothing that changed swiftly, but was a process that occurred over a longer period of time (Simon Szreter, *Fertility, class and gender in Britain 1860-1940*, Cambridge University Press 1996, p. 531).

173 Hans-Olof Ericson, *Vammakt och styrka. Studier av arbetarrörelsens tillkomst och förutsättningar i Jönköping, Huskvarna och Norrahammar 1880-1909*, Lund 1987, p. 24. Unions and popular movements were also, when they first emerged, suspiciously viewed and seen as disrupting the social order and therefore also consequently banned.

174 Rose wrote that British mill owners were on a mission of morals and used this as a way of securing workers to “consent to participate as subordinate partners in production” (Rose 1992, pp. 37-38).

With the sawmill owners providing social services within the boundary of the community in addition to company housing, such as schools, place of worship and company stores, workers were subdued to a control that covered all aspects of life. The system was structured in such a way that social order was to be controlled using social services and benefits as behavioural modifiers. The workers were thus thrice bound to the owner; by tenancy, employment and the social services provided in the community. The sawmill communities were therefore, at least in theory, structurally encapsulating. However, boundaries were not completely chosen by those from within, but must also be equally acknowledged by those on the outside. In the case of the sawmill owner, creating boundaries was also a strategic effort when building company housing in differentiating both communities and workers from each other. Residential divisions among the workers also enforced social difference within the communities.

Within the sawmill industry, much of the social control rested upon the mill owners’ dominant position within the communities and their willingness to exercise that power. Control as such cannot only be viewed from one perspective; it becomes too simplified if it is just regarded from the dominating sides’ way of imposing its values and morals on to the greater masses. This social control also rested upon the workers’ willingness to submit to being controlled and told what to do. Control would therefore not have been absolute, especially because the workers still had a choice in whether to remain or leave.

The type of social control found in the Swedish sawmill communities would therefore have rested upon a mutual contract between owner and employees. The sawmill residents would thus have submitted themselves to the owners’ control and accepted the responsibilities employment demanded of them. This would have been crucial for the overall production. The mutual contract would also have obligated the workers with a certain degree of loyalty and gratitude towards the owners and the sawmills. Even though this type of loyalty was the kind that came into effect through social control, and was enforced as a term of employment, it was universally accepted during the time of employment. It could and most likely would have become more in earnest the longer workers remained settled and employed within the same sawmill community.

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177 Ericson 1987, p. 25.
178 Horgby 1986, pp. 15-16.
179 Ibid. p. 16.
Defining area, site and community
The text frequently makes use of different expressions relating to the settlements around sawmills; sawmill area, sawmill or mill site and sawmill community. There is a strong argument for doing this. Due to the nature of the data and how it has been processed, it is sometimes difficult to talk about communities in a strict geographical sense, but more so regarding areas. While community implies a specific geographical location, area is more loosely used when trying to identify the worker who may have been connected to the communities as this is not always as straightforward in the data. While some areas on a sub level have had to be linked to certain sawmills to reconstruct community areas, others cannot be distinguished from each other. Matfors is a good example because this area included both a sawmill and an agricultural community, where no distinction between these two community enclaves can be made in the data. The usage of area instead of community in the statistical descriptions is therefore a conscious choice to denote awareness that these are reconstructions. Throughout the dissertation, sawmill areas are therefore compared to non-sawmill areas.

The use of sawmill site, or mill site, is a phrase that has a meaning that lies between area and community; it is more geographically specific than area but it is not as geographically closed as community. It is mainly used to refer to the sawmills and the production areas, even though it is also occasionally loosely used to refer to the settlements surrounding the sawmills.

1.5 Geographic definitions and parishes
This study is concentrated to the Sundsvall district in the province of Medelpad, which together with the northern province of Ångermanland, creates the county of Västernorrland. This district is located about 400 kilometres north of the country capitol, Stockholm. This dissertation includes five of the Sundsvall area’s 18 parishes that have been registered and digitally processed by the Demographic Data Base; Skön, Alnö, Njurunda, Tuna and Selånger. These five parishes are geographically closest to the town of Sundsvall and represented during the second half of the 19th century different levels of industrial development.

The dissertation includes statistical data from 31 sawmills between 1850-1890; 30 steam powered sawmills and one water powered sawmill from the chosen parishes. In most sections of this study the body of sawmills will be dealt with together and in other sections will be dealt with on an individual level.

Skön was a coastal parish to the north (and to the south of Sundsvall, as the data also include Skönsmon). Geographically, it was one of the smallest parishes in the area, but it housed some of the most important sawmills. It was the first parish to become industrialised and in total nine sawmills would be constructed during the second half of the century.

_Sawmills in Skön parish 1850-1890 and year of construction_

<table>
<thead>
<tr>
<th>Sawmill</th>
<th>Year of Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tunadal</td>
<td>1849</td>
</tr>
<tr>
<td>Skönsmon (Mon)</td>
<td>1851</td>
</tr>
<tr>
<td>Sund</td>
<td>1857</td>
</tr>
<tr>
<td>Skönvik</td>
<td>1861</td>
</tr>
<tr>
<td>Ortviken</td>
<td>1862</td>
</tr>
<tr>
<td>Heffners</td>
<td>1868</td>
</tr>
<tr>
<td>Kubikenborg</td>
<td>1869</td>
</tr>
<tr>
<td>Vindskär</td>
<td>1875</td>
</tr>
<tr>
<td>Johannedal</td>
<td>1884</td>
</tr>
</tbody>
</table>

Njurunda parish was located south of town and was also a coastal parish sharing its borders with Skönsmon to the north and Attmar and Tuna to the west. In Njurunda a total of six sawmills would be constructed, including the largest sawmill in the entire district, Svartvik.
Sawmills in Njurunda parish 1850-1890 and year of construction

Klampenborg 1868  Stockvik 1873
Essvik 1869  Svartvik 1873
Nyhamn 1873  Juniskär 1878

Alnö parish was located to the east, north east of town and Skön parish, an island just off the coast. Alnö had by the 1880s become the parish with the largest number of sawmills in the Sundsvall district; the parish had a total of 16 different sawmills operational simultaneously. This study includes 15 of those sawmills. Despite the presence of industry, Alnö remained a strongly agricultural parish.

Sawmills in Alnö parish 1850-1890 and year of construction

Eriksdal 1860  Johannesvik 1874  Hörningsholm 1882
Alvik 1869  Rödestrand 1874  Myrnäs 1883
Nykik 1869  Karlsvik 1881  Utvik 1887
Strand 1871  Hovid 1882
Gustafşberg 1873  Vii 1882
Nacka 1874  Ankarsvik 1882

Tuna was an inland parish located to south of Selånge, west of Njurunda and south west of Sundsvall town. Tuna was the location of one of the most successful water powered sawmills in the country, Matfors, which was operational between 1793-1878. This sawmill is also included into the study.

Selånge parish was also an inland parish without any coastal borders and was not an industrial parish at all, but strictly agricultural. The inclusion of this parish thus allows for a comparative perspective, especially in relation to migration.

1:6 Sources and methods

Registering the population has a long tradition in Sweden and this has resulted in Sweden having the world’s most comprehensive collections of church registers available for research. The registers include separate registers from birth and baptismal registers, marriage registers, migration and death registers and parish catechetical registers.181 This dissertation is based upon two different sources,

181 Migration records, however, did not become common until the late 19th century “when increased mobility made them necessary” (Alm Stenflo 1994, p. 20).
church registers and employment lists from four sawmills, written during the sawmill strike of 1879.

The information from the church registers has been gathered from the database at the Demographic Data Base, DDB, at Umeå University, in specifically designed data outputs.\textsuperscript{182} The database at DDB contains information from about 80 parishes from different areas in Sweden, the Linköping region, the Skellefteå region, inland parishes of Sapmi and 18 parishes in the Sundsvall district. What makes the database at DDB so unique is that information from all church registers have been linked to one another, creating a longitudinal timeline for each individual.

The 1879 lists, archived at Västernorrlands regional state archives (Västernorrlands landsarkiv), were digitally processed by the author and thereafter manually linked to the digitised church registers using the search engine provided by the DDB, Indiko, which mirrors the information in the database. Although Indiko is only a selection of the total amount of information from the database, it is individually based and can only deal with smaller statistics. Utilising these two types of sources will provide the dissertation with a longitudinal perspective and local cross-sectional studies to exemplify the situation for workforces in the sawmill communities at a specific point in time.

It could possibly be argued that wage ledgers should have been used to identify and reconstruct the populations in the sawmill communities, as this would have included everyone who had been employed during a specific year. Previous attempts have proven both difficult and inaccurate as the ledgers are limited to only a name, lacking the personal information provided by the church registers or the 1879 lists, which in turn made linking to church records highly uncertain. Despite that the church registers lack distinction between different kinds of workers, the data have through linking workers to a specific sawmill allowed for general estimations of population reconstructions.

Relying on the church registers and the 1879 lists are one of the more straightforward approaches, as it offers a set foundation for reconstruction. Even though it is known that the material providing the foundation only includes the registered population, it is the best material available. Cornell also expressed certain reservations using church registers in relation to population development at the sawmills, especially as they did not differentiate between the de jure and the de facto populations. Some populations in industrial areas will therefore automatically become underestimated. Despite this, he declared that the church registers and

\textsuperscript{182} Demographic Data Base, Umeå University (100516)  
http://www.ddb.umu.se/ddb-english/?languageId=1
population censuses have to be regarded as a satisfactory and an indispensable source, as long as the weaknesses and limitations are acknowledged.\textsuperscript{183}

The digitised church registers
Using digitised church registers allows for larger studies and comparative perspectives as the statistics is more easily gathered and generated. For this dissertation two data outputs were requested and processed by the DDB. The first data output, also the largest one, primarily concerned migratory data from Skön, Alnö, Selånger, Njurunda and Tuna. It contains information about every migratory event taking place within these five parishes between 1850-1890 for residents aged 15 and older.\textsuperscript{184} Each migratory event has been treated as a unique occurrence and given an entry of its own. The data output is individually based and contains information on more than 57,000 unique migratory events concerning approximately 25,000 individuals. This output allows for migrants to be followed as they migrated to and from the parishes and internally within the parishes between agricultural and sawmill areas.\textsuperscript{185}

The second data output contains annual basic statistics from the five parishes, as well as all individual sawmill areas identified within these parishes between 1850-1890. This is not an individually based data output, but focuses on the overall demographic information as they were reported at the end of each year. The data includes information concerning the number of individuals registered in the areas, how many were men and women over and under age 15, number of married and unmarried individuals, number of individuals moving in and out according to gender and how many children were born.

Methodological concerns regarding the data
Several methodological problems have arisen, especially in relation to residency and population. Official church registration was, despite the church law of 1686,\textsuperscript{183}

\textsuperscript{184} This data output does not contain information on the migration of children younger than 15. This differentiation was made based on the fact that children after confirmation at the age of 14-15 were considered able to perform most of the tasks of an adult. This was also an age when they would have left home to find employment (Helene Brembeck, Tyst, lydig, arbetsam. Om barnuppföstran på den västsvenska landsbygden, Kungälv 1986, p. 27).
\textsuperscript{185} At times individuals have been identified in different parishes and on those occasions it has been possible to follow them as they moved across parish borders. For the most part though, it was not unusual that the same individual was given different identification numbers in different parishes. The information about migrations across is therefore, as provided in the database, less consistent and is less reliable comparatively speaking.
not something that occurred in all parishes, all years, on a regular basis.\textsuperscript{186} The catechetical registers were the only one of the church registers to be kept fairly continuously. It incorporated information from most of the different parish registers; birth, marriage, migration and death.\textsuperscript{187} It was not until the 18\textsuperscript{th} century that registration became a frequent and regular feature in all Swedish parishes.\textsuperscript{188}

\begin{center}
\begin{tabular}{|c|c|c|}
\hline
Parish & Time period registered in the database & Actual years of registration \\
\hline
Sköön & 1803-1893 & 90 \\
Ahö & 1804-1894 & 90 \\
Selånger & 1813-1894 & 81 \\
Njurunda & 1816-1891 & 75 \\
Svartvik* & 1860-1901 & 41 \\
Tuna & 1804-1896 & 92 \\
\hline
\end{tabular}
\end{center}

Source: Demographic Data Base, Umeå University

*Svartvik community was administratively separated from Njurunda parish in 1854.

As registration was infrequent at times and because sources have been lost, there are certain gaps in some materials. This is the case regarding information from the Svartvik sawmill community. Located in the parish of Njurunda, Svartvik was administratively separated in 1854 and thereafter had separate church registers. Unfortunately, the registers burned up in the fire of 1888, which destroyed large parts of the town of Sundsvall. Therefore, the migration data do not include any information from Svartvik after 1853 and the annual basic statistics, which are reconstructed based on the information sent to SCB, only have information from 1860. Other sources had to be used to fill some of these gaps. Information on total population from 1855 was gathered from the Tabellverket. For information on migration to and from Svartvik information was gathered from Summariska folkmängdsredogörelserna, another derivative from the church registers that shows the number of female and male in- and out migrants on an annual basis starting from 1865.\textsuperscript{189} Even though they may have been two administratively separate units, information from Svartvik and Njurunda have been combined in this study.


\textsuperscript{187} Eriksson & Rogers 1978, p. 49.

\textsuperscript{188} Gösta Lext, \textit{Studier i svensk kyrkobokföring 1600-1946}, Göteborg 1984, pp. 34, 39, 183.

\textsuperscript{189} There are several inconsistencies between the church registers and the Summariska folkmängdsredogörelserna in relation to total populations. Even though it may be dis-
The digitised church registers provide information on migration and family and this makes it possible to recreate family relations through several generations, provided they resided in the same parish or that a linkage between parishes had been done. Information is generally not linked between parishes, which, especially for migration can interfere in giving a complete picture of migratory patterns. Even for those migrants who can be tracked, there is no obvious way of connecting the migratory information on a sublevel between the different parishes. This does pose certain problems; especially when it comes to migration between sawmill areas. Only migrations within a specific parish is not completely representative of all migration that would have taken place between all sawmill areas. This is a problem that due to the structure of the original data cannot be overcome until a complete linking between the parishes has been done. The migration study therefore has limitations that restrict the study to focus on migration between certain areas within the parishes and not between them.

The structure of the annual statistics also data means that individuals who stayed in the parishes less than a year, or between registration occasions, could in some cases have fallen in-between registrations and involuntarily been excluded. This is, however, not a problem that interferes with the study. The annual statistics also revealed that information from several years were missing for some sawmill areas, such as Svartvik. Information from the data output had, for example, a larger population registered as Svartvik than displayed in the population censuses from 1880 and 1890. The differences were not too staggering though, but nonetheless, they need to be taken into consideration. As to why discrepancies occurred could be linked back to the original sources and the gathering of information as well as the different processes the material has undergone since.

After having gone through some of the original sources, church registers from Alnö 1874-1884 and from Skön 1873-1882 and 1883-1893 revealed lists of the parish division, roteindelning, of where the catechetical meetings had been held. These divisions linked some sawmill areas to certain villages in the parish; even though there was no mention of sawmill communities in their own right in the particular pages that recorded the population. This suggests that sawmill popula-

cussed which source should be considered as most reliable, it was decided to only use folkmängdsredogörelserna in relation to migration and the church registers in relation to total population. Tedebrand made a critical assessment of this material and even though he also found inconsistencies with the church registers, he judged them to be reliable (Tedebrand 1972, pp. 70-75).

190 The population census for 1880 states that Svartvik had 1105 officially registered residents. In 1890 it was 1324. The information provided from the second data output from the database stated that Svartvik in 1880 had 1072 residents and 1350 in 1890 (Folkräkningen 1880, SVAR – Svensk arkivinformation. Anno 1890. Folkräkningen på näset, Forskningsarkivet, Umeå University).
tions officially could be registered in the closest village within the parish division and may perhaps explain why some sawmill areas have years were information on the populations was missing. A possible explanation may be that sawmill areas did not become communities until the resident and registered population reached a certain number. However, when reviewing the material, population size do not appear to have been a determinant of what counted as a community. It differed greatly between the sawmill areas during the first registration years. Another possibility is that the sawmills could have been built on land that geographically belonged to certain villages and that is why they also have been associated with these villages, despite that their names may lead us to believe that they were linked to other villages. Matfors sawmill, for example, had been built on land that belonged to the village of Ängom. This may indicate that the sawmill areas could have been regarded as a form of utjordar. This could be supported by the relative closeness between certain villages and sawmills. In some cases distances were more remote, but it is likely that this may have been linked to the Swedish enclosure process, skiftet. Landowners sold parcels of land to prospective sawmill owners and the land itself would, regardless of ownership, still be considered as a part of a specific village, at least in the beginning. The villages and the sawmill areas might then at a later date have been parted from each other, creating specific boundaries and two different legal localities.

While continuing to review the original sources, it was also discovered that there was a differentiation made within a sawmill, for example Klampenborg and Klampenborg egne (one’s own) in Skön’s catechetical registers 1873-1882. This differentiation of workers may have separated between workers who lived in company housing and those who did not, or between those who lived in the mill site

191 In Alnö, the sawmill at Myrnäset was linked to the village Fröst, Strand sawmill to Böhle, Nyvik sawmill to Nysäter village. In all, some nine sawmills in Alnö were linked to villages in this way. Further research also uncovered that two sawmills in Njurunda parish and one in Skön parish also could be linked to nearby villages (Alnö, Husförhörslängd 1873-1884, AI:9 A. See also Skön, Husförhörslängd 1883-1893, AI:9A).


193 An utjord was a parcel of land for farming or grazing, which was not necessarily located within the village boundary, but further away. It was, however, still counted as being the property of a specific village. While most utjordar remained unpopulated, some became populated with permanent residents, usually crofters.

194 This was not the case with Hovid the village and Hovid the sawmill. The church registers do not make a distinction between the workers at the mill and the residents in the village. The matter becomes even more complex when it is added that Johannesvik sawmill was linked to Hovid village through parish division, but that this mill was registered separately. Not even occupational title can shed light on the matter as sawmill workers were not singled out from other workers in the registers; meaning that it is impossible to distinguish between a sawmill worker and an agricultural worker as both received the title worker in the material. The fact that many workers did not reside at the mill but in villages close by it makes the matter even more complex.
opposed to those who lived in the area counted as the sawmill community but were not necessarily on land owned by the mill.195

The 1879 lists and the sawmill strike
The dissertation’s second source consists of employment lists from four sawmills in the Sundsvall district; Klampenborg and Svartvik in Njurunda parish and Kubikenborg and Heffners in Skön parish. These lists, dated 1879, offer a unique possibility to study a particular set of workers at a certain place at a specific time, regardless of church registration and unofficial residence. 196

These lists were linked to one of the first and largest working strikes of the time, the sawmill strike of 1879 in Sundsvall. This strike was a response to several pay cuts and a harder economic climate that had had negative effects on the sawmill industry during the 1870s. It began on Monday, May 26th and would last for a period of ten days and involve 22 of the 23 largest sawmills in the region and several thousand workers and the military.197 While the workers refused to go back to work despite initial threats of eviction and unemployment, the sawmill owners refused to resolve the issue of the pay cuts, even though they would have had the means to do so.198 Not even numerous persuasion attempts from County Governor Curry Treffenberg, leaders from the temperance movement and leaders from the religious movement weakened the workers’ resolve.199 A continued growing military presence and more threats of eviction and unemployment would eventually result in that many workers weakened in their determination and went back to work.200 Several workers were arrested,201 but most of the owners granted their workers amnesty for their involvement in the strike as long as they returned to work.202

The lists contain a total number of 878 registered workers; Klampenborg (93), Kubikenborg (138), Heffners (212) and Svartvik (435). Their primary focus ap-

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195 Skön, Husförhörslängd 1873-1882, A1:8 B.
196 The lists have not been used in research before, but indications suggest that the list from Kubikenborg was used to describe the number of workers employed and family size in an undergraduate paper from 1978 (Bo Byström, Varför deltog arbetarna i Sundsvallsstrejken 1879? En undersökning med tyngdpunkten lagd vid en genomgång av landshövding Curry Treffenbergs förhörsprotokoll, Sundsvall 1978, p. 12).
199 Olsson 1949, p. 103. Björk & Schnell 1979, p. 60. Letter to Treffenberg from Ullmark in regards to a prayer held at the strikers’ camp on May 29th 1879, dated August 6th 1879. Forskningsarkivet, Umeå University.
200 Björk & Schnell 1979, p. 64. Olsson 1949, p. 105
201 Björk & Schnell 1979, p. 69.
pears to have been to register the workers’ personal information. This is divided into several columns; Name, Residence, Assets, Church registration, Marital status, No. of children, Decision and Remark. Unfortunately, except for the workers’ last names, information was registered sporadically and only occurred in some of the lists. Most of the column titles are self-explanatory, but a few need to be addressed further. These two columns, Decision and Remark included information on some of the workers’ possible involvement in the strike, if they had participated and in what capacity. It also revealed whether or not the workers went back to work or chose to leave their employment.

The Kubikenborg list used the Remark column to note workers who were suspected leaders and was the only list that accounted for the workers’ ‘decision’ to either return or not return to work after the strike by marking in the Decision column. The other lists used the Remark column to display other and similar information. For example, the Svartvik list accounted for workers who were suspected of having been possible strike participants and workers who had not participated at all.

The differences between the lists were mainly found in columns for church registration, marital status/children and decision/remark. Even though appearing in separate columns, the number of children was displayed in the same column as marital status. Information on children was only provided in the Kubikenborg and Svartvik lists. Other discrepancies in relation to marital status could be found in the Heffner list, which had registered information sporadically. Svartvik was also the only list that occasionally reported what position the workers held at the mill, always in the name column.203

Table 1: Information provided by the 1879 lists

<table>
<thead>
<tr>
<th>Residence</th>
<th>Assets</th>
<th>Church registration</th>
<th>Marital status</th>
<th>No. of Children</th>
<th>Decision</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Klampenborg</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Kubikenborg</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Heffners</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>Svartvik</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>


The lists have many possibilities of providing new information about this specific group of workers, but also in a larger perspective seen from the sawmill strike of

203 This was, however, confined to ten workers at Svartvik and only mentioned three different occupational titles.
1879. They provide a unique insight into which workers were employed and resided at the mill sites and give some general ideas on what kind of assets sawmill workers had, how many were officially registered at the mill sites and what they had been up to during the strike itself. The lists provide a good compliment to the information gathered from the church registers. Despite this, the lists also have rather severe limitations, and they are not always as compatible as one would have wished due to the sporadic information recorded. Despite that compatibility between the lists can be regarded as slightly skewed at times, it is not in any way a misrepresentation of the workers registered, as they depict diverse workforces at different sawmills. They have also displayed inconsistencies when compared to the church registers. Not being completely compatible does not necessarily have to be a problem because the possibilities the lists offer, as a compliment and a contradiction to the official registers, which makes them invaluable as a secondary source.

The origin of the 1879 lists

The origin of the lists is important to understand and analyse if one wishes to understand from which perspective the lists were written, on whose order and for what purpose. Two of the lists, Svartvik and Heffners were dated June 2nd 1879. It is therefore likely that the other two lists also were written in close proximity to that date. Through the linking process several discrepancies have been discovered because some of the lists depicted events that clearly occurred after June 2nd. This would suggest that the lists either had been backdated or that they had been written on the 2nd but that certain information had been added if it had occurred before the lists were sent to the authorities. The lists also could have been re-written after the 2nd and information could have been added in the process. Since neither of these later recorded events stretched further than to mid June of 1879, it can be estimated with some degree of accuracy that the lists were written somewhere in-between June 2nd and June 30th 1879. This would suggest the lists may have been written on the sawmill owners’ orders.

There is also the possibility that they may have been the lists written during the interrogations that took place at the strikers’ camp between June 3rd and June 5th. The low number of workers registered in the lists would support this because they do not account for the entire workforce. Witness accounts from the strikers’ camp retell that the workers had their names written down in a list before being allowed to return home. These lists were thereafter complemented with information from the sawmills with information such as time of employment, number of
family members and if the workers had money saved in the company bank.\textsuperscript{204} This could mean that it might have been County Governor Treffenberg and not the sawmill owners who had ordered the lists to be written. As Treffenberg's lists had to be complemented, it is possible that this was the information the sawmill owners provided him with. Thus, this would once again indicate that it was the owners and not Treffenberg who had ordered the lists to be written.

Because when the lists were written is closely connected to who actually ordered them to be written, it is necessary to recall the events that took place at the strikers' camp during the last days. On June 3\textsuperscript{rd} interrogations with workers from Svartvik began. They were supposedly asked if they had a contract, if they resided in company housing or had any financial assets to their names, and if they had anything against volunteering information about themselves. Those answering yes were placed in one group and those answering no were placed in another. The workers who did not have a contract or were not recognised by any of his supervisors from the mill were arrested as vagrants and most likely lost their employment.\textsuperscript{205}

What happened to the workers who did not volunteer any information about themselves remains unknown, but they would most likely have been excluded from the lists. The workers from Skönvik were also interrogated on the 3\textsuperscript{rd}, making it possible for the Skönvik list to have been written the same day.\textsuperscript{206} Because the list actually mentions workers who started working again on the 3\textsuperscript{rd} suggests that this list was written prior to the 3\textsuperscript{rd}.\textsuperscript{207} Treffenberg reported to his superiors on June 4\textsuperscript{th} that almost all inquiries have been held. Only a few workers from Ortviken and the workers from Heffners remained to be interrogated on the following day, June 5\textsuperscript{th}.\textsuperscript{208} This would thus further support that the lists written at the camp and the lists were not one and the same. The 1879 lists contain information about workers who were marked as non-participants, which seems odd, especially considering that they would not have been in the camp during Treffenberg's inquiries. Also,
apart from the lists being dated June 2nd 1879, both the Svartvik and Heffners lists were signed with the individual sawmill name. This would suggest that they were written at the mills on the given date.

Based on the above discussions it is believed that these lists were written sometime in early June of 1879. They were written in relation to the strike, to which the existence of the decisions and remarks gives evidence. The lists were most likely written on order from the sawmill owners who wanted to know what their workers had done during the strike.

Methodological concerns regarding the 1879 lists
The 1879 lists were as previously explained encountered in their original form and had not undergone any form of digital processing. They were therefore manually processed and each individual worker was researched using Indiko. 272 individual workers could not be identified in the church registers. Considering that 195 workers lacked an official church registration altogether, it must be concluded to have only been temporarily settled in the district. Because they could not be identified in the church registers they were excluded. 209

The linking process between the lists and the church registers was not done without some difficulties. The documents had been withered by age and sometimes it was difficult separating ink dots and smudges from actual markings. Spelling of names differed and the writing was occasionally difficult to interpret. These were only superficial and cosmetic problems, the real hurdles regarding the lists were embedded in the linking process. There were three distinct areas where problems repeatedly occurred and there is a need to explain how these situations were dealt with and on what grounds decisions regarding inclusion and exclusion were made. Methodological concerns relate to the issue of names, followed by inconsistencies of dates and actual presence, and finally general problems of exclusion of information and individuals who occurred throughout the linking process.

209 The lists had 82 workers marked as married, 75 specifically as unmarried and the remaining lacked a marking regarding marital status, but were most likely also unmarried. 235 workers did not have children living with them according to the list, only 37 workers did. Even though as many as 218 workers were recorded having resided at the mill site, 54 lacked marking relating to residency. As many as 195 workers lacked a marking regarding where they were officially church registered. 13 workers were marked as registered in Finland, one worker in Norway. The remaining 63 workers had the province or parish in the Sundsvall region they were officially registered in, even though the latter seldom corresponded with the mill they were employed at.
- Criteria of inclusion and exclusion
The criteria of inclusion and exclusion were difficult to set. The different information provided by the 1879 lists meant that while some workers could be identified using a name only; others could not be identified even though the lists may have provided additional information about marital status and household size.

Something that also has been of concern is the frequency in which information in the different columns has been crossed out, as in the case of the resident column in the list from Heffners sawmill. It could be argued that those markings could have had similarities with how it was used in the parish registers to display that an individual had left the parish. If that explanation would hold, it would mean that all residents had left Heffners. On further examination it became clear that almost every worker had been crossed out in the resident column. The actual crossing out was done in a single stroke; no individual markings had been made. Because the individual names were not crossed out, this marking could more likely be seen as a verification of their presence; just as it appears in the other lists with a V-shaped marking by the workers’ names. No one has therefore been excluded on account of being crossed out. Individuals whose names that have been completely inked out could, however, have been an indication that they left the area. If no contradictory information could be found about these workers in the church registers, they were excluded.

Most workers with no parish register in the mill of employment were excluded as they could not be found in the parishes in the Sundsvall district. A select few were located within other parishes in the district; those men have all been included. They have not been included in the cross-section study regarding time settled, as they usually only had a verified presence in 1879 through the lists.

- The issue of names
Names appeared to be one of the most difficult methodological problems. Spelling could differ between the different source materials and many of the workers in the lists had more than one first and last name and their usage could differ in the material on several occasions.

Name changes became increasingly frequent during the late 19th century and the authorities supported the acquisition of family names that did not end with -son or -dotter. Anyone who wished to change their name could just choose a new one. The only real requirement was that the priest in the local parish was to be informed so that the change could be recorded in the church registers. This was not always done, which is why there are inconsistencies between different sources.
This is probably one of the reasons why the authorities felt that there was a need to clarify the issue in law by the end of the 19th century.

The law of 1901 that stated new family names could only be officially accepted if they had been approved by the County Administrative board in the county of residence was a fairly easy process. The applicant also had to inform the local priest about the name change within a year of approval. Acquisition of a family name was not necessarily a hindrance to the linking process, provided the name change had been reported, and more particularly if the name chosen was uncommon.

Spelling of names, both first and last names, also momentarily caused concern. The lists might have recorded Per Svensson in the church registers as the same individual who may have been registered as Per Svensson Lundgren or Pehr Lundgren (Svensson). In many cases it was difficult to know if this indicated two completely different individuals or just two versions of the same name. Individuals with two last names provided challenging predicaments, especially when different sources can have different last names registered.

The clergy had specific instructions on how names were supposed to be noted in the church registers, both first and last names should be completely spelled out. That was apparently not something that concerned the authors of the 1879 lists; they frequently used both individual spelling and name shortenings. First names were often reduced to one letter; the letter J could, for example, indicate the names Johan, John, Jon, Jonas or Jakob. Sometimes also shortening to three letters was used, usually to differentiate between names. The shortening Joh usually indicated the name Johannes, but could also have indicated either Johan or John.

The most frequent problem has been multiple choices. Many workers had the same or similar names, which made identification next to impossible and less reliable. In such cases where name alone could not link one of the workers in the lists to a man registered in the church registers, comparison between other information given in the lists and the registers had to be done; such as marital status and family size. In the cases where the lists only provided a name and no further information, it was usually impossible find a match in the church registers. Those individuals were excluded on the premises of lack of information.

210 Lext 1984, pp. 190–91. Exceptions to the law were persons without family names who chose to create one by using the name of the father or grandfather, in practice any last name with a –son ending. These individuals only needed to inform their local priest and did not need formal approval. This also applied to individuals who chose a name that distinguished a specific heritage or a local geographical location.

211 Ibid. p. 191.
- Inconsistencies with dates and actual presence

The 1879 lists and the church registers display several discrepancies in regards to moving in dates and actual presence. A migrant did not become an official resident until he or she was correctly registered in the parish by the priest. It is therefore important to highlight the issue of unofficial and official presence in the source material when it can be detected. The law stated that whenever someone moved between parishes, the migrant was obligated to request from the departure parish a moving certificate, and then hand it over to the priest in the parish of destination. It was also mandatory to include to where the migrant was moving on the certificate. The migrant was obligated to hand over the moving certificate within two to four weeks after arrival to the new parish. The moving certificate was linked to both church and state interest in controlling population movements in the country. For example, without a parish registration an individual was not eligible to receive help from the parish poor relief, nor could he claim a right to receive communion in church. The certificate also functioned as a sort of character reference because it contained information about the migrant’s relation to the church and his knowledge of Christianity.

Those who lacked employment and saw little chance of acquiring it in their home parish could sometimes leave without notifying the priest and requesting a

212 Lext 1984, p. 259. Moving certificates were not requested when the upper classes moved; it was meant more to be a way to have control over the movements of the lower classes. This changed in 1812 when it was decreed that everybody who moved across parish borders needed a moving certificate. This was partly based on the authorities’ wish for more accurate statistics. It was punishable by law to move without a certificate. An employer could be held responsible and forced to pay a fine for hiring a servant without a certificate. This law was not abolished until 1894 (Ibid. pp. 243-245). In 1886 it also became illegal to use the term obestämd ort (Ibid. p. 261). (Obestämd ort – English translation is unknown place of residence.) The intended new residence had to be registered (Ibid. p. 270). Laws against försvarslösa, unemployed and unregistered vagrants were severe during the 19th century. The law of hemortsätt dictated parish responsibility and meant that the last parish of residence or taxation would be responsible for the care of individuals who had been caught as vagrants were poor, sickly and could not care for themselves (Gösta Lext, Mantalsskrivning i Sverige före 1860, Göteborg 1979, pp. 31, 39, 42, 187).

213 Lext 1984, pp. 247-248. Discrepancies between moving out date and moving in date of a few days were not uncommon, but could also at times become weeks and even months. Lext claimed that these differences were normal, and that migrants simply forgot about the certificate.

214 Entitlement to communion had a longstanding tradition dating back to the mid 15th century. In 1571 church law stated that no priest could give sacrament to a person if the individual could not prove that he was entitled to receive it. The priests would therefore need verification that the individual was who he said he was. A written note from the previous parish of residence to the new parish was the easiest way to convey this entitlement. Lext wrote that this is how the practice of the moving certificate came into place (Lext 1984, p. 242).

215 Lext 1984, p. 242. Migrants could also request a work certificate from the local priests, a more elaborate character reference, which was needed when searching for employment (Ibid. p. 290).
There were also those workers who did not request moving certificates until several years after they had left and settled in a new parish. Other workers lived close to the sawmills, perhaps in the same parish and would have seen little reason to change their official registration because they still went to the same church. Seasonal migration did not require migration certificates because these migrants returned home when their employment ended. This implies that much of the migration that did occur went undocumented.

Another group of workers who offered problems were those with a verified presence in 1879, but who had a factual moving in date originating a few months or even years later. Just as the excluded group of workers, it can be determined that they were present during the strike of 1879. However, it cannot be determined if they were present in the sawmill community the entire time between 1879 and the official moving in date.

In the cases where discrepancies have occurred between moving out date and official moving in dates, the latter was used as the starting point because it definitely verifies that the migrant was present in the parish. This was the most appropriate approach because there may otherwise have been problems determining when the migration and move actually took place. Or, for that matter, what the migrant was doing in-between the out and in dates when he was not officially registered in any parish at all. Albeit, to be completely dead set in that approach would cause problems with the workers with an official moving in date a few months after the strike. The case of the workers from Matfors in Tuna parish is a good example of this. Due to the 1879 lists we can place them at Svartvik during the strike of 1879 in May/June, but the majority of those who officially registered in the parish did not do so until October. Still, those workers, as well as the other Matfors workers who registered within the next few years have been viewed as immigrants the year of the strike.

The methodological problems with factual dates and actual presence have shown that presence and dates have not necessarily had anything to do with each other. This has indicated that using complementary sources to the church registers are a possible way of uncovering the unofficial residents who inhabited the sawmill communities.

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216 Lext 1984, p. 186.
Chapter 2
THE DEVELOPMENT OF THE SAWMILL INDUSTRY

The construction of Tunadal sawmill in 1849 in Skön parish, Sundsvall has usually been viewed as the beginning of the sawmill industry in Sweden. However, sawmilling was not a 19th century phenomenon as one might be inclined to believe, but has a long tradition that has spanned over several centuries.217 The first recorded sawmill dated back to the mid 15th century when the sawmills were part of a larger context of different types of mills that could be found in most villages.218

To understand the development of the 19th century sawmills, it is important to understand the conditions from which the industry evolved. The most important aspect is that the state exercised a great deal of power over the nation’s sawmilling prior to 1842. The early water powered sawmills were small and state enforced regulations stipulated production restraints, specific measurement requirements and taxes and tolls on sawed timber. This restricted privately owned sawmills and the distribution of their products as all export had to go via the capita.219 By the late 18th century, only two northern towns, Härnösand and Umeå had export privileges from their local harbours.220

219 Carlgren 1926, pp. 16-19. It was not uncommon for the state to lease their sawmills to local authorities or private citizens. Harald Wik wrote that in 1584 Hälsingland had 14 privately owned sawmills and Ångermanland and Västerbotten had three each (Harald Wik, Norra Sveriges sågverksindustri från 1800-talets mitt fram till 1937, Uppsala 1950, p. 7).
220 Carlgren 1926, pp. 20-21, 28-30, 59. Regulations from the early 18th century limited export of Swedish commodities and products to be shipped on foreign ships. This favoured the nationally controlled shipping (Lennart Schön, En modern svensk ekonomisk historia. Tillväxt och omvandling under två sekel, Stockholm 2007, p. 60). Regulations even momentarily forbade the shipping of timber as the primary cargo and stipulated that it could only be shipped in smaller quantities as a secondary cargo (Carlgren 1926, p. 58).
With the regulations the state demonstrated that it had no real interest in saw-milling and only regarded timber as useful for creating charcoal stacks as a part of iron processing at the foundry estates. The foundry estates’ need of timber was therefore prioritised and as a result many farmers and sawmills lost logging rights in certain state-owned forests. In Hälsingland and Ångermanland sawmills were even forbidden to sell their timber within a radius of 5-7.5 kilometres from the nearest foundry estate. Fines were given to those that did not comply.\footnote{Carlgren 1926, pp. 35-36. Reinhold Olsson & Richard Lindström, En krönika om sågverksarbetare, Sundsvall 1953, p. 14.}

There were two types of sawmills, privately owned that produced for a household need, \textit{husbehovssågar}, and state owned commercial/export sawmills, \textit{salussågar}.\footnote{Medelpad had officially 57 sawmills registered in 1763, 110 sawmills by 1796 and 136 in 1804. Important to note that only sawmills of a specific value or production size were included in these calculations. The number of sawmills in total would have been larger as many of the smaller sawmills went unreported or were built without permission. According to Wik, if all sawmills in Ångermanland would have been counted, one would have to include at least 134 additional smaller sawmills (Wik 1950, p. 92). Different reports and registers by state and provincial authorities recorded different number of sawmills during different times, most likely using different methods of calculation (Carlgren 1926, p. 96). A combined estimation of sawmills in Gästrikland, Hälsingland, Medelpad, Ångermanland and Västerbotten display more than 800 sawmill registrations between 1699-1804, albeit many mills could have been registered more than once (Carlgren 1926, pp. 96-103). Ångermanland was the province with the largest amount of sawmills by 1804. The southern part of the province went from having 52 mills in 1702 to 187 in 1804. The northern part of the province had 35 during the late 1760s and only 48 by 1804 (Ibid. pp. 100-101).} During the mid 18th century, 71 percent of all sawmills in Medelpad were commercial/export sawmills.\footnote{Carlgren 1926, pp. 98-99. By 1805, Medelpad appears to have had at least 77 commercial/export sawmills.}

The aim of this chapter is to provide a background to the sawmill industry’s development during the 19th century. This chapter will study the industry’s different prerequisites, its frequency in the Sundsvall district and export. What changed within the industry and society in general that allowed the 19th century sawmills to emerge? Who were the owners of the steam powered sawmills and did they differ from the owners of the water powered mills? Special focus will be placed on the northern parts of the country, the county of Västernorrland, and the province of Medelpad in which the Sundsvall district is located.
2:1 The emergence of the sawmill industry

Swedish at the beginning of the 19th century

In comparison to other European nations, Sweden's industrialisation came late. The country was still mainly agrarian with an overwhelming majority of its population residing in the countryside by mid-century. Early forms of industrial production were performed in several shapes and sizes, such as, proto-industry for household needs, manufactures, crafts regulated by the guilds, foundry estates, shipyards, loading docks and small sawmills. Production relating to these fields were more characterised by an increased productivity rather than technical innovation. During the second half on the 19th century, industrialisation entered a new phase that focused on mechanisation and the utilisation of new technology, such as steam power allowing for larger production capacities. Industrial production would become more characterised by technical innovation than it previously had. The expansion during the 1850s and 1860s were, however, mainly to be located within the industries that produced for the national market and not within industries that produced for export. This was something that slowly would change by the late 1860s and early 1870s.

By becoming a real contender on the export market, Swedish industrial and economic development was more tightly linked to continental Europe, their political developments and market demands. These were aspects that would strongly impact progress. Sweden was therefore characterised both by economic growth and stability, as well as periods of economic crisis throughout the 19th century.

Industrial prerequisites

The industrial prerequisites enabling the sawmill industry to develop had, on a general level, much to do with the liberal ideas that influenced political policy than technology alone. The state abolished the regulations and limitations that had been controlling the sawmill industry in 1842. The guild system regulating the specialised crafts was abolished in 1846; this opened up the labour market

224 Eriksson & Rogers 1978, p. 44.
225 Schön 2007, p. 85.
226 Ibid. p. 79.
227 Ibid. pp. 167-168. The shipbuilding industry was also a significant industry during the second half of the 19th century (Filip Hjulström, Gunnar Arpi & Esse Lövgren, Sundsvallsdistriktet 1850-1950, Geographica Nr 26, Uppsala 1955, p. 93).
228 Schön 2007, p. 29. The Crimean war in the 1850s, failing crops in the late 1860s and the war between Germany and France in the early 1870s would all introduce limitations on Swedish export and cause an economic crisis (Ibid. p. 134).
229 Cornell 1982, pp. 36-37.
and allowed for workers to move freely.\textsuperscript{230} All harbours north of Stockholm were granted export privileges and foreign ships were able to go directly to the production site and load their cargo.\textsuperscript{231} The final ban was lifted in 1863 and related to the construction of commercial/export mills, which had stated that such mills could not be established without state permission or in too close proximity to each other. All export duties on sawed timber also disappeared and this completely nullified state influence over the sawmill industry.\textsuperscript{232}

Industrial development was also positively influenced by new technology, transport, communication and access to natural resources. Steam power allowed for larger production capacities in mills. Steam powered ships could take on more cargo, reducing transportation costs and could be used more successfully to break up ice during wintertime, prolonging the transport season. The telegraph enabled a quicker gathering of information and the extension of the railways enabled transportation to and from more remote areas.\textsuperscript{233} Rivers were adjusted to suit log rafting, making previously inaccessible forests available. With the enlargements and developments of the waterways, timber from these forests could be rafted directly to the sawmills. This was an important part of the industrial development.\textsuperscript{234}

Land distribution and ownership was another important development enabling the industry to emerge. During the early 19th century, ownership of the Swedish forests was still diffuse. Ernst Söderlund wrote that the state had basically claimed all forests that did not have an established ownership and this left concerns regarding disposal rights. The Swedish enclosure process, \textit{avvittring} and \textit{skiftet}, which helped to determine ownership of the forests, formally differentiated between the property of the state, villages, parishes and individuals. It was more or less complete in northern parts of the country by the time of industrialism that meant that most forests were privately owned.\textsuperscript{235} It was far easier for the new industrialists to

\begin{flushleft}
\textsuperscript{230} Schön 2007, pp. 86-88, 112.
\textsuperscript{231} Carlgren 1926, pp. 112-115.
\textsuperscript{235} Söderlund 1951, pp. 6-8. Prior to this process “land was generally distributed so that each landowner received a portion of every type and quality of land belonging to the village” (Eriksson & Rogers 1978, p. 44).
\end{flushleft}
negotiate directly with private owners than what it would have been had they been obliged to deal with the state as their predecessors had been forced to.\textsuperscript{236}

Not all forests were appropriate for the sawmill industry to log and by the mid 19\textsuperscript{th} century, most forests in southern and central Sweden had been exploited, leaving nothing but young trees behind. The market demanded logs with large dimensions and this meant that the sawmill owners had to direct their interest to the virgin forests of the north. Jörgen Björklund called this the timber frontier, which slowly made its way further north as more forests were logged and exploited.\textsuperscript{237}

Acquiring logging rights had initially been seen as preferable from owning land. Lundberg wrote that most industrialists did not believe that it was economical to tie capital directly into the land.\textsuperscript{238} These leases were usually contracted for a 50 year period, but the benefits from actually owning the land would eventually become more prominent and this induced purchases of forests, land and agricultural properties.\textsuperscript{239} Rolén described how the sawmill companies excelled in their acquisitions of agrarian land and property during the 1870s, which completely changed the ownership structure in all northern counties.\textsuperscript{240} “The need of raw materials increased considerably” during the 1880s and 1890s and prices on timber rose as a consequence, which in turn speeded up the sawmill companies purchases of forestry.\textsuperscript{241} The reason behind the sawmill companies’ land purchases was, according to Wik, the high costs of the industries. The mills themselves were cheap to build, but they required capital to pay for logging, transport and shipping. Buying land and forestry were therefore not only seen as the convenient thing to do, but also as a sound investment to secure the companies’ future.\textsuperscript{242}

The acquisition of land was also a result of that many forest owners became more reluctant to sign away logging rights for such lengthy periods as 50 years.\textsuperscript{243} It was more beneficial for them to sell their forests to the sawmill companies because they did not see it as important as their farmland.\textsuperscript{244} Even though some among the peasantry had begun to realise the economic potentials of timber, most of them failed to really comprehend the principles of the new industry and could probably have made more money had they not been so quick in their decisions to sell.\textsuperscript{245}

\textsuperscript{236} Lundberg 1984, p. 8.
\textsuperscript{238} Lundberg 1984, p. 8.
\textsuperscript{240} Rolén 1979, p. 12. In many counties they became the largest landowners.
\textsuperscript{241} Björklund 1998, pp. 37, 73.
\textsuperscript{242} Wik 1950, p. 272.
\textsuperscript{243} Rolén 1979, p. 46.
\textsuperscript{244} Lundberg 1984, p. 18.
\textsuperscript{245} Rolén 1979, pp. 47, 57.
Some of the peasantry would, however, involve themselves directly with the new sawmill industry, mainly as investors. In the Sundsvall district there were even two steam powered sawmills that were owned by members of the peasantry, Nils August Flodén mentioned Johannesvik and Nacka sawmills in Alnö parish.246

Due to these large purchases of land, there was a growing concern among the public and authorities that the peasantry were “forced from the land” by the end of the century. This would eventually result in laws to protect farmers from being exploited by sawmill companies. The first law from 1889 restricted the time during which a company could lease logging rights; a limit was set to a maximum of 20 years.247 This did not change the fact that the sawmill companies’ ruthless exploitation in certain areas led to changes in many agrarian villages and threatened individual ownership.248

Geographical prerequisites for the sawmill industry
The geographic prerequisites for a large-scale sawmill industry, access to natural resources and transport routes, were all in place in the Sundsvall district. The two major water systems in the district, Indalsälven and Ljungan, had forks that stretched far inland through virgin forests.249 Even though the water powered sawmills had been constructed alongside rivers, streams and waterfalls, they had mainly been located inland.250 The coastal areas had only been the location of the loading docks to which the sawed timber had been transported and thereafter loaded on to waiting ships. Steam power allowed the new sawmill owners to seek a new geographical venue that was more favourable for large scale production, because the mills no longer were dependent upon shifting water currents. The sawmills were therefore relocated to the coastal areas where they could be built in conjunction to

247 Olsson & Lindström 1953, p. 23.
250 Wik 1950, p. 150. Layton wrote that few mills and foundry estates in Norrbotten were located upstream inland, but that the majority were located as far down by the rivers and streams that were possible so that the loading docks could be utilised (Layton 1979, p. 223).
the loading docks. Timber could thereafter be loaded directly onto waiting ships, cutting transport costs and the sawed boards also became more even because they were not as easily discoloured by being soaked in the water during log-rafting. The relocation was therefore backed by strong economic incentives especially as the new technology allowed the mills to operate more regularly.

The sawmills’ geographic locations were, according to Hjulström, decided both by accidental and incidental reasons, which was directly tied to where the sawmill owners owned or could buy land. Procuring land to build the sawmills usually offered no problems especially in unpopulated sections of the parishes. Preferable locations were bays, behind narrow points of land or islands that allowed for the establishment of harbours with favourable weather conditions. Hjulström commented upon the particularly favourable locations of Tunadal and Skönsmon sawmills. Tunadal was built close to Tunaby, a village by the Alnö strait, close to the mouth of the Indalsälven. Skönsmon’s (Mon) sawmill had similar advantages of close proximity to a possible workforce, a river for transport and a loading dock.

As seen in the map, Alnö parish provided a natural barrier against more rough conditions at sea; making the western shoreline a perfect geographical location for sawmilling. The importance of the geographic location is most definitely displayed by the fact that no sawmills were constructed along the south east shoreline of Alnö, which would have been more sensitive to the weather at sea. The development of the sawmill industry in Alnö, especially the mills’ close proximity to each other, was most likely a consequence of the lifting of the final ban that had stipulated that commercial/export sawmills could not be established without permission, nor be built too close. By looking at the map from 1900, it is clear that the abolishment of this law must have played an important part in the establishment of sawmills in this particular parish.

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251 Layton wrote that most export mills were located within a radius of 20 kilometres from the coast. Without suitable rivers and streams to utilise for transport, some sawmills would have been forced to construct roads, which would have been both costly and made transportation slower (Ibid. p. 230).


253 Wik 1950, p. 120. Layton 1979, p. 239. Hjulström 1955, p. 120. Layton 1979, p. 239. Glete 1987, p. 146.

254 Hjulström 1955, pp. 116, 120.

255 Berglund-Lake 2001, p. 86. It was especially important that the harbours were deep so that larger transport ships could dock. Many sawmills tried their best to add on to their loading docks and improve loading possibilities by extending the dock area towards deeper water (Layton 1979, p. 244).

256 Hjulström 1955, pp. 116, 120.

257 Cornell 1982, pp. 34-35. Wik 1950, pp. 80-82. It is difficult though to say whether or not this particular law was followed to the letter, especially in the northern parts of the
The coastal area of Skön parish also offered favourable geographic locations and looking at the map from 1900 sawmills were evenly spaced along the shoreline, from Skönvik in the north to Kabikenborg in the south were evenly spaced along the coast. Njurunda had the advantage of Svartviken, the bay in which the outflow of Ljungan split the parish in two, thus creating the perfect setting for the sawmill industry. The only one of the Njurunda mills built alongside the east shoreline was Juniskär, in-between two smaller capes in Boviksjärden.

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country where state control and supervision would have been more difficult to implement.


### 2:2 Steam power vs. water power

Steam power revolutionised the sawmilling industry because it would change so much about the structure of the mills, their locations and especially their production capacity. Although, not everybody was too keen on the new technology. P.F. Heffner had been involved in the timber trade and sawmilling since the early 1820s and according to Söderlund he had been very resistant claiming that it was possible to build three water mills for the cost of one steam mill.\(^{258}\) It was not until the last years of his life that he finally accepted the advantages of the new technology and built Heffners sawmill in Skön.\(^{259}\)

It is true that the steam powered sawmills may have been more expensive to build, but the steam powered sawmills were, in the long term, much cheaper to operate than the water powered mills, especially in relation to transportation costs. The cost of building a steam powered sawmill was usually between four to five times higher than building a water powered sawmill. As Ostergren wrote, they "could be fuelled with the waste from their own saws and therefore be located on the coast where the output could be loaded directly and efficiently onto waiting ships."\(^{260}\)

Because the first steam powered sawmills were of a rather modest character with a limited production capacity, they were unable to compete with the well established water powered sawmills.\(^{261}\) Cornell claimed that the number of water powered sawmills in general increased after the introduction of steam power, even though the number of water powered mills steadily decreased in all of Norrland after 1870 in favour of the steam powered sawmills.\(^{262}\) The water mills actually increased their production during the 1850s and 1860s.\(^{263}\) Matfors sawmill, for example, was one of the largest water mills in the country during the 1860s and early 1870s. The mills’ production capacity would allow it to compete with the steam powered mills longer than any other water mill before production finally ceased in 1878.\(^{264}\) Water mills would continue to be constructed up until the 1890s, but Cornell noted that their contribution and importance to the sawmilling indus-

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\(^{258}\) Söderlund 1951, p. 111.
\(^{259}\) Höglund 1957, p. 24.
\(^{261}\) Olsson 1949, p. 49. Hjulström 1955, p. 120. Söderlund 1951, p. 111.
\(^{262}\) Cornell 1982, p. 46. Olsson 1949, p. 50. There were still 23 water powered mills in Medelpad in 1883, alongside 32 steam powered sawmills (Höglund 1957, p. 12).
\(^{264}\) Ostergren 1990, p. 26. Cornell 1982, p. 46. The mill expanded with an additional saw house in 1852 and became the largest mill in Norrland with almost 100,000 sawing hours annually (Nordberg 1979, p. 294). Further improvements to increase productions were added 1869-1870, despite the knowledge that the mill eventually would have to close down (Bylund 1979, p. 333).
try were greatly reduced over the second half of the century. They continued to struggle with high transport costs to the loading docks and their production became more susceptible to economic fluctuations and the increased competition from the steam powered sawmills.

**Figure 2.1 Number of sawmill types in Norrland according to county 1871-1900**

Information from a study by Harald Wik made it possible to get an overall estimation of the frequency and type of sawmills in the northern parts of the country during the second half of the 19th century. Water mills appear to have had a stronger foothold in Västernorrland and Hälsingland than in Norrbotten, Västerbotten and Jämtland. The number decreased, but not as rapid as one might have presumed, going from 203 in 1880 to 151 in 1890. The water mills were smaller, but they were established at a higher frequency and Ångermanland and Medelpad were crowded with smaller mills. Västernorrland and Hälsingland also had the largest number of steam powered mills.

Why the other counties did not have a similar development is difficult to say, Wik speculated that the many rivers and streams in Västernorrland provided better transport routes from the inland logging sites, and had better and closer communications with the southern parts of the country. What can be said though is

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266 Wik 1950, p. 117. Layton 1979, p. 239.
267 Wik 1950, p. 137.
268 Ibid. pp. 88, 124.
269 Ibid. pp. 128-129.
that Västernorrland displayed a longer tradition of sawmilling, which must have helped to establish the industry in these provinces more profoundly. Västernorrland had by the turn of the century 106 steam powered sawmills, while only nine water mills remained.270

Steam powered sawmills in the Sundsvall district
Skön was the first parish to become industrialised with the sawmill in Tunadal in 1849, followed by Skönsmon (Mon’s) sawmill in 1851, and Sund sawmill in 1857.271 With the construction of these mills, the beginning of the sawmill era in the Sundsvall district had begun. Although, as previous research has shown, the first steam powered mills had a very modest production and were clearly outnumbered by the water mills. In total, between 1849-1899, 40 steam powered sawmills would be constructed in four of the districts’ parishes; Skön, Alnö, Njurunda and Timrå.

During the 1860s, more sawmills started to appear in all four parishes. Eriksdal was constructed in Alnö parish in 1860 and Alvik in 1869. In Njurunda, Klampenborg and Essvik were built in 1868 and 1869 respectively. In Skön an additional four mills were constructed during the 1860s; Skönvik abandoned the glass foundry and installed a sawmill in 1861, Ortviken was established in 1862 and in 1868 and 1869, Heffners and Kubikenborg were built. Two more mills were also constructed in Timrå. By the end of the 1860s, Skön had truly established itself as being the leading sawmill parish in the district.

Table 2:1 Number of steam powered sawmills by decade and parish in the Sundsvall region 1840-1899*

<table>
<thead>
<tr>
<th>Year</th>
<th>Alnö</th>
<th>Njurunda</th>
<th>Skön</th>
<th>Timrå</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1840-49</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>1850-59</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>1860-69</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>1870-79</td>
<td>7</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>1880-89</td>
<td>6</td>
<td>-</td>
<td>1</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>1890-99</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td><strong>6</strong></td>
<td><strong>9</strong></td>
<td><strong>8</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

Source: Höglund 1957.
*Some sawmills lacked a definite construction year. For simplicity these sawmills have been counted as having been established the first time they appear in the sources.

Something happened during the 1870s that would challenge Skön parish’s leading position. This was the decade when most sawmills were established; the demand

for timber changed development and it increased drastically between 1869-1874.272 A total of eleven mills were constructed during those years. Economic optimism infused the first half of the 1870s and no more than seven sawmills were established at Alnö, five of them during the first half of the 1870s. In Njurunda three mills were constructed in 1873, among them Svartvik. In Skön it appears as though the construction of mills almost had stopped; only one sawmill was constructed, Vindskär in 1875.273 Despite a favourable economic climate, no sawmills were constructed in Timrå parish during the first half of the 1870s.

During the 1880s, sawmill construction was mainly concentrated to Alnö where as many as six mills were built. Timrå parish had four new mills constructed during this decade and in Skön one new sawmill was built. The 1880s were therefore, after the 1870s, the most active decade of sawmill construction. The sawmill construction phase appears to have almost come to a halt by the 1890s, only two sawmills were established in Alnö.

### 2:3 Production and export

Sawmill construction was highly linked to the economic development, fluctuations and demands from abroad. Export from Sweden grew with a staggering 500 percent between 1850-1870.274 Production developed quickly and the demand for raw materials rose, during the early 1860s the industry consumed 0.63 million pieces (logs) annually, in the early 1870s it had risen to 2.35 million pieces and by the turn of the century, the industry consumed 6.88 million pieces.275 Rondahl wrote that Norrland was overall the primary export area for all timber products from Sweden and accounted for about 70 percent of the entire export between 1875-1910.276

The national export figures of sawed timber would triple during the 19th century and this development occurred after 1860. Nationally the increase during the 1860s went from 0.9 to 2.2 million cubic metres. The following decades displayed an approximate increase of one million cubic metres per decade.277 In spite of falling timber prices during the second half of the 1860s,278 the market experienced extremely positive prospects by the early 1870s and both production and export increased. There was a general feeling of optimism among the sawmill owners.

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272 Rondahl 1972, p. 23.
273 Höglund 1957, p. 165.
274 Söderlund 1951, p. 67.
276 Rondahl 1972, p. 25.
277 Hjulström 1955, p. 290.
278 Lundberg 1984, p. 3.
in the country. Export prospered because of lowered import and export taxes. In 1875, four fifths of all timber export came from Norrland and the national export had increased to 2.5 million cubic meters. In 1860 export of sawed boards represented seven percent of the nation’s total export and by 1890 export from the Sundsvall district alone contributed 21 percent of the national total export of sawed boards according to Hjulström.

Table 2:2 Number of sawed timber in Medelpad province 1871-1900

<table>
<thead>
<tr>
<th>Period</th>
<th>Water mills</th>
<th>Steam mills</th>
</tr>
</thead>
<tbody>
<tr>
<td>1871-1875</td>
<td>279,337</td>
<td>2,082,079</td>
</tr>
<tr>
<td>1876-1880</td>
<td>34,056</td>
<td>2,565,170</td>
</tr>
<tr>
<td>1881-1885</td>
<td>99,424</td>
<td>4,134,763</td>
</tr>
<tr>
<td>1886-1890</td>
<td>112,408</td>
<td>5,081,607</td>
</tr>
<tr>
<td>1891-1895</td>
<td>183,261</td>
<td>4,804,690</td>
</tr>
<tr>
<td>1896-1900</td>
<td>116,718</td>
<td>6,763,655</td>
</tr>
</tbody>
</table>


A harder economic climate during the second half of the decade discouraged the building of new mills; despite this three were constructed between 1875-1878. The demand decreased after 1875 but peaked again in 1877, only to diminish severely after 1878 and hit rock bottom in 1879. Large investments in less than instantly profitable sectors had been made and the credit market fell along with prices, wages and export. Prices dropped with almost 40 percent between 1878-1879. The sawmill owners in the Sundsvall shielded themselves against financial losses by reducing their production costs and as a consequence logging decreased, wages were cut and unemployment among loggers rose. During the spring of 1879 wages were cut again as a preventive measure by the sawmill owners to protect themselves against larger financial losses. The entire industry was feeling the

279 Cornell 1982, p. 41.  
281 Hjulström 1955, p. 288. Usually, different products were displayed separately. This is just an example to show the general trend in which export developed.  
282 Björklund based this information on BiSOS H. Kungl. Maj:ts befalningshavande fem-årskrättelser för Västernorrlands län.  
283 Rondahl 1972, p. 23. Despite this, there was one sawmill that was constructed after 1875; Juniskär in Njurunda in 1878 (Höglund 1957, p. 132).  
286 Olsson 1949, p. 97.  
287 Olsson estimated that wages were cut by 15-20 percent. This affected around 7,000 workers in the district (Olsson 1949, p. 112). Björklund, however, estimated that the wages were cut with as much as 20-25 percent between 1878-1879 (Jörgen Björklund,
effects of the lowered demands and the Swedish government therefore approved a loan of 3 million Swedish crowns to help the industry back on its feet.\textsuperscript{288}

Figure 2.2 Export of sawed boards from the Sundsvall district 1850-1890*  

*The numbers are an approximation between total production and export. Cornell wrote that information about production (and export) prior to 1896 is very uncertain.\textsuperscript{289}

During the 1880s the aftermath of the financial crisis had to be dealt with and despite wages and prices continued to fluctuate, both export and prices also steadily increased.\textsuperscript{290} The industry and the economy slowly recovered, but as seen in Figure 2.2 illustrating a general development of export on sawed boards from the Sundsvall district, the economic crisis of the late 1870s barely had a discernible effect, at least not on the export of sawed boards. The economic crisis, however, should have affected export of different products differently. In the Sundsvall district export of timber products in general “increased from 31,000 to 790,000 cubic metres” between 1850-1895. By 1900, export had reached 5 million cubic metres.\textsuperscript{291}

Prices hit rock bottom again in 1886. The economic difficulties of the late 1880s were also reflected in sawmill construction as displayed in Table 2.1. Of the eleven

\textsuperscript{288} When the news about the loan spread, many workers may have believed that this money would restore their previous wages. No such action was intended (Olsson 1949, p. 112). The sawmill owners celebrated the news of the approved loan with a banquet (Björk & Schnell 1979, p. 39).
\textsuperscript{289} Cornell 1982, p. 42.
\textsuperscript{291} Björklund 1998, p. 60.
mills established during the 1880s, nine were constructed in-between 1881-1885. The economic recession during the early 1890s continued to affect both construction and export. Prices did not start to rise again until 1896. Despite a slight economic setback during the early 1890s, the second half of the decade would prove to become the most prosperous decade since the expansion of the sawmill industry began.

2:4 The sawmill owners

The sawmill owners would come to have a great influence on their sawmills, the development of the communities and should probably be described as an industrial prerequisite for the development of the new industry. Although, it was not the already established sawmill owners who profited on the sawmill industry during the second half of the 19th century. When the state regulations on the industry had been abolished, the established sawmill owners did little to seize the moment. Jan Glete wrote that they clearly lacked initiative and willingness to take risks and were, as a result, less successful. The existing sawmills had in some cases been handed down through generations and the ownership structure had grown rather diffuse and many lacked the initiative to expand. As a consequence the established sawmill owners were, more or less, overrun by a new type of entrepreneur and industrialist who showed no hesitation in taking advantage of the new circumstances to invest in steam power. Glete wrote that one explanation for this development could have been that outsiders’ larger networks and connections abroad had given them better prerequisites than the local producers. Within the Sundsvall district there were really only two already established owners within the sawmill industry who made the leap from water power to steam power; the Dicksons and P.F. Heffner.

The owners of the steam powered sawmills represented a new generation of timber merchants and industrialists who had a greater understanding of market demands and the mentality of those with whom they did business. They came, according to Glete, from poor or humble circumstances, which had worked their

296 Ibid. pp. 151, 154-156.
297 Söderlund 1951, p. 100.
way up gathering experience from timber sales, loading docks, manual sawing stations or been involved within the foundry industries. Many of the new sawmill owners were not local to the Sundsvall district, but had migrated from southern parts of Sweden, such as Enhörning (Kubikenborg) or Wikström (Skönsmon), or come from abroad. Examples of the latter include families, such as, Bünsow (Skönvik), Jacobsen (Tunadal), Braathen (Hovid) and the Dicksons (Matfors/Svartvik). Others such as Heffner had spent time abroad learning about the industry.

*Industrialists and power*

The companies that grew up around timber trade and sawmilling during the 19th century were to a large part family-owned companies that accumulated great wealth and owned vast natural resources. Glete studied the role of owners and ownership in industrial development and found that there were different types of owners. Most common were the entrepreneurs and industrialists who established a business or company, either with their own capital or with the assistance of investors. Ownership structures linked to these entrepreneurs usually became family oriented and family members could be found in most leading positions. Their influence and importance to the company would have become diluted as the companies were introduced to the stock market. Other companies were established through investment corporations or trading houses, where there was no direct owner per se, but where everyone had an equal interest in monitoring the progression and profit of the business.

Glete also differentiated between two types of power, change and preservation. The power of change implied expansion and development and a continuous flow of information and knowledge on how to navigate current trends and finances. The owners who were more interested in preserving power needed no such information; instead it was the power the owner yielded over an existing capital that was the key to success. Preserving power was only successful as long as the surrounding world did not change too swiftly, but such companies were rare. Even though there was an apparent tendency of wanting to preserve power within the families, Glete found nothing to suggest that they were adverse to changes in term of the companies’ development. In fact, many of the older sawmill compa-

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299 Höglund 1957. Glete 1987, pp. 64-65. The foundry estate owners were a completely different type of owner and were, according to Glete, not the predecessors to the new type of sawmill owners who emerged after the 1850s (Glete 1987, p. 77).  
300 Glete 1987, p. 141.  
301 Ibid. p. 15.  
302 Ibid. p. 16.
nies were transformed from single, or part-owned companies to stock-based ownership, such as Tunadal, Skönsmon, Sund, Ortviken, Heffners and Kubikenborg. What differs though was when this transformation occurred and how the stock was dispersed.\footnote{Höglund 1957. Tunadal was transformed to a stock company in 1870, Sund in 1876, Ortviken in 1865 and Heffners and Kubikenborg during late 1880s.} When Nils Wikström owner of Skönsmon sawmill in 1867 transformed the business to a joint-stock company, he kept 98 stocks himself, while the remaining two were kept within the family.\footnote{Ibid. p. 172.}

Management and relationships
Industrialisation and the establishment of industrial mills and factories meant that the employer, the owner was given direct control over the production process and the material and the workers and their performance. Control over these aspects allowed for time and money to be saved in the production process. Profit thus became the motive propelling the owners’ strategies, especially as competition became tighter. Olsson wrote that this development created a structural necessity for mill owners and employers to increase control over the work and the workforce.\footnote{Lars Olsson, Då barn var lönsamma. Om arbetsdelning, barnarbete och teknologiska förändringar i några svenska industrier under 1800- och början av 1900-talet, Stockholm 1980, pp. 28-29.}

The way that the companies were managed was of great importance for the different structures of the communities, for example, if they provided company housing, had their own schools, a place to worship, a company store, financial help funds for the sick and bereaved. These social services were a part of consolidating the inhabitants in the sawmill communities into a set hierarchy with the purpose of pushing the residents into a submissive state where they accepted the sawmill owner’s undisputed power.\footnote{Ibid. p. 41.} It is likely that companies that had less stable developments, which struggled with economic difficulties, and where ownership changed more frequently, were less patriarchal than companies with only one major owner who remained in power for an extended period.

While some sawmill owners chose to have direct involvement in the running of the mills, others like Nyhamm’s owner Näs and Svartvik’s owners the Dickson family lived elsewhere and hired managers to run the mills for them.\footnote{Höglund 1957. Glete 1987, pp. 64-65.} This would, however, not necessarily mean that the managers hired were not patriarchal in their view of the workers employed at the mill. The manager at Bünsow’s Skönvik
was, by Nils August Flodén, characterised as a good example of someone favo-
ring the patriarchal structures of the foundry estates.\textsuperscript{308}

There was also a clear difference between owners who owned one mill and
those who were part-owners in several sawmill companies. The former estab-
lished and managed their own mills while the latter may have been involved in
the construction and initial development phase of the mill and then later handed
over the managing of the mill to others.\textsuperscript{309} It is likely that if a mill was part-owned
by owners with other sawmill interests that this naturally would have diminished
competition as the wish for profits would have been equally important from all
holdings.\textsuperscript{310} Patriarchal tendencies should also have decreased if the owner had in-
terests in more than one sawmill simultaneously. In general though, most sawmill
communities were viewed as rather patriarchal environments, if simply from the
fact that the workers lived in company housing.\textsuperscript{311}

The social hierarchy and structure of the time would have been a great in-
fluence in how the workers were regarded and treated. Showing loyalty and respect
towards managers and employers was an integral part of the system accepted by
all.\textsuperscript{312} Most communities had rather conservative standpoints resembling the rela-
tionship between master and servant.\textsuperscript{313} Patriarchal attitudes would therefore have
been easy to find. Everyone had their place and knew where in the social hierarchy
they fitted in and everything in the community was centred on the production. An
employment contract from 1862 at Sund sawmill also described the relationship
between worker and employer as that of a relationship between a master and his
servant.\textsuperscript{314} In employment contracts from Johannesvik in 1877, the tone descri-
bining the relationship between worker and employer had changed. These contracts
emphasised the workers’ duties and responsibilities relating to the specific tasks
the worker had been hired to do. They also clearly stipulated that breaches of the

\textsuperscript{308} Nils August Flodén, Sågverks patronerna. Del 1. De tio stora, Sundsvall 1949, p. 87.

\textsuperscript{309} Glete 1987, p. 59.

\textsuperscript{310} The ownership structure in sawmill industry in Skellefteå was characterised by part-

\textsuperscript{311} Björklund 1998, p. 25. According to Seccome, during the early years of industrialism
ownership in multiple industries (Torbjörn Danell, Sven Gaunitz & Ulf Lundström, In-

\textsuperscript{312} Björklund 1976, p. 22.

\textsuperscript{313} Lars-Göran Tedebrand, Historia och demografi – valda texter, Umeå 1999, p. 207.

\textsuperscript{314} Cornell 1982, p. 131.
contract, such as, drunkenness and disobedience would result in unemployment and a loss of earned wages.315

In a letter written by the workers at Heffners to the companies resigning owners in 1895 showed that the relationship between workers and owners was familiar, but built on mutual dependence. It was also a relationship between different social classes, where the workers accepted their subordinate position, at the same time as they were aware that the owners just as they had obligations to fulfil to make the relationship work.316 This was the accepted social view that was taken for granted. The sawmill company was obligated to care for its workers and the workers were obligated to work, behave and express loyalty towards the employer.317 Acts such as these could either be viewed as a true representation of the workers’ feelings, but also as a given and expected way to behave. Playing by the social rules, they were supposed to be subservient and humble, show reverence and loyalty.318 By holding on to ceremony and dressing in the socially accepted role may be regarded as a way of nursing the relationship that existed between worker and owner. Berglund-Lake remarked that following such behaviour usually had the purpose of securing benefits along the way. As the relationship was as it were, workers were therefore not completely without influence over the sawmill companies.319

A small circle – family and networks

Ownership within the sawmill companies was mainly kept within close networks of family, friends and local business acquaintances.320 The owners’ networks were of great importance to the companies’ development, survival and success and influenced their strategies.321 For example, when the founder of Kubikenborg, J.A. Enhörning got himself into economic difficulties during the 1860s, he could with the economic backing from a brother-in-law overcome his problems.322 A.F. Forsell who established Ortviken sawmill had a brother-in-law who was involved in the sawmill industry, part-owner in Strand and a few other sawmills.323

Kinship connections also appear to have been an important element, at least among the first industrialists. Studies of industrialist families in Skellefteå showed that women played an important part of creating new networks through mar-

318 Tedebrand 1999, p. 207.
320 Glete 1987, p. 53.
321 Ibid. p. 29.
322 Höglund 1957, p. 160.
riage. It was especially an important strategy between local businessmen and in-migrating industrialists. It was even common for men to use marriage as a way of gaining control over a company or acquiring additional capital. In Sundsvall, C. Jacobsen, the part-owner and manager of Tunadal married the daughter of former owner J. Axling. Jacobsen was also tied to J.A Hedberg, the brother of the founder of Klampenborg, who had married his sister-in-law. Appointing new managing directors of the sawmills was something that was usually passed on within the family of the major owners. F. Bünsow at Skönvik had inherited property and capital from his maternal uncle and the sawmill company he had built from the ground was later handed over to his son. J. Johnasson, founder of Johannedal also handed over the managing of the company to his son. When a new manager was to be appointed to Sund sawmill during the early 1880s it was a nephew to one of the part-owners, E.J. Hammarberg, who got the position. This man, O. Björklund, later also married his first cousin, Hammarberg’s daughter. Enhörning at Kubikenborg was also succeeded by his brother’s son.

The second generation within the sawmill families would also continue to network through marriage. Two daughters of G.F. Burman, owner of Gustafsberg, were married to Per Näs at Nyhamn and Axel Jacobsen at Tunadal. F.A. Åslund, the son and successor of P.F. Heffner at Heffners, had a daughter who married into the Axell family, which had connections to both Ortviken and Strand sawmills. This generation of sawmill owners was, however, not always as successful as their predecessors in managing the sawmill companies. The development between the generation of entrepreneurs and industrialists and their offspring was therefore reminiscent of what the situation had been for the owners of the water mills; the dynamics of the companies changed when the children or other family members were promoted to front-line positions. Forsell at Ortviken handed over the reins to his son in 1888, but the son soon filed for bankruptcy and had to sell to Skönvik in 1894. A similar fate occurred at Nyhamn as the owner Näs was succeeded by his son in 1889. Within three years the son had driven the company into bankrupt-

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325 Ibid. p. 114.
326 Ibid. p. 89.
328 Ibid. pp. 44, 46, 36.
329 Ibid. p. 40.
330 Ibid. p. 160.
331 Flodén 1949, p. 336.
332 Ibid. pp. 200-201.
334 Höglund 1957, p. 27.
ticy and had to sell.\textsuperscript{335} At Eriksdal another generational shift in management also led to a forced sale.\textsuperscript{336}

Even though many companies and sawmills remained family owned by the end of the century, the families’ importance for the companies in themselves would have decreased. It became more and more important to form new contacts and broaden networks to include more than just friends and family.\textsuperscript{337} As Grenovetter suggested, people needed to connect with members of different groups in order to collect and gather information. Without these connections groups tended to become more isolated.\textsuperscript{338} It was therefore, according to Glete, the sawmills with more diverse ownership structures that were more successful than the family businesses, because they would have had access to a greater capital, larger networks and more information and thus the option to withdraw their ownership if the market changed.\textsuperscript{339}

2:5 Conclusions

The sawmill industry that developed during the 19th century was a new kind of industry, with better prerequisites and a different breed of owners. The abolishment of the state enforced regulations, which had controlled the industry for centuries prior to 1842, opened a whole new world of opportunities when it came to sawmilling. From this sprung a new type of sawmill industry, unperturbed by state influence, which came to have a direct influence on community construction.

New technology, steam power, would eventually revolutionise the industry, but began with enabling better transport possibilities and communication. The new steam powered sawmills were, unlike their predecessors the water mills, located by the coastal areas, close to river outflows. Building sawmills close to loading docks allowed for timber to be directly rafted to the mills from inland logging sites, which cut transportation costs. Even though more steam mills were constructed in the Sundsvall district after Tunadal in 1849, they remained small and their production moderate. In fact, water mills actually increased their production and it would take two more decades until they were overrun by the production of the steam mills. In the Sundsvall district, 40 steam powered sawmills were constructed between 1849-1899.

\textsuperscript{335} Ibid. pp. 136-137.
\textsuperscript{336} Ibid. p. 85.
\textsuperscript{337} Glete 1987, p. 54.
\textsuperscript{339} Glete 1987, pp. 284-285. Those who made the “the greatest use of weak ties are those whose weak ties do connect to social circles different from one’s own” (Grenovetter 1983, p. 208).
Due to irregular production, few water powered sawmills had resulted in permanent settlements with registered populations. The new industry, no longer controlled by shifting water currents and with longer sawing periods, focused on the northern part of the country that offered virgin forests with the requested log dimensions. Adjustments to waterways enabled logging in previously unexploited areas and production and export increased.

Increased export made the new sawmill industry highly susceptible and vulnerable to the demands of the market and fluctuating economic situations. Despite economic setbacks, falling prices and less capital, export managed to continue to increase. The northern part of the country contributed with the majority of natural resources to the timber export and the importance of the Sundsvall district to the country’s sawmill industry was indisputable.

The majority of the owners behind the steam powered sawmills did not belong to the already established sawmill-owning elite, but were new entrepreneurs. These were men who embraced technological change and were not hesitant to take advantage of the new favourable circumstances. The sawmill companies that arose were mainly family owned, but because many of these men lacked their own resources, it was not uncommon for consortiums or small groups of part-owners to share ownership. Networking was an important tool and many of the new sawmill families in the Sundsvall district were linked to each other through marriage. It was the driving force of improvements these new type of sawmill owners offered and their propelling motives for profits that revolutionised the sawmill industry. Together with the new technology, the new sawmill owners became an important part in the industrial development and the construction of the sawmill communities.
Chapter 3

THE SAWMILL COMMUNITIES

Few industries had prior to the introduction of the steam powered sawmills resulted in permanent settlements. The water powered sawmills had usually been built by farmers in local villages to meet a household need and their location was dictated by the closest stream, river or waterfall that could provide power. Their size and location would therefore seldom result in permanent population settlements.340 Neither had the shipyards nor the loading docks resulted in any larger settlements, at least not in the Sundsvall district. The majority actually had their workers residing elsewhere.341 Wifstavarv and Svartvik were the only areas where shipbuilding had lead to permanent communities, but that had been combined with other industrial enterprises.342

The foundry estates were really the only true predecessors to the sawmill communities. Constructed like smaller villages, they emerged during the 17th century and were among the first population enclaves outside the agricultural villages in the rural landscape and become important commercial centres. The main production area and the workers’ residences commonly centred together in close proximity to the owners’ main house. The estates mainly focused on one major production, processing natural resources, such as, timber, iron or coal for commercial purposes. This was also combined with everything from ironworks, shipbuilding, sawmills, glasswork, farming and different kinds of handicrafts.343

On the one hand, it could therefore be argued that the sawmill communities rested on traditional structures found within older industries, such as the foundry estates. On the other hand it could also be argued that the communities that arose around the 19th century steam powered sawmills were completely new types of communities. Regardless which, one thing is clear and that is that the establish-

340 Matfors was one exception though, the greater Matfors area had 211 registered residents by 1850 and the mill had according to Hjulström, 74 registered residents directly registered at the mill site (Hjulström 1955, p. 108). Information provided by Hjulström does not correspond with the numbers from the church registered population in Matfors. However, since Hjulström has utilised another source, mantalslängder, it is likely that the numbers in the table only depict the population directly connected to the mill. The information provided by church registration does not separate between villagers and workers at the mill, hence the difference.

342 Ibid. p. 90.
ment and development of sawmill communities never really followed a set pattern or time table.

The aim of this chapter is to discuss the sawmill communities’ physical and social structures. How were the sawmills constructed and planned? Under what conditions did the residents live? Under what conditions did the men, women and children work within the sawmills? The social aspect of the sawmill communities brought on by the popular movements also played an important part for the sawmill communities in setting new perspectives through which to view life. What did they promote and contribute to the social environments within the communities?

3:1 Creating communities

One of the most important questions when dealing with sawmill communities and the one, which is most difficult to answer, due to their different circumstances, is when the settlements around the sawmills actually become communities? What was counted as community characteristics; practical aspects like company housing, schools, stores or the construction of a new parish? The size of the populations would have been a deciding factor, at least to a point, when the settlements transformed into communities. Although, perhaps not so much relating to the particular size of the population but rather what a population of that particular size required and might have demanded of their social environment.

Svartvik was the only sawmill community that would become its own parish but because this administrative separation occurred almost two decades before the sawmill was constructed it cannot be directly linked to the sawmill industry. Several other sawmills also had chapels or other meeting halls that functioned as places of worship. Not even the presence of chapels may have created communities or been a premise of their construction. Although, religion in general, and the presence of the religious movement within the sawmill communities, would have contributed to their social development.

Ulla Johansson suggested that there may have been a strong connection between schools and community, particularly in the Sundsvall district where the sawmill industry and its communities transformed the parishes. Schools

344 The settlements around Tunadal had around ten years after its establishment in 1849 been said to have developed the characteristics of a sawmill community (Olsson 1949, p. 39). Johansson wrote that even though the first school in Stocka sawmill in Hälsingland was built during the 1860s, the settlement did not really become a more coherent sawmill community until the end of the century (Johansson 1988, pp. 82-83). It would not have been until then that the communities included schools, a place of worship, a company store and social meeting halls.

345 Ulla Johansson, Att skolas för hemmet. Trädgårdsskötsel, slöjd, huslig ekonomi och nykterhetsundervisning i den svenska folkskolan 1842-1919 med exempel från Sköns
in particular were seen as ways of fostering the next generation of sawmill workers. Through company schools, the company was in a position to influence how the children were brought up, educated and disciplined.\textsuperscript{346} It also introduced the children to the company standard of loyalty and discipline. Community schools were adjusted to fit the need of the mills that allowed the children to be used for their cheap labour. Pushing the children into the system from an early age was meant to make them feel as a part of the company.\textsuperscript{347}

Establishing schools was not something that all sawmills did though, as parish schools in some cases were closely situated to the sawmill communities. Despite that the companies obtained economic grants from the state to establish schools, it still meant a considerable cost.\textsuperscript{348} Two sawmill communities in Skön parish, Ortviken and Johannedal, refused to establish their own schools to the dismay of the local school board. Johansson suggested that this was a symbol of a new type of sawmill owner, where social relations no longer were formed after traditional patterns of servant and master.\textsuperscript{349}

The sawmill owners’ social responsibilities towards the registered populations began almost immediately, even though it was not as profound in the beginning of industrialisation as it would become by the end of the 19\textsuperscript{th} century. While many sawmill owners were driven by an honest commitment to improving the social environments in the sawmill communities by introducing different social structures, others were driven by more hidden agendas such as wishing to increase their control over the populations.\textsuperscript{350} Every benefit and economic investment the sawmill companies made in the communities followed economic strategies and calculations. Some strategies even went as far as holding social investments back, because it was more economically beneficial not to have a permanent labour force connected to the mills.\textsuperscript{351} A small population did not require as much as a population consisting of several hundreds. An increasing population would have compelled the sawmill owners to invest in the standard of the community and community life.

\textsuperscript{346} Ibid. p. 39.
\textsuperscript{347} Ibid. p. 36.
\textsuperscript{348} Berglund-Lake 2001, p. 151.
\textsuperscript{349} Johansson 1987, p. 33. Skön parish had by 1870 three schools, of which one was located within a sawmill community, Skönvik. By 1880 schools were also found in sawmill communities at Tunadal, Heffners and Skönsmon (Mon). In 1890 additional schools had been established in sawmill communities at Sund and Kubikenborg (Ibid. pp. 22-24). The first school at Skönvik was established in 1870, Tunadal and Heffners 1872, Skönsmon 1878, Kubikenborg 1885 and at Sund 1886 (Ibid. p. 32).
\textsuperscript{350} Johansson 1987, p. 255.
\textsuperscript{351} Berglund-Lake 2001, pp. 148-149.
Berglund-Lake claimed that even though it was common for sawmill companies to supply their populations with basic provisions in the beginning of industrialisation, this would have stopped as the populations increased and established trading cooperatives on their own initiatives. Most sawmill owners were willing to support such actions, provided that they later could hand over the responsibility.\footnote{Berglund-Lake 2001, p. 150. Sågverksfolket 1995, pp. 45, 143, 152, 216. It could also go the other way around, with the workers establishing a trading cooperative over which the sawmill owners in time gained more and more influence, finally taking over the running of the business and transforming it into a proper company store as had been the case at Gustafsberg (Ibid. p. 185).} The owner of Strand sawmill, Axell, appears to have been one of those owners who accepted his social responsibility with great eagerness and he became highly appreciated by his workers. He built a school and supported the establishment of a trade cooperative. He even insured both permanent and temporary workers against accidents in 1890.\footnote{Sågverksfolket 1995, p. 143. Axell was known as a rather progressive sawmill owner and expressed a high regard for his workers. For a more detailed description of his person and political involvement, see Tedebrand 1999, pp. 209-213.}

Being generous generated a good reputation, which was important especially during the recruitment process. No owner wanted to risk alienating skilled workers or gain a reputation as a bad employer. A sawmill company that cared for the sawmill population was more attractive than a company that did not invest into the social aspect of the sawmill community.\footnote{Ibid. pp. 153, 155, 158.} The companies were, more or less, forced to show benevolence especially because they believed that it promoted good behaviour among the workers. The residing populations therefore also relied on their employer and expected that the company would help if problems arose, because it was their responsibility.\footnote{Berglund-Lake 2001, pp. 152-153. Sågverksfolket 1995, p. 8.} This would, most likely, have created strong patriarchal relationships.

In order to create a symbolic sense of community among the population, and pride towards the community, it was also usual for the owners to host different social outings and gatherings. This reduced the differences between the workers themselves and between the workers and the owner and increased togetherness and an acceptance of the social differences that existed.\footnote{Ibid. pp. 153, 158.} Then, at least for a day the entire sawmill populations were incorporated in a joint “us”.\footnote{Paulsson 1981, p. 223.} Stronger, more genuine bonds and loyalty towards the own mill were created and strengthened over time. The workers who had sided with the company and remained loyal

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352 Berglund-Lake 2001, p. 150. Sågverksfolket 1995, pp. 45, 143, 152, 216. It could also go the other way around, with the workers establishing a trading cooperative over which the sawmill owners in time gained more and more influence, finally taking over the running of the business and transforming it into a proper company store as had been the case at Gustafsberg (Ibid. p. 185).
353 Sågverksfolket 1995, p. 143. Axell was known as a rather progressive sawmill owner and expressed a high regard for his workers. For a more detailed description of his person and political involvement, see Tedebrand 1999, pp. 209-213.
356 Ibid. pp. 153, 155, 158.
during hard times would most likely have experienced a stronger employment security and better material standard.\textsuperscript{358}

\textit{The sawmill communities physical structure}

The sawmill communities, just as the foundry estates, emerged from a centralised production and the mills were commonly located in the centre of communities. The foundry estates, however, were more architecturally unified than the sawmill communities and there had usually been a structured plan on how the communities should be designed.\textsuperscript{359} Still, they could only be planned to a certain point and it was not uncommon for additional constructions to be added or that non-industrial settlements emerged outside estate controlled land.\textsuperscript{360} When it came to the sawmill industry though, plans on how a possible community would be structured seldom existed. The planning usually only went as far as the construction of the mill. Most areas around the mill therefore lacked clear definitions during the first years. Residential areas or company housing rarely consisted of anything other than a few poorly constructed barracks for seasonal workers. These barracks would have had few interior details, apart from a few windows it would only have included beds and cupboards nailed to the walls. Not even the sawmills that can be described as pre-planned areas, had housing ready for the workers and their families by the time production at the mills began. Most settlements did not resemble communities, but were more like camps during the first production years.\textsuperscript{361}

Tunadal, for example, had after three years in production only three barracks available for workers. The settlement around the mill site had by the end of the 1850s expanded, not only from its original site to adjacent land, but with several barracks for workers, the mill itself, an owner’s mansion, stables, a barn and other outhouses and community houses. Situated along the shoreline in Skön parish with Alnö on the other side of the strait, it had its large lumber area on its right and the residential areas on the left. Tunadal had become a sawmill community.\textsuperscript{362}

Community development was linked to a number of different aspects that influenced the industry, Berghlund-Lake mentioned geography, ownership structure, companies’ economic situation and employment opportunities.\textsuperscript{363} Despite differences in production, the conditions of the trade and production, the majority of the sawmill areas developed similar community structures. There would always

\textsuperscript{358} Berghlund-Lake 2001, p. 168.
\textsuperscript{360} Paulsson 1981, p. 173.
\textsuperscript{361} Ibid. pp. 176-177.
\textsuperscript{362} Olsson 1949, pp. 36, 39-40.
\textsuperscript{363} Berghlund-Lake 2001, p. 85.
be a lumber yard, a saw house, a harbour, a boiler house and many other structures that were connected to production. There would also be workers’ residences and offices in rows or clusters evenly spaced around the mill site. There would usually be a mansion where the owner or director managing the mill resided, slightly separated from the rest, but in a place that was highly visible to most of the mill site:364

The centre is the visible saw houses; they are like the church in the centre of a society. The chimneys with its smoke, almost makes a monument over the labour conducted. From one of the short ends of the saw house there is a slope on where the logs are brought up from the water. Besides from that, the house looks like a barn. Around the saw house is the timber arranged in streets, high piles covered with a sloping roof. They almost resemble market carts. Beyond the timber yard is the workers quarters, grey, red or white barracks, and often two stories. Some have small red cottages as neighbours that the workers have built themselves just outside the mill owned land.365

The industry’s continuous development and expansion often meant that many of the houses and buildings in the communities were built over a longer period of time, which resulted in them being of different size, height, width and style.366 Take the three oldest industrial communities in the district, Wifstavarv, Skönvik, Matfors and Svartvik, which had all been constructed differently. Wifstavarv could because of its location on a plain, plan the houses and buildings in perfect symmetry, making the population more easily controlled and it was all overseen by an owner’s mansion.367 At Skönvik, however, the sawmill had been located by the shoreline in a small bay that was surrounded by hills. The owner’s mansion was constructed on the opposite side while the workers’ quarters were constructed in anything but planned symmetry on the sloping hillside just west of the mill site.368 Svartvik sawmill community had the resemblance, or illusion of a bruks-gata as the community had been constructed alongside the main road leading in

364 Ibid. p. 87. For example, the sawmill owner at Skönvik in Sundsvall, Fredrik Bünsow built his mansion on the opposing hillside as the workers’ residences were built. Even though this was a common strategy for most sawmill owners, and even though many owners settled with their industries, it was a transitional phase. Many chose to leave this environment as it became more important to identify with the upper classes (Gregor Paulsson, Svensk stad. Liv och stil i Svenska städer under 1800-talet, Del 1, Lund 1979, p. 498).
365 Björk & Schnell 1979, p. 123. Description of Sundsvall and its sawmills by journalist Ernst Beckman in 1879. (Author’s translation)
366 Johansson 1988, pp. 75, 82-83.
368 Ibid. p. 215.
to the town of Sundsvall. The community was, however, not only a consequence of the sawmill, but had been established in conjunction with the loading dock, which had been present since the 1830s. The first description of the community consisted of a house for the site manager and three, red painted workers’ quarters. The sawmill had been built by the riverside, by the side of the existing loading dock. The manager’s residence was rebuilt, creating an owner’s mansion at the top of the bank, overlooking the work areas, facing the church and the rows or red painted workers’ residences on the slope on the opposite side of the road. On either side of the church were the company’s official buildings and the inspector’s residence. The road thus split the mill site and the mansion from the workers’ residential areas, creating a natural border between work and home, employer and employees, work and social life. The really large buildings and the majority of the workers’ residences were not built until the 1870s.

An account of a physical environment of a sawmill community was written during the early 1870s. As described by Ostergren, Matfors sawmill and iron foundry were composed of a large, spread-out estate complex consisting of nearly sixty buildings that had been constructed on a “low-lying protrusion of land that extended out into the course of the Ljungan from its left bank.” The estate centred around the “imposing collection of multi-stored, red-painted sawmill buildings that occupied the furthest tip of land past which the river flowed.” The mill buildings were located “above the water sluice that provided power to drive the saws and overlooked the catchment areas for timber that floated downstream to the mill site.” Further down the stream from the mill buildings lay the buildings associated with the iron foundry. Another couple of hundred metres beyond that was the “stack yards for finished mill products along with a lathe works and drying shed” located.

Just inland from the mill buildings, on a small rise of the ground, stood the stately two-storey herrgård (corpus de logis). Beyond the house was a courtyard, enclosed on two sides by company offices, inspector’s residence, brewing-house, and stables. The far side of the courtyard opened to the bruksgatan; a 250 metre long, tree-lined avenue flanked on either side by a row of evenly spaced residential structures for workers.

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369 Hjulström 1955, p. 92. The foundry estates usually were more planned communities than the sawmills. Just as Matfors, Wifstavarv also had the structural appearance of a bruksgata, a main road in its centre flanked by buildings on either side, however, here in a carefully planned symmetry (Ibid. p. 94).
370 A carefully planted yard of leaf trees in front of the mansion enclosed the house, cutting it off from the workers more profoundly, protected by the trees (Paulsson 1981, p. 212).
As production rose and the industry expanded it also demanded an infrastructure, roads, harbours and loading docks. Larger industries meant more workers which, in turn, lead to more workers’ quarters being built.\footnote{Johansson 1988, p. 68.} Still, even after more proper housing for the residing populations had been built, the poorly constructed barracks remained to accommodate seasonal and migratory workers.\footnote{Paulsson 1981, p. 180}

\subsection*{The workers residences}

Housing for workers had always been regarded as less important; focus had primarily been on expanding the industries and their production. Few sawmill companies planned for workers’ living quarters and even those who did, always built the mill itself first without having any housing to offer the workers they employed.\footnote{Christina Fjellström, Drömmen om det goda livet. Livskvalitet och matvanor i ett uppväxande industrisamhälle: Stocka sågverk 1870-1980, Stockholm 1990, p. 117.} The largest problem with the housing situation was that it demanded economic solutions, something many owners were extremely unwilling to recognise or do anything about.\footnote{Johansson 1987, p. 238.} It was simply not believed that building houses for the working
classes could be profitable.\textsuperscript{376} Johansson implied that the unwillingness to expand the industrial communities displayed a lack of patriarchal interests and economic disinterest in the workers’ welfare.\textsuperscript{377} New buildings were therefore only added when absolutely needed and the speed in which they were built, usually resulted in faulty and poor constructions. The permanently settled workers were usually offered better housing constructed of better materials that allowed them to be used during the winter. It was, however, not always enough and many workers were given housing built for seasonal workers, which was only intended for summer use.\textsuperscript{378}

Company housing in general was not large but type of employment and marital status usually dictated what kind of residency a worker would get with regard to size and location. Bo Gustafsson claimed that full-time employed workers’ accommodations would have been separate from the barracks where the seasonal and migrant workers were housed.\textsuperscript{379} Married and full-time employed workers usually lived in one room apartments and the unmarried workers in barracks with room for up to 20-30 workers, or as lodgers in other working families or in the agricultural communities.\textsuperscript{380} Overcrowding was one of the most common features in the sawmill communities.\textsuperscript{381}

By the late 19\textsuperscript{th} century, the lower classes’ living situation had become an interest for provincial doctors and county governors who reported on the problems.\textsuperscript{382} The barracks in the Sundsvall district were, according to Olsson, often primitive and a family had at the most one room and during the summer it was not unusual for two families to have to share a room.\textsuperscript{383} The authorities wanted something done about the matter but it was little they could do having given up state interference in the development of the sawmill industry. Continued industrial expansion would, however, eventually lead to the greatest expansion of workers’ residences being built by the end of the century. This also resulted in regular inspections of

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\textsuperscript{377} Johansson 1988, p. 82. \\
\textsuperscript{378} Berglund-Lake 2001, p. 68. Paulsson 1981, p. 216. \\
\textsuperscript{379} Bo Gustafsson, \textit{Den norrländska sågverksindustrins arbetare 1890-1913. Arbets- och levnadsförhållanden}, Stockholm 1965, pp. 190-91. \\
\textsuperscript{380} Ibid. p. 158. When the workforce expanded, more men had to live together in the same space as before. Isidor Kjellberg depicted the difference in living quarters between employer and employee at the sawmill at Sund, that while 36 working families were housed in one room each, the owner’s mansion with more than twenty rooms housed only one family (Isidor Kjellberg, \textit{Sågverksarbetarne i Norrland. Anteckningar af Isidor Kjellberg under ett besök i Norrland strax efter sågverksarbetarnes allmänna, af landshöfding T reffenberg våldsamt undertryckta arbetsinställning i slutet af maj 1879}, Sundevalls museum 1974, p. 9). \\
\textsuperscript{381} Fjellström 1990, p. 117. \\
\textsuperscript{382} Ibid. p. 116. \\
\textsuperscript{383} Olsson 1949, p. 85.
\end{flushright}
the sawmill communities and the workers’ living conditions by the district physician. These inspections mainly served two purposes, firstly, it made the authorities aware of the workers’ living conditions, and secondly, it put pressure on the sawmill owners and the companies to make improvements. That being said, the suggestions that these inspections resulted in were just that, suggestions. It was still up to the companies if they wanted to adhere to them.\footnote{Gustafsson 1965, p. 167.}

Gustafsson described the inspection procedures that took place in the Sundsvall district and wrote that most communities inspected during the 1890s seem to have been perceived as fairly acceptable. Svartvik and Wifstavarv were said to have presented excellent living quarters for the workers. At Wifstavarv it was even the norm to give two-room apartments to each family.\footnote{Ibid. p. 160. In the beginning of the 1900s some one-room apartments were remodelled into two- room apartments for families with more than three children.} From Alnö parish it was reported in 1899 that overcrowding was a real problem and that most mills lacked sufficient living quarters for workers.\footnote{Ibid. p. 167.} Most mills in the district seem to have started to make improvements to the workers’ residences after 1890 and most communities passed the inspections, despite signs of overcrowding.\footnote{Ibid. p. 172. The only mill that failed the inspections, where the improvements seemed to have reverted to its former, less acceptable condition, was reported from Ortviken’s sawmill. The sawmill was first inspected in 1893 and the inspector marked the workers’ residences as being spacious but rather ugly. In 1900 the inspector reported that the workers’ residential area and the offered housing were neglected and close to ruin. In 1901 another inspection described the living quarters as largely ruined and poorly constructed (Ibid. p. 170).}

The overall standard of the housing situation did, according to Gustafsson, improve between 1890-1913, even though the problems did not disappear.\footnote{Gustafsson 1965, pp. 159, 163.} There were still more workers than available accommodations. This meant that there had to be some kind of selection process where specific workers received housing and others did not. Johansson wrote that this must have been given a very strong symbolic meaning. Receiving housing at the mill site would have created or reinforced feelings of belonging.\footnote{Johansson 1988, p. 395.} Overcrowding remained one of the largest problems even during the first decades of the 20\textsuperscript{th} century.\footnote{Gustafsson 1965, p. 177.}
3:2 Social structures

The sawmill communities were not only a physical place, but also a highly vibrant social unit. The workers and their families who shared barracks and living quarters all lived close to each other and it was important to maintain good relations to be accepted. Social networking among workers would therefore have been an important tool for those who lacked the presence of kin to help ease the way.

The sawmill communities were by no means homogenous communities, but included individuals of different ages and backgrounds with different experiences. The environments were, as it had been at the foundry estates, a reflection of the social structure of society. The hierarchical structure was extremely rigid and advocated to maintain the divisions and continued to separate between different kinds of workers, seasonal and full-time workers, temporary and permanently settled workers. The residential areas were not only divided on a basis of social class and hierarchy, but could also be divided between different occupations and relate to how much the workers earned. This usually resulted in that workers socialised horizontally and solidarity was maintained within groups who had similar social status and living and working conditions. It was these feelings of us and them that the popular movements, especially the workers’ movement, found so helpful and important in creating solidarity between different kinds of workers’ groups.

Most sawmill companies supported the workers’ ambitions and activities during their time off work by contributing money, building material and land for public meeting houses to be constructed, such as for the religious and temperance movements. They were, for example, more than willing to sponsor and support the temperance movement when they wanted to establish local groups in communities. The sawmill owners and the temperance movement were in agreement that alcohol was degenerative for the workers and their wishes for a sober workforce. Almost all sawmill areas at Alnö had some sort of religious society and many sawmill owners contributed to the construction of halls in which to meet and to the expansion of the school system in the parish.

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392 Ibid. p. 142.

393 Ibid. pp. 183, 220.

394 Johansson 1987, pp. 229, 193, 201.

395 Sågverksfolket 1995, p. 8. Enhörning at Kubikenborg provided time for the construction of a chapel 1874 at Skönsmon (Cornell 1982, p. 316). The workers at Hörningsholm were the first in Alnö parish to construct a folkets hus. This opened in 1896 (Sågverksfolket 1995, p. 24).
Social change and the popular movements

Sweden went through many social changes during the 19th century. Old structures were being questioned and groups that never had been involved in public life demanded a place to make themselves heard. Lars Båtefalk wrote that it was changes of economic, political, religious, ideological and cultural nature that eventually would overturn old social structures from within. The popular movements challenged established social and hierarchical structures and promoted new ways of living that went beyond state-sanctioned control. They brought about new approaches and meanings of interaction, both vertically and horizontally, and came to play an especially important role in the sawmill communities helping to consolidate the workers into a more unified occupational group.

Representing a new type of organisation, the popular movements were built upon the principle of association rather than class and heritage and introduced new morals and values that promoted a proper lifestyle and behaviour. They became a way of creating a new and different sense of belonging that was not dependent on employment or residency, by encouraging people’s adjustment and integration into new environments and the rebuilding of new structures. The popular movements did, however, meet many obstacles. The authorities feared all organisations that it had not sanctioned and all attempts by the lower classes to organise were seen as threats against established policies.

In industrial areas the movements became particularly attractive to immigrants but less so to the local, agrarian populations. Bo Öhngren suggested that the locals’ resistance may have reflected a greater influence of older, already existing

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396 Lars Båtefalk, *Staten, samhället och superiet. Samhällsorganisatoriska principer och praktik kring dryckenskapsproblemet och nykterhetssträvandena i stat, borglig offentlighet och associationsväsendena ca 1770-1900*, Uppsala 2000, p. 13. The un-propertied lower classes became more definitely formalised during the second half of the 19th century. They had few opportunities to actually influence their situation or show dissatisfaction without being reprimanded or punished, being stereotyped as dangerous, immoral, and politically, socially and economically inferior (Ibid. p. 18).


399 Sven Lundkvist, *Folkrörelserna i det svenska samhället 1850-1920*, Uppsala 1977, pp. 154, 219, 221. Båtefalk wrote that one of their most important functions was to create identification within the new modern society and within the new communities that arose. They became an alternative to a limited and excluding public life (Båtefalk 2000, pp. 28, 58). The movements also provided their members with a sense of belonging, dignity and pride creating a basis for identity formation (Horgby 1993, p. 48. Bo Öhngren, “Elit och massa - Spännningar i färden mot ett nytt samhälle. Folkrörelse och samhällsutveckling 1850-1990,” Lars-Göran Tedebrand (ed.), *Sundsvalls historia* D. 3, Sundsvall 1996, p. 71).

400 Lundkvist 1977, p. 48.
norms and structures and less willingness to change. The religious movement in Sundsvall had a greater commitment among non-industrial populations than among the sawmill populations. They had a higher proportion of long-time members and according to Lundkvist this should be seen in relation to the large population turnovers within the sawmill communities. The slightly higher stability within the religious movement would have made it possible for its members more than others, to identify with the place of settlement. He saw the religious movements awakening within the sawmill communities as the start of a greater indifference towards religion rather than an increased religiosity. Workers had a higher joining frequency to the temperance movement and workers’ movement, than to the religious movement. This was also noticed by Bäckström, who claimed that through the industrial lifestyle more workers became accustomed with an increasingly secular attitude towards life, family and labour.

Doctrines – similarities and differences
Strathern wrote that only a few things within the local communities would apply to all residents and allow them to interact on a community basis. The popular movements changed this because it allowed for the creation of common ground that had nothing to do with background, occupation or class. They filled a social function as they frequently arranged social gatherings where like-minded could meet and where their message could be spread. It could therefore probably be argued that one of the important functions of the popular movements was giving its members a chance to establish social networks.

402 Bäckström 1999, p. 40. The religious movements were more attractive to non-industrial workers; the landless, farmers, the middle class, women and the older populations, and lower among sawmill workers. Still, Bäckström claims that the industrial workers constituted one of the larger groups recruited to the various religious groups (Ibid. p. 33).
404 Lundkvist 1977, p. 156.
405 Ibid. p. 147. The effects of migration may not necessarily have been negative. It could have been used as an advantage under the right leadership, having a continuous flow of new engaged members especially because engagement among regular members usually would have stagnated after a while (Ibid. p. 129).
406 Ibid. p. 95. The members within the workers’ movement were almost exclusively male. The religious movement had a great surplus of women, while the temperance movement had a surplus of men, whom a majority were workers (Ibid. pp. 91, 118). Within the religious movement there were, however, a majority of women (Ibid. p. 99).
409 Öhngren 1996, p. 71. Medelpads blåbandsförbunds årsbok för 1907-08, Sundsvall 1908, p. 16. It was also common to hold lectures and study circles.
The popular movements promoted an idea of self-education and awakening. Through education came the desire of self-improvement, self-awareness and encouragement to reclaim control over one’s own life. The religious movement wanted spiritual awakening and renewal; the temperance movement wanted an individual awakening and self-realisation of a better life; and the workers’ movement wanted a political awakening and to spread a political consciousness. While the temperance movement promoted individual gain to members who stopped drinking alcohol, the workers’ movement was more concerned with the gain of the collective.410 They gathered around what could be defined as class interests, while the temperance and religious movement were more individually oriented.411

It was all about creating a better, self-aware man who rejected anything but clean-living and acted in a humane way towards his peers. Alcohol especially was seen as crude, something the new man was not.412 Despite legislative actions and the influence from religion, alcohol had become a social problem at many workplaces.413 This encouraged the temperance movement to settle in the industrial communities where they preached complete sobriety. This ambition received positive feedback from both owners and from the religious movement.414 The temperance movement would therefore become extremely important to the self-image for many workers, as overzealous consumption among the lower classes provided them with negative stereotypes. Horgby implied that being well-behaved and respectable became important for the working populations.415

The workers’ movement was focused upon improving employment and living conditions for all workers and came to use strikes as their foremost weapon of choice. They fought a continuous battle for higher wages and the right for workers to congregate and unionise without fear of losing their employment.416 For
the workers’ movement, the workplace became a natural place to meet likeminded people to identify with.\textsuperscript{417} This movement was in some respect egalitarian, believing in the equality of men, while it also tried to differentiate itself from other social groups. Horgby argued that one of the goals of the workers’ movements was to achieve equality with the middle class and that is why morals became so important.\textsuperscript{418} The members were to recognise their own value and when united, workers could rise to the same levels as society’s educated elite.\textsuperscript{419}

The sawmill strike of 1879 marked a specific turning point for the sawmill workers and the workers’ movement in the Sundsvall district. The experience became a valuable lesson as the workers realised that spontaneous and unorganised strikes had few chances of succeeding.\textsuperscript{420} Despite being unsuccessful, it did nothing to deter workers from striking, but appeared to have strengthened their resolve as they realised they could cause their employers economic harm. Even though strikes occurred with regular intervals the following years, the workers’ movement had problems asserting itself in working communities because of the owners’ scare tactics.\textsuperscript{421} Their frequency did, however, reveal a strong willingness among the workers to unite.\textsuperscript{422}

Skarin Frykman stated that the force of the workers’ movement would not have had the impact it had if not a class conscious had already existed.\textsuperscript{423} In Ericson’s view, class consciousness was an expression of a competing worldview, which opposed the agenda promoted by the social hierarchy. That is why the workers’ con-

\textsuperscript{417} Karlbom 1967, p. 237. Workers often identified with the smaller community attached to the industrial sites according to Laura Frader. The collective support that arose in time of strike clearly shows how closely bound the entire community was to the local economy (Laura L. Frader, “Grapes of Wrath,” Class, conflict and collective action, Louise A. Tilly & Charles Tilly (eds.), Beverly Hills 1981, pp. 197-98).

\textsuperscript{418} Horgby 1993, p. 53. Skarin Frykman argued that the workers were joined in a moral economy, which became an important weapon in the struggle against a system that gave them more responsibility than it gave them rights (Skarin Frykman 1990, p. 221).

\textsuperscript{419} Horgby 1993, pp. 47-48.

\textsuperscript{420} Björklund 1976, p. 48. Cohen claimed that local experiences could mediate national identity and that our understanding of specific events cannot proceed without the knowledge of the former (Cohen 1982, p. 13). This would have been especially evident in relation to the sawmill strike of 1879.

\textsuperscript{421} Ericson 1987, p. 163. Research has shown that group members feel stronger identification following group failure than following success (Michael A. Hogg & Dominic Abrams, Social identifications. A social psychology of intergroup relations and group processes, London 1988, p. 128).

\textsuperscript{422} Björklund 1976, p. 66.

\textsuperscript{423} Skarin Frykman 1990, p. 34.
sciousness as a social class was an ongoing process of creating a new worldview based on experiences, opinions and a new sense of community, solidarity between people and the creation of new identities. It was not until “real” unions emerged during the 1890s, when a generation had seen the changes, learned about the struggles and been educated that class consciousness fully had emerged and could be put to use. The workers’ movement and the early unions’ greatest importance would therefore have been to educate future leaders who were going to lead the political struggles during the late 19th century and early 20th century.

Because the goals of the popular movements sometimes overlapped, it was easy to find cooperation between different movements and members usually claimed belonging to more than one movement. On the one hand, the movements completed each other as they had a similar foundation, goals and a common will to implement change. On the other hand, even though it allowed for recognition across borders and consolidated larger groups in society, they were also in competition against each other and stressed their own superiority. They may have helped to unify some workers, but they did not merge entire populations together and continued to promote separation between different groups and different movements. For example, the increased influence of the workers’ movement made the religious movement feel that it was important to encourage religious workers with leading roles within the workers’ movement to help workers from a religious standpoint instead of a socialistic one. They saw the workers’ movement as a threat against workers’ religious beliefs, to social hierarchy and authority. It was not acceptable because it meant that the lower classes would not have the guidance and authority of a superior. Ambjörnsson wrote that not only did the workers’ movement have to fight against sawmill owners and employers but also “against

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424 Ericson 1987, p. 25. Among the dockworkers in Norrköping, Horgby found a strong sense of community and togetherness. It was solely based on a notion of us and them, where individuals with previous ties to the profession were more desirable to have joined the group than someone who did not. He sees the culture as a response to the working conditions as well as a consequence of it (Horgby 1993, p. 85).

425 Ericson 1987, p. 108. The movement during the 1880s had a completely different character than what it came to have during the 1900s (Ibid. p. 105).

426 Ibid. p. 106.

427 Horgby 1993, p. 91.

428 Bäckström 1999, p. 34. The religious movement and the workers’ movement promoted similar interests during the 1880s, when the former became involved with the conditions within the industrial communities rather than within the religious sphere.

429 Lundkvist 1977, p. 83.

430 Ericson 1987, pp. 109, 119, 126.

431 Despite the initial “classless” promotion, the religious movement still advocated a strong hierarchical structure.
those individuals from the own class that behaved in a way that undermined the movements organisational work.\textsuperscript{432}

3:3 The industry and working conditions

A seasonal character

The sawmill industry was seasonal in character and highly dependant upon climate and the natural rhythm of the weather, which meant that production was highly irregular.\textsuperscript{433} During the beginning of industrialisation few sawmills had the possibility to stay open during the winter, many tasks were simply impossible to perform. Nor was year round shipping possible due to the winter climate.\textsuperscript{434} Days were short and heating and lighting of the saw houses was difficult.\textsuperscript{435} Sawing was too costly and there was a larger risk for the sawed timber to go bad and rot due to temperature shifts and damp weather. Further north, where winter stretched for longer periods, production time was even shorter.\textsuperscript{436} This meant that the season consisted of different intervals.\textsuperscript{437} Log-rafting was best performed during early spring when melting snow caused higher water levels. Because many rivers and streams were torrential with cataracts, rapids and smaller waterfalls transportation was made easier.\textsuperscript{438} During the 1860s sawing usually commenced in May or June and lasted until October.\textsuperscript{439} Shipping of timber often started in late April, early May and commenced until late November.\textsuperscript{440}

\textsuperscript{432} Ambjörnsson 1988, p. 261. Åke Lindgren claimed that the social democrats had in accordance with the foundation set by August Palm in 1881, held a neutral stand against religious affiliations. Although, that did not stop the members of the workers movement to openly argue against both religion and the temperance movement (Åke Lindgren, \textit{Rörelse i tiden. En bok om kampen för ett nyktrare Sverige}, Malmö 2001, p. 13. Ericson 1987, pp. 112-114). This was the public stance that was established when the social democratic party was founded in 1889). A leading argument was that religion should be a private matter (Ericson 1987, p. 126). August Palm himself had not been particularly fond of either the temperance or the religious movements. He claimed that the temperance movement did not promote democracy but hypocrisy and that there was an excess of irrelevant rituals and he strongly opposed the way in which members within the religious movement were encouraged to spy on each other (Ibid. p. 21). Cohen, however, argued that “rituals conforms and strengthen social identity and peoples, sense of social location: it is an important means through which people experiences community” (Cohen 1989, p. 50).

\textsuperscript{433} Johansson 1988, p. 125.
\textsuperscript{434} Alm Stenflo 1994, p. 9.
\textsuperscript{435} Cornell 1982, p. 176. Skönsmon’s sawmill became the first sawmill in the Sundsvall region to install eclectic lights in 1887.
\textsuperscript{436} Gustafsson 1965, p. 68.
\textsuperscript{438} Layton 1979, p. 230.
\textsuperscript{439} Johansson 1988, pp. 124-125, 128.
\textsuperscript{440} Gustafsson 1965, p. 68.
When the industry started to expand and the demand of sawed timber increased, so did the number of companies that tried to prolong production and utilise all months of the year, even though it was impractical and costly. The majority of the work was still performed "in the summer and fall in order to meet the demands of the shipping season."441 It was really only the absolutely largest mills that sawed timber all year around, but production was always limited. By the 1890s though, sawing had generally been extended to ten months a year.442

Production months were also linked to number of employed workers. Gustafsson wrote that if a company employed less than 60 workers, it did normally not stay open for production more than seven or eight months a year, especially in the beginning of industrialisation. Companies with around 100 employees seldom worked less than seven to eight months and the really large mills with 200 employees or more were most likely to be in production year round.443 When demand for sawed timber rose above the cost of keeping the mills open during the winter; even mills with smaller workforces could afford all-year production. Cornell and Johansson both found in their respective studies that most tasks started to be performed throughout the year as technological development progressed, resulting in that the seasonal character of the industry began to dissolve.444

Employment
The seasonal character of the sawmill industry meant that the workers employed at the mill performed different tasks depending on the season, hence, their knowledge was not specialised to any particular part of the work performed at the mill.445 This changed during the 1860s as more workers settled permanently in the sawmill areas and the work could be more specialised.446 This meant that workers were given more time to actually devote to what they primarily had been hired to do. Johansson called it a horizontal division of work.447 Separating different tasks in the production process from each other reduced the need to hire skilled workers for all stages of production. Hiring unskilled workers was economical for the sawmill owners because they could be paid less.448 Thus, specialisation was the direct consequence of that it was profitable for the sawmill owners, making work

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442 Johansson 1988, pp. 124-125, 128.
443 Gustafsson 1965, p. 72.
446 Ibid. p. 297. Even the registers become more specific when recording occupations. Workers went from being workers to sawmill workers (Ibid. p. 232).
447 Ibid. pp. 296-297.
448 Olsson 1980, p. 32.
more organised and more efficient. Cornell wrote that there were three types of sawmill workers, the full-time employed, the seasonally employed and migratory workers:

The labour force of most operations was organised according to tasks, each of which required different skills and time commitments. The necessary consequence was a labour force that could be broken down into a number of categories. Some were permanently employed workers, who held skilled positions of various kinds and lived on or near the site of the mill. Others were seasonal or migratory workers, who worked at various tasks when there was a demand for their labour and who were drawn either from a local agricultural population or from a sort of floating pool of migratory workers. These people could be employed for relatively long or for extremely short periods of time depending on circumstances.

Recruitment and hiring also became important aspects of managing the industries, especially when it came to new ways of organising work. Ericson noted that employers often had to teach the workers to cooperate in an order that would serve the industrial discipline. Even though skilled labours were preferable, it was important to know what kind of skills the workers had because skilled workers often wanted higher wages than unskilled workers.

Sawmill management usually had an obvious affection for their full-time workers, but also for the seasonal workers who came back year after year. They usually tried to reduce the number of temporary employed workers, because they were regarded as less reliable. The full-time employed workers usually considered themselves as the real workers belonging to the mill with a higher degree of employment security. Unlike the temporary, seasonal workers that commonly had been hired on verbal agreement, full-time workers were contracted. Contracts in general became a more common practice during industrialisation than it had been earlier but it seldom included other than full-time workers. The contracts usually demanded that the worker remained well-behaved, sober and showed the proper respect towards his superiors during the contracted period. The contract created

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449 Johansson 1988, p. 227. Part of this was also to construct housing and have the workers live close by (Ibid. p. 395).
452 Ericson 1987, p. 20. Ostergren noted that when it came to hiring skilled workers at Matsfors bruk, the owners hired workers who had experience, most coming from families “that had practiced the trade for generations” (Ostergren 1990, p. 43).
453 Berglund-Lake 2001, p. 123. This notion was probably even more stigmatised if the workers were locally born and bred; it was usually the nearest agricultural villages that benefited from the employment opportunities at the mills (Ibid. p. 58). “Real workers” was also commented upon by Johansson who connected it with those who had been offered company housing (Johansson 1988, p. 144).
a strong bond between worker and employer regulating benefits and responsibilities of both parties. In practice though, it restricted the workers and made them completely dependent upon the good grace of their employer for both work and shelter. Neglecting the responsibilities and failing to live up to the stipulated agreements usually ended in a loss of employment and eviction from the company housing.

The verbal agreements would therefore have meant that seasonal and temporary workers had more freedom of choice of which mill to work for. If wages were too low at one mill they were not unaccustomed to leaving and searching for work that paid more. This made the decision of which workers to offer full-time employment to even more important. It was a strong incentive why sawmills liked to hire married workers with dependants; such men more likely would behave and comply. However, as Cornell pointed out, during the busiest period of the season when as many hands as possible were needed, the majority of the workforce was made up of temporary workers who they never could circumvent employing.

Women at the sawmills

It was not unusual to find women and children working at the sawmills and the loading docks during the summer months, performing menial tasks within most occupational fields within the industry. Life for most working families was financially poor and even though men were seen as the sole breadwinners, reality dictated that women of the lower strata of society actually had to work to help support the family.

Unfortunately, the sources seldom reveal female involvement within the sawmill industry because it was not official. The number of working women at the different sawmills would also have differed, and their situation would have been different depending on what mill was studied. They were not employed full-
time or paid as much as their male counterparts, even if they performed the same
tasks.\footnote{Cornell 1982, p. 117.} In fact, Johansson claimed that women’s wages were at the same level as
under-aged boys because it was viewed only as a supplemental income.\footnote{Johansson 1988, p. 335. Björklund 1977, p. 89.} Anders
Björklund, however, stated that minors in general had a lower wage than adult
women.\footnote{Björklund 1977, p. 87.}

Of the women who were employed within industrial production, the majority
could be found working as stevedore workers at the loading docks, where they usu-
ally were employed by the captains on the different boats. Björklund wrote that
stevedore work never demanded women to invest in any particular tools or clo-
thes, nor did it require any particular prerequisites, apart from having reached the
legal age. This is one of the reasons why women were drawn to this occupation.\footnote{Ibid. p. 68.}

The sources that have survived have shown that most female workers were
unmarried and usually came from families living in the sawmill communities.\footnote{Torsten Gårdlund, \textit{Industrialismens samhälle}, Stockholm 1942, p. 334. Björklund
1977, p. 31. Cornell 1982, p. 117.} Cornell claimed that it was more difficult for married women to work outside the
home due to household duties. Married female workers were usually frowned
upon and this became highly noticeable after the sawmill strike of 1879 when the
committee appointed to investigate the living conditions of the sawmill workers
clearly stated that the place for married women was in the home. The presence
of female sawmill workers at the sawmills in the Sundsvall district therefore dis-
played a decline during the 1880s.\footnote{Cornell 1982, pp. 118-119. One of the proposals of the committee stated that female
presence at the sawmill workplace should be limited to the greatest extent possible.
Daughters of workers should also be given the opportunity to educate themselves in
the female arts necessary to run a home instead of being introduced to the crude envi-
ronment at the sawmills (Björk & Schnell 1979, p. 204). Johansson discovered similar
attitudes towards female sawmill workers at Stock sawmill in Hälsingland. Females
working at the sawmills were not regarded as proper. A woman’s place was in the home
caring for the family (Johansson 1988, p. 339). Sågverksarbetarförbundet carried out a
survey in 1898 of 32 sawmills and could only find 100 female workers among the 4970
employed sawmill workers (Björklund 1977, p. 28).}
Child labour

Mats Sjöberg wrote the work was a natural part of any child's schooling and upbringing. Johansson indicated that responsibility started early, especially for children within the industrial communities as parents expected their children to contribute to the household economy as soon as they were able. Raising a family was not cheap, many children were a strain on the household economy and it was usually the families with the most children who were the poorest. Daughters were taught how to manage a household; to replace their mothers in the household if the mother needed to work outside the home. Sons were to be prepared for labour, a preparation that could start as early as the age of five or six. By slowly easing them into industrial work they were to be fostered into the next generation of industrial workers. Young boys especially, would be an important capital, both to their parents as contributors to the family income and the mill owners as future workers.

Children were present within the sawmill industry, but to what extent is difficult to know, there are few official records relating to this area. It is known though, that children of both the full-time employed and the temporarily employed could be found helping out. It was not uncommon that children younger than ten years of age supplemented their fathers' income with extra work. Children were much cheaper than adult workers; they could more easily be disciplined and more easily exploited. They were also at times used more forcefully for their cheap labour, especially when adult labourers were scarce. Olsson wrote that the children's ages would have regulated their wages, but could not conclude if it was based on different work tasks or if it was regulated by more formal principles.

Even though school attendance was obligatory, school was usually only regarded as a waiting period for boys before coming to work in the mill full-time. The

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469 Fjellström 1990, pp. 110, 166.
470 Johansson 1987, p. 247. There were, for example, no regulations determining working hours for child labourers (Cornell 1982, p. 126). Boys being fostered into sawmill workers; see Johansson 1988, pp. 349–351. Tilly & Scott 1978, p. 59.
474 Sjöberg 1986, p. 121.
475 Olsson 1980, p. 82.
476 Johansson 1987, p. 250. Not all sawmill communities built schools (Ibid. pp. 32–33). The schools in the sawmill communities were tightly linked to the structural and hierarchical system of the mill and it fostered the workers’ children into the industrial system (Ibid. pp. 33, 36). Gender specific school education helped to confirm and strengthen
need of the mill usually regulated the schooldays throughout the year allowing for child labour to be used. 477

In some industries children became redundant as more mechanical machines were introduced. 478 At Sund, Cornell found that the presence of minors decreased between the late 1860s and the mid 1880s. There was, however, an apparent correlation between increased female workers and fewer minors and vice versa. 479 From 1881, child labour became regulated by law within most industries. The sawmill industry, however, was completely exempt from these regulations from 1883. This suggests that the regulations came to be directed towards those industries where child labour already had started to decrease. 480 It is therefore difficult to find accurate statistics relating to child labour within the sawmill industry. Olsson stated though, that even if the accurate numbers were double, there were industries that utilised child labour more intensively than the sawmills. 481 Child labour would, however, have decreased by the end of the 19th century. 482

In 1875, minors at the sawmills supposedly amounted to 16.8 percent of the employed workforces. The majority of the minors were between the ages 14-18, but 1.4 percent was reportedly under the age of 12. By 1884-1885 the proportion of minors working within in the mills had dropped to 11.6 percent, but by 1891 it had
increased again to 18.1 percent. The share of children within the sawmill industry went from 5.0 children per thousand workers in 1875 to 2.9 in 1891.

**Working hours**

There were mainly two things that regulated working hours at the sawmills, type of employment and nature. The number of months the mills were in production influenced the number of working hours. Lack of daylight during winter interfered with long working hours while the long bright days and nights of summer enabled work to be performed all hours. Also weather and temperature influenced work and could determine the length of a working day.

Working hours during early industrialisation were more flexible and change was continuously implemented in the different sawing teams. The 12 hour shifts would not become a reality for all sawyers until the 1870s, whereas tasks performed outside the saw house could demand as long as 14 hour shifts. Johansson's findings for Stocka also correspond with what contemporary journalist Isidor Kjellberg wrote in 1879 about the sawmill workers' situation in Sundsvall; a norm of 14 hour shifts with only two hours set aside for breaks. In an inquiry made during the mid 1880s, eight sawmill companies in Sundsvall declared that shifts spanned from 10-12 hours. It is, however, difficult to know if the situation was similar at all mills, especially when they differed in size and production capacity.

During the summer, if the sawmills only utilised one shift, work normally started at 6:00 a.m. and lasted until 8:00 p.m. Breaks usually amounted to two hours a day. Larger sawmills though, usually divided day and night into two 12 hour shifts during the summer months. The day shift work started at 6:00 a.m. and ended at 6:00 p.m. and the night shift started at 6:00 p.m. and lasted until 6:00 a.m. Two

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483 Cornell 1982, p. 123. These results derived from contemporary investigations have, however, many flaws and missing gaps of information which means that a complete picture cannot be provided. Johansson could conclude that child labour at Stocka sawmill in Hälsingland began to grow during the 1870s and continued to grow during the 1880s. He estimated that in 1877 minors made up between 10-12 percent of the workforce, while it had grown to 20-25 percent in 1891 (Johansson 1988, p. 343). It is highly likely that child labour within the sawmill industries has been underestimated, especially because sawmills seldom reported the correct number of workers in general (Olsson 1949, p. 85).

484 Olsson 1980, pp. 50, 144.

485 Cornell 1982 pp. 185, 189.


487 Ibid. pp. 165-166.

488 Kjellberg 1974, p. 8. It is important to note that usually when calculating the working hours, breaks are excluded. This would thus add to the number of hours the worker actually spent on site (Cornell 1988, p. 183).

shifts, however, meant that the breaks were not as long.\textsuperscript{490} Gustafsson stated that during the early 1890s no shifts exceeded more than 12 hours or were shorter than ten.\textsuperscript{491}

In the areas with less developed industry, where agricultural work still dominated, there was a higher tendency to adopt a view similar to that within the agricultural field; that all hours of the day were equally important and no restraints were in place to regulate working hours.\textsuperscript{492}

Working hours for children within industries by the turn of the century were estimated to be around six hours for children older than six. Children aged 13-18 worked around ten hours a day, although, working hours differed between industries. Amelie Tham wrote that it was not unusual that children working within timber and mechanical industries worked up to 12 hours a day.\textsuperscript{493} Children were generally considered to be young adults after confirmation at the age of 14-15, able to perform an adult’s workload.\textsuperscript{494}

\begin{table}[h]
\centering
\caption{Working hours in 1891, 1905 and 1917}
\begin{tabular}{|c|c|c|c|c|}
\hline
  & Kubikenborg & Klampenborg & Heffners & Svartvik \\
\hline
1891 & 12 & 11 & 12 & 10 \\
1905 & 10½ & 10 & 10 & 10 \\
1917 & 10 & 10 & 10 & 10 \\
\hline
\end{tabular}
\end{table}

Source: Gustafsson 1965, pp. 65-66.

The sawmills in the Sundsvall district displayed more differences in working hours prior to the turn of the century than after. During the 1890s, demands of regulated working hours were increasingly influential upon the sawmill owners. In 1891 both Kubikenborg and Heffners still implemented 12-hour shifts, Klampenborg 11-hour shifts and Svartvik only 10-hour shifts. Svartvik was actually the only mill that appeared to have been the most consistent with the average length of the wor-

\textsuperscript{490} Ibid. p. 394. Similar figures are found in Bengt Berglund’s study of industrial factories in the south of Sweden. At Charlottenberg’s foundry estate, for example, work commenced at 6:00 a.m. and lasted until 6:00 p.m., at Eskilstuna Jernmanufaktur from 6:00 a.m. to 7:00 or 8:00 p.m. (Bengt Berglund, \textit{Industriarbetarklassens formering. Arbete och teknisk förändring vi tre svensk-fabriker under 1800-talet}, Göteborg 1982, pp. 260-261). Kjellberg was even told during his inquiries in Sundsvall in 1879 that work could commence as early as 4:30 a.m. at Svartvik (Kjellberg 1974, p. 8).
\textsuperscript{491} Gustafsson 1965, p. 30.
\textsuperscript{492} Ibid. p. 36.
\textsuperscript{493} Tham 2001, pp. 17-18. The age division used to regulate working hours within industry appears to have been directly transferred from when children started working within the agricultural communities. Sjöberg wrote that work was adjusted to the children’s age and strength and would gradually increase in difficulty and responsibility (Sjöberg 1986, pp. 117-118).
\textsuperscript{494} Brembeck 1986, p. 27.
kers’ shifts. Even though the average length of a shift decreased during the early 20th century, when the sawmills industry expanded their production over more months of the year, most workers found that their working hours had increased as the shifts during the winter became longer.

Benefits
During the early years of industrialisation workers received several benefits; these included free rent in company housing and free firewood. At some sawmills workers even had the possibility to grow their own vegetables, or keep a pig and few experienced any problems with getting permission to build their own hog sheds. Although, when the industries expanded, space in the communities became scarcer and the practice of holding cattle and growing potatoes or vegetables diminished. This increased the sawmill populations’ reliance on produce and farm products increasing the importance of the agricultural communities for the sawmills, especially because the company stores seldom could provide for the entire sawmill populations. Cornell stated though, that the quality of the benefits might be discussed and questioned, but the two most important ones, free room and firewood were of great importance to most workers and their families. It was also the benefits that were more or less constant throughout the period and that would survive until after the turn of the century. Some sawmill companies also provided community services such as breweries, bakeries and social gathering halls for the populations to use.

495 Gustafsson 1965, p. 37.
496 Cornell 1982, p. 185. Gustafsson 1965, p. 53. Seccombe found similar results within British industries and wrote that that even if working days became shorter, work was intensified and speeded up (Seccombe 1993, p. 85).
497 Johansson 1987, p. 230. Johansson wrote that importance of owning a piece of land was shared by most Swedes, and it was believed that having this possibility to work the land would increase family ties, and loyalty towards the nation.
500 Cornell 1982, p. 137. Benefits were usually cancelled during economic recessions and restored again when the economic climate changes, which was what happened during the strike of 1879. Blumenthal, however, wrote that the mining workers in Mineville seldom went on strike because of a fear that “in times of prosperity, when the men are powerful enough to succeed with a strike, they are inhibited by a fear that the employer will ‘get even’ during ‘hard times’” (Blumenthal 1932, p. 69).
Wages
Industrial wages developed differently, but they were all dependent on the workers’ own performances and market forces. Bengt Berglund saw three different wage developments occurring for factory workers by the end of the 19th century. Firstly, wages became more equalised to each other and Berglund linked this to the technological development and the creation of a more homogenised workforce. Secondly, different tasks in the overall production came to be regarded as equally important and production in itself became more industrialised. Due to the equalising of wages, some workers lost some of their benefits. Thirdly, wages developed towards an increased differentiation between workers. Work became more individual and this also influenced wages to differ due to factors, such as, gender, age, skills, work absence and pace. While wages between different tasks became more equalised, wages for the individual workers became more differentiated.503

Cornell claimed that workers employed at the sawmills in Sundsvall always were paid in cash.504 The annual cash wage was made up of three parts; the provisional wage, time wage and reimbursements for time spent to prepare and clean at the beginning and end of each shift. Provisional wages were most common and time wage was predominantly paid to the seasonal and migrant workers.505 Provisional wages became the more dominant form of wages, starting to appear more and more during the late 1870s. Wages would also become more tied to the actual work performance and the specific tasks of a particular worker. This allowed for a tighter control over how much the specific workers had carried, sawed or loaded, but it also made the workers’ wages more vulnerable to the fluctuation within the industry. If prices of sawed timber dropped, so did the workers’ wages. This should have induced workers to work harder as their actual, individual work performance was mirrored in how much they earned.506

Olsson also commented on the fact that there were more visible distinctions between the better paid workers in comparison to the lesser paid.507 There was a clear hierarchy within the sawmill industry and some tasks were valued more and others less, although they worked the same hours. Wages also differentiated between different sawmills and some owners used this as a reason to cut wages.508

503 Berglund 1982, p. 192.
506 Johansson 1988, pp. 382-388. Olsson claimed that provisional wages and a specialisation of work as it gradually lead to the work process becoming intensified. This would also lead to higher production and profits (Olsson 1980, pp. 42-43).
507 Olsson 1949, p. 88. Still, women could not stop their husbands from spending their wages unwisely (Johansson 1987, p. 29).
508 Gustafsson 1965, p. 120.
Even though wages fluctuated, for the most part they remained fairly stable due to little outside influence. During the 1860s wages for sawmill workers were no worse than other workers but as the 1870s were approaching, it would be clear how very sensitive the sawmill industry was to the fluctuating market abroad. Shortly after the war between France and Germany in 1870–71 prices and wages rose, but this changed in 1874 when demand on Swedish timber drastically fell. This resulted in that export, prices and wages were reduced.\textsuperscript{509}

The favourable economic climate during the first half of the 1870s increased the sawmill workers’ wages; at Tunadal it went from 760 Swedish crowns to 1,056 crowns and at Wifstavarv from 506 to 956 crowns. By 1878, three-fourths of all sawmill workers in the district had a yearly income of 668 Swedish crowns.\textsuperscript{510} The harder economic climate of the late 1870s would, however, change this and Kjellberg accounted that the better paid workers earned around 750 Swedish crowns a year in 1879; while the lesser paid workers earned around 400 crowns a year, or less. The average worker earned between 550–575 crowns for a years work.\textsuperscript{511}

As many workers went without income during the winter months, wage cuts in economic recessions were economic catastrophes for most families because they no longer could be supported only on the husband’s wage. Despite the fact the wages were cut during recessions and that this had negative effects on workers’ living conditions, the workers and especially their wives were often blamed for their poor circumstances. Wages were never too low to support a family in a sufficient living standard, what was lacking was economic sense. Johansson wrote that women were seen as intermediates between workers and employers, between workers and capital. It was the wives’ responsibility to make sure that the wage was enough to feed the family.\textsuperscript{512} Thus, in their eyes standing between a family and economic ruin was a good housewife.\textsuperscript{513} Wage cuts thus forced wives to find employment to supplement the husbands’ income to help keep the family out of debt.\textsuperscript{514}

Wages continued to fluctuate according to the supply and demand of timber all through the 1880s.\textsuperscript{515} Rondahl wrote that after 1879, wages rose continuously up until 1886, apart from a small break between 1882–84 and would continue to increase until the 1890s.\textsuperscript{516} Wages decreased during the recessions, but always se-

\textsuperscript{509} Olsson 1949, pp. 78-83. Björklund 1976, p. 25. The absolute power among the owners to dictate wages was one of the reasons workers went to protest and joined the workers’ movement.
\textsuperscript{511} Kjellberg 1974, pp. 7-8.
\textsuperscript{512} Johansson 1987, p. 244.
\textsuperscript{513} Ibid. p. 232.
\textsuperscript{514} Kjellberg 1974, p. 9.
\textsuperscript{515} Gustafsson 1965, p. 132.
\textsuperscript{516} Rondahl 1972, pp. 129-130.
emed to increase when demands rose again. This was also evident in the recession that hit the industry in the early 1890s. The industry recuperated and from 1894 the wage increased, only to be lowered again two years later in 1896. For the rest of the decade the cash wage remained in the mid 700s, only to peak again at the turn of the century and keep increasing. 517

Controlling wages
The sawmill owners were often interested in knowing how the workers spent their money. By making workers buy food on credit and giving vouchers for the company store, owners did not only avoid paying the entire wage sum in cash but also restricted what the workers could spend their money on. 518 A major problem for most working families was that they had to buy most of what they consumed with money they did not have. 519 Items in the company store were usually overpriced which forced many into debt. 520

Some employers tried to encourage their workers to save their money in the company bank, others demanded it. Sometimes workers could find that a small percent of their wages had already been put in a savings account without their expressed wish. 521 The action of withholding and paying workers in kind had two positive functions; it insured that workers had some money saved for winter and being paid in kind ensured the welfare of the workers’ families as the goods usually went straight under the wives’ control. It also had negative effects on the relationship between employers and employees. The workers rarely appreciated this sort of intrusion into their private sphere. The withheld wages were usually distributed at the end of the year; even though most appreciated receiving some extra money around Christmas, having the money saved in the company bank meant that the company could dispose over the money and use it as extra capital. 522

It would seem that the employers tried to guarantee that the workers would be able to support themselves and their families, but they also appear to have wanted to extend their control over the workers, refusing the workers’ disposal rights over their own wages. Despite the employers “eagerness to help” workers to save mo-

517 Gustafsson 1965, p. 132.
519 Cornell 1982, p. 137.
520 Olsson 1949, pp. 95.
521 Cornell 1982, p. 131. In the aftermath of the strike of 1879, the investigating committee encouraged workers to save their earnings as pay cuts would also occur in the future. This would help them when this happened and prevent starvation and absolute poverty. The committee thus suggested that the workers’ earnings would be carefully noted and that those who wished would be given the opportunity to save some of their earnings in a bank would be given help to do so (Björklund 1976, pp. 49-50).
522 Olsson 1949, p. 93.
ney, this could not change one important fact; most workers had little to save after the weekly expenses had been paid.\textsuperscript{523} Even if families had savings, that money would go directly back to the employer to pay any possible debts the workers may have had.\textsuperscript{523}

For seasonal and migratory workers savings was a distant notion. Even the settled workers with families had difficulties in acquiring savings. Skarin Frykman wrote that the economic situation for most workers were poor. To save money or to plan was in fact, an unrealistic approach to the household economy, while utilising the available resources to solve the needs of the present was strategically wise.\textsuperscript{525}

Savings presupposed a stable market and job security, something that rarely was the case, especially not within the sawmill industry.

\textbf{3:4 Conclusions}

The establishment and development of sawmill communities was a process that involved time, strategies of the owner, but more specifically on the size and need of the populations. It is therefore difficult to say exactly when the communities were established, what they included and when they were actively spoken about as communities. Sawmill communities were seldom constructed after a specific plan or style; houses were added when needs arose, meaning that most sawmill communities consisted of many different styles unsystematically spread out on the mill sites. The sawmills and the lumber yards would, however, usually be found in the centre of the communities.

While some owners embraced their social responsibilities and evolved themselves in community construction and the development of the social environment, others took a less forthcoming approach. Initially, many sawmill owners did not see the benefits of having their workers live close to the mill site and were reluctant to spend money on proper and permanent housing. The company housing that was

\textsuperscript{523} Skarin Frykman 1990, p. 282.
\textsuperscript{524} Fjellström 1990, p. 110. The debt system had a long-standing tradition in regulating the relationship between master and worker and had also been widely utilised by the paternalistically governed communities attached to the iron foundries (Hjulström 1955, p. 65). Similar patterns were found by Samuel Cohn who stated in an article about British railway workers that indebtedness was a way in which the employers tried to exercise control over the workers outside the workplace. By withholding pay to reduce the turnover and create credit dependency in the company stores, the workers’ dependency increased (Samuel Cohn, “Keeping the navvies in line: Variations in work discipline among British railway construction crews,” \textit{Class conflict and collective action}, Tilly, Louise A. & Tilly Charles (eds.), Beverly Hills 1981, p. 147).
\textsuperscript{525} Skarin Frykman 1990, p. 282. Few families managed to save money as the workers’ low wages only covered the basic necessities (Tilly & Scott 1978, p. 54).
offered to the workers was usually of rather poor quality and overcrowding was a constant problem.

The seasonal character of the industry and the sawmill owners categorised the workers in terms of full-time and temporary workers, favouring the former. This was also reflected in housing and wages. During early industrialisation most sawmills offered their workers benefits, such as patches of land to grow vegetables, firewood and free housing. This clearly suggests a wish to recreate features of the workers’ agricultural pasts and offer additional means of supporting a family. That many sawmills also continuously hired women and children from the sawmill populations during the busiest months of the year could also suggest that they tried to tie entire families to the sawmills.

Many families were not uncommonly put into debt and workers and their families were extremely sensitive to pay cuts. While work during the summer months was clearly scheduled by the workers’ shifts at the mill, the winter months were usually a time of unemployment. This was something that would come to affect community construction in a negative way. The seasonal character of the industry was a hindrance in community development because a smaller core population would have had less leverage for development. Nor would a temporary population have had any influence.

The popular movements that arose would come to have a great influence on the social sphere within the sawmill communities, bringing people from different walks of life together and help in consolidating the workers as an occupational group. Challenging old structures, the religious, temperance and workers’ movements promoted new ways of living that attracted many among the sawmill populations. Their worldviews would occasionally collide but they also had similar values and morals, which made it possible for membership within more than one movement and group.
Chapter 4
POPULATION DEVELOPMENT

One of the most important aspects of the sawmill communities was its population. The population on site, whether it be officially registered or not, would come to dictate certain aspects of the communities’ developments and services provided. Although, as discussed previously, the establishment of the sawmill communities can be difficult to pinpoint exactly, which is why population development in the sawmill areas becomes an invaluable tool in understanding the communities developmental process.

It is a common assumption that the population development in the sawmill areas was the direct consequence of the industries’ recruitment and migration. A large part of the sawmill communities emerged in areas with no previously registered population and had no given population basis for community construction. What is not commonly known though is that many sawmills were built in already populated areas or even previously established communities, with registered residents on site. Thus, the individual sawmill communities were from the start given different prerequisites in relation to population proximity. That the sawmills also were constructed during different times, by different owners with different financial situations, in areas with different geographical prerequisites would imply that few sawmill communities would have been similar to each other with regard to population development, rate and size.

The aim of this chapter is to study population development during the 19th century relating to the sawmill communities in the Sundsvall district, from the perspective of the above mentioned prerequisites. How was population development in the northern part of the country characterised? Were there any concrete aspects relating to the sawmill communities in the Sundsvall district that could have influenced population development and community construction, such as, year of construction, population proximity, industrial expansion and ownership structure?
4:1 Population development in Västernorrland during the 19th century

Sweden was an agrarian country and one of the least industrialised countries in Western Europe during the 19th century; with a population of two and a half million at the beginning of the century, of which 90.2 percent lived in rural areas. By 1900, Sweden had around five million inhabitants and 78.5 percent still resided in rural areas.

The Sundsvall district, situated about 400 kilometres north of the capital is located in Medelpad province, which together with the bordering northern province of Ångermanland made up Västernorrland County. This was primarily a rural county, although only 3.5 percent of the land was cultivated by the end of the century. The majority of the land, 83.0 percent was covered by forests. This made Västernorrland an excellent county in which to establish sawmills.

Population growth in Västernorrland prior to 1850 was mainly explained through a surplus of births over deaths. Population gains from in-migration were still too insignificant to make a difference in the total population. The nation in general had a population growth of 12.4 per thousand between 1810-1860, while it was 18.6 per thousand in Västernorrland. Throughout the century mortality rates had decreased and the changes were highest among children and infants. Cornell observed that the average death rate in the Sundsvall district was higher than for the nation between 1860-1890. The coastal areas usually had the highest mortality rates whereas rates in the inland areas were considerably lower. Infant and childhood mortality increased due to industrialisation and did not drop until after 1880. Whereas “industrialisation did not substantially increase adult mortality” in the Sundsvall district but “it delayed the decline for adults younger than 50.”

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530 Tedebrand 1972, p. 29.
531 Alm Stenflo 1994, p. 43.
532 Lundberg 1984, p. 80.
533 Hofsten 1986, pp. 35-37.
535 Ibid. p. 258.
536 Alm Stenflo 1994, pp. 78-81.
The population development that occurred after 1850 was exceptional and nothing like it had been witnessed before. The northern parts of the country continued to experience an increased marital frequency, resulting in an increased marital fertility.537 The population increased with almost 90 percent between 1850-1890.538 Västernorrland experienced especially strong population growth in the industrial districts; Sundsvall, Härnösand and Ådalen.539 In fact, the county was one of the fastest growing counties in Sweden during industrialisation.540

Västernorrland had continued high birth rates compared to the national levels between 1870-1890, and the industrialised parts of the county displayed even higher fertility rates, especially marital fertility.541 While the rest Sweden experienced a subsiding population growth, no such trend was detected in Västernorrland.542 By the 1890s 35 percent of the county’s population officially resided in sawmill communities.543

Population developments in the Sundsvall district

The town of Sundsvall functioned as a hub that tied the district together and was the area that gained the largest number of new inhabitants, but also had the largest population turnover during the second half of the 19th century. It was very common for migrants to first take up residency in town before finding employment, or between employments. Many also came to town to marry and only registered for the wedding.

The rapid population development that occurred in Medelpad province was therefore tied to specific areas. Especially the industrial parishes and areas close to industries gained larger populations and had more dense population clusters. Among those parishes were Skön, Njurunda, Alnö, Tuna and Timrå.544 Population density and settlements therefore remained unevenly distributed in the province. Alm Stenflo noted that the fastest growing parishes were those found alongside Indalsälven and Ljungan; growing 10-15 percent during the decade between

537 Rondahl 1972, p. 35.
539 Olsson 1949, pp. 65-66. The increased migration towards these areas would cause population shifts in the northern counties, as areas such as Sundsvall drew migrants from adjacent counties. This was especially evident in the province of Jämtland, where momentarily shortages of labourers were observed by the authorities. By January 1, 1890, Västernorrland had 204,000 registered residents (Cornell 1982, p. 203). That represented about 4.5 percent of the country’s population (Alm Stenflo 1994, p. 37).
540 Tedebrand 1999, p. 120. Cornell 1982, p. 203.
542 Lundberg 1984, p. 80.
543 Tedebrand 1999, p. 120. Cornell 1982, p. 203.
Population density was higher along the coast and Skön, the most expansive parish in the district, also had the highest population density with 21.7 inhabitants per square kilometre.

Figure 4.1 shows that all of the parishes displayed a fairly steady development during the 1850s. Despite the presence of Tunadal in Skön, the parish did not seem to have had a large population increase until the mid 1860s, thus suggesting that the industrial population did not grow at a particularly rapid pace. Cornell also noticed that Skön did not seem to have been as affected by the famine of 1867 as the other parishes and the population continued to grow. Population growth in Skön after 1860 was therefore, as Cornell stated, at a considerably higher level than in the province and the county in general. Skön grew from 1,100 inhabitants in 1850 to 11,744 inhabitants in 1900.

The results of Figure 4.1 also shows that the time around the 1870s may be used as a turning point when it pertains to population growth, at least for Skön

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548 Folkmängd 1810-1990, Demographic Data Base, Umeå University.
and Njurunda. Increased labour demands within the sawmill industry would cause migration to become the primary reason for population development. Njurunda had a slightly larger population up until the late 1860s, displaying approximate numbers above 2,000 inhabitants. Njurunda parish went from 2,479 in 1850 to 8,292 inhabitants in 1900.549

Despite the presence of several sawmills in Alnö parish, the total population did not surpass 2,000 inhabitants until the mid 1870s and did not show any rapid population increases until the late 1870s. The parish displayed a greater population increase during the 1880s, which to some extent may be explained by the construction of several more sawmills.

Tuna only had one larger sawmill and Selånger had none; both parishes were mainly agricultural. They did not experience any overwhelming population influxes, even though Tuna displayed a slightly larger population throughout most of the century. The population in Tuna decreased slightly during the late 1870s, which could be linked to the closing of Matfors in 1878. The population in Selånger remained small and only rose above 2,000 inhabitants during the last decades of the century. Tedebrand also found that Selånger experienced a slight population increase during the most expansive period of population growth in the town of Sundsvall due to its close location. Farmers from other areas moved to the parish and the number of registered farmers increased with about 40 percent between 1865-1901.550

4:2 Population development in sawmill areas

The population in the sawmill areas was a vital aspect to the development of the sawmill communities because it was around this core of individuals that the communities grew and evolved from. However, the establishment and development of the sawmill communities in the Sundsvall district were highly uneven.

The population in both agricultural and industrial areas increased between 1850-1890, but making a distinction between just rural and urban to distinguish the different populations is difficult, especially as the majority of the sawmills were located in the rural areas surrounding the town of Sundsvall. Instead, to separate the two, one has to distinguish between the agricultural population and a possible sawmill population.

549 Ibid.
550 Tedebrand 1999, p. 158.
Figure 4.2 Population development within areas identified as sawmill areas in parishes Skön, Alnö, Njurunda and Tuna 1850-1890* (specific to the years of industrial production)

Source: Demographic Data Base, Umeå University.
Tabellverket

*Missing information on total population in Svartvik 1854, 1856-1859.

The Matfors sawmill in Tuna was the oldest sawmill included in this study. Established in 1793, it was by 1850 the only sawmill community remaining in the district. In fact, estimations based on the numbers in Figure 4.2 reveals that the Matfors area was one of the largest settlements in the parish and by 1850 housed 1.4 percent of the entire parish’s population. In 1878, the year the mill closed, one-fifth of the parish population was registered in Matfors. In comparison to the other parishes and their sawmill populations, no single sawmill community would ever again display such a high proportion of its parish’s total population.

As seen in Figure 4.2, Njurunda and Alnö had more rapidly growing sawmill populations. Alnö parish had a very small sawmill population during the early and mid 1860s, but it continued to increase throughout the following two decades and would eventually reach the same level as Skön, only to surpass it during the last two years of the 1880s. In 1889 and 1890, more than 45 percent of the registered total population in the parish resided in the sawmill communities. The development in Skön grew steadily up until the mid 1870s, by which time almost half of the parish population resided in a sawmill community.

The sawmill population in Njurunda was, as it had been in the beginning in both Skön and Alnö, extremely small and only represented 1.7 percent of the pa-
Njurunda showed a considerable leap between 1872 and 1873, which is mainly based on the inclusion of the already settled population of Svartvik from the latter year. Svartvik would eventually become the single largest sawmill community in the district and was one of the fastest growing industrial areas. By 1890, 44.2 percent of the registered population in Njurunda resided in the sawmill communities.

Development of sawmill populations in Skön parish

Skön became one of the most important industrial parishes in the region and attracted registered settlers to the sawmill areas Tunadal, Skönsmon and Sund from the early 1850s, as displayed in Figure 4:3.

Figure 4:3 Registered populations in sawmill areas in Skön parish 1850-1890

The population registered at Skönvik, constructed in 1861, displayed the first real, established sawmill community in the parish. This was, however, due to the fact that the mill was built within the compound of Skönvik foundry estate, which had been established in 1811. The area therefore already had an established population when the mill was constructed. Compared to the other early mills in the parish, Tunadal, Skönsmon and Strand, Skönvik displayed a strong population develop-

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551 This was expected because the first mill, Klampenborg, was constructed in 1868.
552 Information on construction years for all sawmills is primarily based on Höglund 1957 and secondarily on Sägverksfolket 1995.
ment during the early 1860s and remained stable until the 1870s when it began to increase again.

Within the other sawmill communities, population development did not really begin until the late 1860s or early 1870s, despite a previously registered population on site. Kubikenborg was even later in its population development, but is one of the sawmills in the parish that increased its population within the shortest time span. Heffners, Ortviken and Skönsmon all displayed population growth at a slower pace, but would still during the 1880s present impressive groups of registered populations.

Development of sawmill populations in Alnö parish

Alnö parish had the largest number of sawmills in the Sundsvall district; the parish would in total house 16 individual sawmills prior to 1890. It can be determined that the registered populations at the sawmills in Alnö parish were considerably smaller than the sawmill communities in Sköns and Nyurunda. However, the combined population total of the mills did not come anywhere near the populations connected to the sawmills on the mainland.

Population development in what would become the largest sawmill areas in Alnö occurred at a very slow pace as displayed in Figure 4:4. Even though sawmill areas like Eriksdal and Strand displayed the presence of registered settlers prior to the construction of the mills, no real population growth appeared to have occurred until the early 1870s. Nyvik did not have a registered population until four years after it had been established and only displayed a modest population growth. Gustafsberg displayed registered settlers from the year of construction, but it would appear that population growth was fairly modest up until the mid 1870s. If this was the result of registration, unofficial migration or just an extremely small population could of course be discussed.

The size of the registered populations in the sawmill communities would have been linked to the sawmills’ prerequisites set by the sawmills’ geographic locations, owners, population proximity and available social structures. The un-

553 Because Alnö had so many sawmills, they are displayed in two separate figures based on total population 1890. The first graph displays the sawmill areas with the largest registered population, while the second displays the lowest.

554 Two industrial areas have been excluded, Rökland sawmill and Stornäset. Rökland was an agricultural village and only had one sawmill operational for two years, between 1875-1877. There is very little information about this mill, but it would not have been particularly large and due to its short time span it is not likely that it would have affected population development in the village considerably. Stornäset was also a proper village in the parish and was from the 1880s the location of a broom factory. A sawmill was not constructed until 1895 and would therefore fall outside the scope of the study.
registered populations would have been determined by production demands. Increased production would have caused the number of both registered and unregistered workers to grow. It is possible that low numbers of registered residents during the sawmill’s first production years could have been linked to a high presence of local workers.

**Figure 4.4 Registered populations in the largest sawmill areas in Alnö parish 1850-1890**

Source: Demographic Data Base, Umeå University.

All of the sawmills established prior to 1880 display a population growth occurring during the 1870s, but it was not until the 1880s that there were any real signs of any rapid increase. During the early 1880s two more sawmills, Hovid and Vii were constructed in established villages and both areas displayed an increased population development. It would seem that the second half of the 1880s appeared to have affected the population development in a positive direction.

The majority of the sawmill communities at Alnö remained small. Nine sawmill areas had not exceeded 200 inhabitants by 1890, but then again, five mills had been constructed during the 1880s and would only have been in production for a few years. The most explosive population growth in the district had occurred prior to 1880, but as Figures, 4:2, 4:4 and 4:5 displays, Alnö parish experienced a positive population growth during the second half of the 1880s. It did not show

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any similarities to the population growth that had occurred in the sawmill communities during the 1870s.

*Figure 4.5 Registered populations in the smallest sawmill areas in Alnö parish 1860-1890*

![Graph showing population growth](image)

Source: Demographic Data Base, Umeå University.

Alvik was one of the older mills in the parish, but remained fairly small until the mid 1870s, after which the population showed signs of having decreased, only to increase during the late 1880s. Neither Johannesvik, Rödestrand nor Nacka sawmills had registered settlers prior to sawmill construction. Interesting to see are how different their population developments were. Rödestrand experienced a rather rapid population development during its first production years. Nacka had very few registered residents during its first production years but then went from 30 inhabitants in 1883 to 125 in 1884. The sawmill had a very modest population during its first production years and because it did not undergo any production expansion during this particular time to explain the influx of people, the only real explanation may be that the owners finally had invested in company housing for its workers. This would have enabled them to settle and register on site instead of living close to the villages.

Population development at Johannesvik showed no similarities with either Rödestrand or Nacka, but ended up somewhere in the middle. Rödestrand, however, appeared to have experienced a population loss during the late 1880s. Nacka, Karlsvik and Alvik, and to a slightly lesser degree, Myrnäs, Ankarsvik and Utvik,
all appear to have experienced positive population developments during the late 1880s.

**Development of sawmill populations in Njurunda and Tuna parishes**

The first sawmill populations appeared in Njurunda in 1868 when Klampenborg was established. Njurunda parish is slightly difficult to work with due to the sources, or rather the lack of sources available from Svartvik. It is believed though, that the reconstructed material will still provide a fairly reliable estimation on population size. Similar to the estimations regarding the material from Svartvik, the material concerning Matfors also has to be seen as an estimation because the material does not differentiate between the sawmill population and the population residing in Matfors village.

**Figure 4:6 Registered populations in sawmill communities in Njurunda parish and in Tuna parish (Matfors) 1850-1890**

![Graph showing registered populations](image)

Source: Demographic Data Base, Umeå University.

*Information from Svartvik is missing 1854, 1856-1859.

Figure 4:6 shows that the registered populations in the sawmill areas in Njurunda display quick population growth, especially Svartvik. Unlike most other communities in the district, Svartvik did not even experience a population loss during the strike of 1879 or during the first years of the 1880s. Instead the population
registered in Svartvik continued to increase, resulting in that the community by 1890 was the largest sawmill community in the district.

Only one community did not reach more than 100 registered inhabitants, Juniskär. As Svartvik, this particular community showed wide gaps in the sources regarding official registration. Juniskär would, with its 69 registered inhabitants in 1890, be the smallest sawmill community in Njurunda parish.

The sawmill communities at Klampenborg, Essvik, Stockvik and Nyhamn all displayed continuous population development from establishment and up until 1890, although differentiating in size. While Klampenborg had a rather quick population growth during the early 1870s, five years after establishment the community had 168 inhabitants, both Essvik and Stockvik would eventually become larger. Matfors, the only sawmill community in Tuna parish, had a stable population development up until the sawmill closed and was one of the largest sawmill communities of its time. It was only contested by Svartvik during the early 1870s.

4:3 Influencing aspects
The difference in population development in the individual sawmill communities would suggest that there would have been aspects in these communities that influenced population development in different directions. Because it is impossible to pinpoint all the differences between the sawmills, the larger structures connecting all the mills have to be identified. All of the sawmills had an owner, a year of construction and a specific geographical location. What are the differences detected and would these aspects have influenced population development?

Population proximity
By the time the steam powered sawmills emerged, most of the population already lived in the coastal areas. The area around the Alnö strait, for example, had according to Cornell a population density of around 12 inhabitants per square kilometre.556 It could therefore be assumed that most sawmills, in order to secure labour during the first production years, would have been built within or close to already populated areas. The sawmill communities usually arose in the outskirts of the agricultural parishes, but could also, as in Skön, be very central and close to established villages. It is possible that this would have included the sawmill populations in the parish community more directly.557 Sawmills Heffners and Ortviken were built within walking distance from the town of Sundsvall and several villages.

in Skön parish. Vindskär was constructed close to the outskirts of Skönsmon and within walking distance from both Stockvik and Svartvik. This would have enabled easy travel between the mill sites and the villages. In truth, the majority of the sawmills in the Sundsvall district were all built within walking distance from some form of population settlement.

What sort of influence did population proximity exert over population development in the sawmill communities? The majority of the mill sites appeared to have housed work related activities on site prior to construction of the sawmill, such as, loading docks, manual sawing stations and shipyards. Although, work related activities did not necessarily mean that an area had a registered population, even though such activities may have induced individuals to settle. If the workers already lived within walking distance from the mills, it is less likely that they would have chosen to relocate to the mill sites, nor may they have been offered company housing.\textsuperscript{558} This should therefore have had a negative effect on population development and community construction.

Table 4:1 Sawmills and population on site at the time of construction\textsuperscript{*}

<table>
<thead>
<tr>
<th>Sawmill site</th>
<th>Parish</th>
<th>Njurunda</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No pop. on sawmill site</td>
<td>Skön</td>
<td>Alnö</td>
<td>Njurunda</td>
</tr>
<tr>
<td></td>
<td>Heffners, Skönsmon, Vindskär, Tunadal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawmill site sparsely pop.\textsuperscript{**}</td>
<td>Ortviken, Johannesdal, Kubikenborg</td>
<td>Alevik, Strand, Hörningsholm</td>
<td>Klampenborg, Nyhamn</td>
</tr>
<tr>
<td>Sawmill site pop.</td>
<td>Sund, Skönvik, Hovid, Vii, Karlsvik, Mymås</td>
<td>Essvik, Svartvik</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>15</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: Demographic Data Base, Umeå University.
\textsuperscript{*}Excludes Matfors because there are no registers available to determine the population prior to the construction if the mill in 1793.
\textsuperscript{**}Areas with a registered population of 20 inhabitants or less the years prior to the construction of the sawmills.

Table 4:2 shows that a total of 14 mill sites did not have a registered population prior to construction of the sawmill. In fact, six mill sites did not have a registered population until the year after, or sometimes several years after establishment. Eriksdal and Nyvik did not have registered populations until three and four years after construction while Juniskär sawmill displays a gap of eleven (!) years between the year of construction and the first registered residents. Population

558 Johansson 1988, pp. 78-79.
development in sawmill sites with no population registered prior to sawmill construction was therefore very modest, at least until the late 1860s and early 1870s. There does not seem to have been any conclusive population pattern related to unpopulated areas, some displayed low population development, while other areas experienced high population growth.

Eight sawmills were constructed in sparsely populated areas, with 20 inhabitants or less during the years leading up to the mills being built. These mill sites were, in comparison to the other two categories, more frequently built in areas lacking work related activities connected to the sawmill industry. Population development in these sawmill areas mainly occurred after 1870. A slight difference from mills in unpopulated areas was that these mills seem to have experienced a less rapid population growth, but did generally have more stable populations. Only Kubikenborg displayed an immediate population growth after its establishment.

Nine mill sites already had registered populations when the mills were constructed. In fact, all but two could be connected to previous sawmill related activities. There were, however, two types of areas, those which had been populated for a considerable time and those were fairly recently populated. While Svartvik and Skönvik were established industrial estates with a long-time settled population, Karlsvik, Myrnäs and Essvik had only been populated during the 1860s. In comparison to unpopulated and sparsely populated mill sites, populated mill sites became among the largest sawmill communities. This is perhaps not a complete surprise because these areas already had a social foundation in place, which may explain their attractiveness. There would especially appear to be a connection between already established industrial communities and a more rapid population growth as shown by Skönvik and Svartvik in Table 4:2. It would also seem that the population became less stable in some areas: both Hovid and Sund displayed dwindling numbers.

- Community construction and population

It might be assumed that sawmill construction led to instant population growth, but that was not always the case. The study has revealed that a clear majority of the sawmills did not have a particularly rapid population development. It would appear though, that sawmills constructed in already populated areas were more consistently larger than sawmills established in sparsely populated areas. This would suggest that an already established social environment was beneficial to furthering the construction of sawmill communities, whereas the development at mill sites lacking population at the time of construction may have had a negative effect on community construction. Apart from a few exceptions, sawmills con-
structed in conjunction with agricultural villages had tendencies of displaying a lower propensity for becoming excessively large.

Most sawmill owners appear to have preferred to establish sawmills in areas that did not have a pre-settled population on site, a total of 14 such sites were chosen by the sawmill owners. In many cases, the choice of a sawmill’s location can be linked to the owner’s previous work related activities at the site. The preference of where to locate a sawmill would change; during the 1880s most mills were constructed in already populated sites. This would have been a consequence of sawmills being established near existing loading docks and that unpopulated, undeveloped areas suitable for sawmilling along the shorelines had become scarcer.

It is assumed that locally registered workers would have been viewed as a highly valued commodity for the sawmill owners. Their presence in the areas meant that the owners did not have to arrange for their accommodations by building company housing.

It is possible that population proximity may have been a conscious economic strategy when deciding the specific location of the sawmills. Local workers would therefore have been important to the industries’ workforces, but less so to the establishment and development of the sawmill communities.

Year of construction
The study has shown that the establishment of sawmills was a time-linked phenomenon and primarily connected to the industry’s most expansive and profitable years 1869-1874, as discussed in chapter two. No less than 14 sawmills were constructed during those particular years and the export of sawed boards in Table 2:2 showed a rapid increase corresponding with these years. Even though export was slowing down and showed few signs of increasing during the late 1870s, the early 1880s provided a somewhat better financial climate and between 1881-1884, six mills were established.

Time must therefore be considered to have had a great impact on population development in the sawmill communities. It is assumed that sawmill established during the 1850s or 1860s would have had larger populations by the end of the studied time period. Those communities would have had a considerably longer time to have accumulated populations than mills established during the 1870s or 1880s. It could also be supposed that sawmills established during the late 1860s and early 1870s, during the industry’s most prosperous time, would have evolved into communities at a more rapid pace than sawmills established before and after this period.
To gain a better understanding of which sawmill grew the fastest in relation to the year of construction, time specific intervals were used. The time specific intervals chosen were 2, 5, 10, 15, 20 and 25 years after construction. The populations during the sawmill industry's expansion phase 1869-1874 have been highlighted in the table.

Table 4.2 Sawmills and population size according to set time intervals*

<table>
<thead>
<tr>
<th>Year of construction</th>
<th>Sawmill</th>
<th>Parish</th>
<th>Pop. at construction</th>
<th>Years after construction</th>
<th>Pop. 1890</th>
</tr>
</thead>
<tbody>
<tr>
<td>1849</td>
<td>Tunadal Skön</td>
<td>-</td>
<td>3</td>
<td>54 58 101</td>
<td>165 417 722</td>
</tr>
<tr>
<td>1851</td>
<td>Skönsmo Skön</td>
<td>-</td>
<td>43</td>
<td>86 117 66</td>
<td>92 250 618</td>
</tr>
<tr>
<td>1857</td>
<td>Sund Skön</td>
<td>77</td>
<td>81</td>
<td>98 146</td>
<td>369 472 449 678</td>
</tr>
<tr>
<td>1860</td>
<td>Erikadal Ånö</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>62 113 194 240 279</td>
</tr>
<tr>
<td>1861</td>
<td>Skövik Skön</td>
<td>171</td>
<td>307</td>
<td>422 407 580</td>
<td>685 796 902</td>
</tr>
<tr>
<td>1862</td>
<td>Örviiken Skön</td>
<td>26</td>
<td>70</td>
<td>78 143</td>
<td>239 247 330 467</td>
</tr>
<tr>
<td>1868</td>
<td>Heffnern Skön</td>
<td>27</td>
<td>83</td>
<td>328 310</td>
<td>449 535 544</td>
</tr>
<tr>
<td>Klampenborg Njurunda</td>
<td>-</td>
<td>16</td>
<td>988</td>
<td>283 262</td>
<td>337 349</td>
</tr>
<tr>
<td>Alvik Ånö</td>
<td>-</td>
<td>15</td>
<td>38</td>
<td>84 78 109</td>
<td>- 128</td>
</tr>
<tr>
<td>Nyvik Ånö</td>
<td>-</td>
<td>21</td>
<td>42</td>
<td>87 129</td>
<td>- 156</td>
</tr>
<tr>
<td>Essvik Njurunda</td>
<td>43</td>
<td>48</td>
<td>98</td>
<td>201 372</td>
<td>481 494</td>
</tr>
<tr>
<td>Kubiikenborg Njurunda</td>
<td>36</td>
<td>74</td>
<td>230</td>
<td>537 740</td>
<td>872 891</td>
</tr>
<tr>
<td>Strand Ånö</td>
<td>4</td>
<td>77</td>
<td>110</td>
<td>161 273</td>
<td>- 361</td>
</tr>
<tr>
<td>1871</td>
<td>Gustafsfors Alnö</td>
<td>-</td>
<td>1</td>
<td>82 144 408</td>
<td>- 429</td>
</tr>
<tr>
<td>Nyhamn Njurunda</td>
<td>36</td>
<td>51</td>
<td>109</td>
<td>161 227</td>
<td>- 294</td>
</tr>
<tr>
<td>Stockvik Njurunda</td>
<td>48</td>
<td>157</td>
<td>261</td>
<td>416 598</td>
<td>- 678</td>
</tr>
<tr>
<td>Svarvik Njurunda</td>
<td>556</td>
<td>635</td>
<td>782</td>
<td>1,303 1,379</td>
<td>- 1,350</td>
</tr>
<tr>
<td>1874</td>
<td>Johannesvik Ånö</td>
<td>17</td>
<td>21</td>
<td>49 68 77</td>
<td>- 70</td>
</tr>
<tr>
<td>Nazka Ånö</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>125 134</td>
<td>- 146</td>
</tr>
<tr>
<td>Rödestrand Ånö</td>
<td>9</td>
<td>31</td>
<td>113</td>
<td>132 (99)**</td>
<td>- (93)**</td>
</tr>
<tr>
<td>1875</td>
<td>Vindskär Skön</td>
<td>6</td>
<td>63</td>
<td>118 130</td>
<td>(69)** - (69)**</td>
</tr>
<tr>
<td>1878</td>
<td>Juniskär Njurunda</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>- 96</td>
</tr>
<tr>
<td>1881</td>
<td>Karlsvik Ånö</td>
<td>48</td>
<td>47</td>
<td>116 -</td>
<td>- - 148</td>
</tr>
<tr>
<td>Hovid Ånö</td>
<td>111</td>
<td>119</td>
<td>207</td>
<td>-</td>
<td>- - 258</td>
</tr>
<tr>
<td>1882</td>
<td>Ankarsvik Ånö</td>
<td>123</td>
<td>182</td>
<td>229 -</td>
<td>- - 246</td>
</tr>
<tr>
<td>1883</td>
<td>Höngsholm Ånö</td>
<td>1</td>
<td>14</td>
<td>33 -</td>
<td>- - 63</td>
</tr>
<tr>
<td>Mymås Ånö</td>
<td>2</td>
<td>29</td>
<td>35</td>
<td>- -</td>
<td>- - 52</td>
</tr>
<tr>
<td>1884</td>
<td>Johannedal Skön</td>
<td>65</td>
<td>92</td>
<td>130 -</td>
<td>- - 140</td>
</tr>
<tr>
<td>Ulvik Ånö</td>
<td>-</td>
<td>16</td>
<td>-</td>
<td>- -</td>
<td>- - 45</td>
</tr>
</tbody>
</table>

Source: Demographic Data Base, Umeå University.
Högland 1957.
Sägverksföretket 1955.
*This table excludes Matfors because the requested information is not available or included within the time frame of this study.
**After production had stopped at the sawmills. This will be discussed in further detail in a separate section.
Table 4:1 shows that the sawmills built during the 1850s and early 1860s had among the largest populations in 1890. It also showed that sawmills established during the 1870s had more rapid population growth than earlier sawmills. What was not expected though, was that of the mills established prior to 1870s, the majority had a very moderate population growth during the first years of production. Tunadal, for example, had only 165 inhabitants after 20 years of production. Earlier years of construction thus appear to have resulted in slower, but more stable, population developments. It would seem that the modest development of the early sawmill industry discussed in chapter two was accompanied by a modest population development.

The sawmill communities with the largest populations at establishment and in 1890, with the most positive population developments were Svartvik and Skönvik. Thus, at the top of this list are the two communities which already were established industrial communities prior to sawmill establishment. This would imply that these communities differed greatly from the other sawmill communities in the district and may perhaps not be as compatible in relation to population development, other than to each other.

The highlighted populations show that the differences between the sawmills were vast. While Tunadal went from 165 inhabitants in 1869 to 417 in 1874, Heffners went from 63 inhabitants in 1870 to 126 in 1873. When the sawmill had been established clearly would have been an important aspect during this phase of the industry’s development and especially the companies financial situation which would have been the foundation for expansions increasing production and the size of the workforces. The location of the sawmills would also have been important, Tunadal and Heffners were both located in Skön parish because reviewing the population developments at the sawmills in Alnö parish during the same period show that the good financial climate did not appear to have had an impact on population development.

What can be concluded is that while some communities took time before developing, others went from no registered residents to several hundred inhabitants in just a few years. Mills established during the economically prosperous period of the sawmill industry, showed a considerably more rapid population development over fewer years, indicating that the year of construction appears to have been an important aspect in relation to population development in the sawmill communities.
Industrial expansion and population development

It may be assumed to have been a strong connection between expansion possibilities and the sawmill companies’ financial situation. This means that the sawmill owners were an important aspect of how and when the sawmill communities were populated. If financial shortcomings and setbacks had a negative effect on the industry, it would also have had a negative effect on population development. Industrial expansion is therefore assumed to have had a positive effect on population development, because larger industries would generate more employment opportunities, which should have resulted in larger populations officially registered in the sawmill communities.

- Sköns parish

In Sköns, most sawmills expanded within the scope of the study by adding additional saw houses and frame saws to meet market demands and increase production. The first information on the number of frame saws for Tunadal, built in 1849, originate from 1860-62 when an additional saw house with three frame saws was constructed. A third saw house with additionally three frames was completed in 1872. Figure 4:3 displays that there was a slight increase among the registered population during the first half of the 1860s, but it is too inconclusive to tell if this was directly linked to industrial expansion. The 1872 investments, however, displayed what could be indications of a population growth linked to expansion.

Skönvik had initially eight frame saws installed and in 1874 four more were added. In 1888, a new sawmill with 16 frame saws was constructed. Population development at Skönvik indicates that there might have been a connection between establishment and expansion because the registered population displays growth in relation to both events.

Sund first expanded from two to five frame saws in 1869. A fire resulted in the construction of a new saw house with six frames in 1874. Population growth occurred around 1869 and continued through the first half of the 1870s, which may point to a link between population growth and expansion. Skönsmon showed the opposite reaction to industrial expansion. Figure 4:3 displays a slight population loss during the second half of the 1860s, despite an expansion to five frame saws in 1868.

Heffners sawmill started out with three frame saws and an additional saw house was constructed in 1878 with six frame saws. Due to the economic insecurity of the late 1870s it is surprising that the owner was confident enough to invest.

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559 Information on sawmill expansions in primarily gathered from Högland 1957 and secondarily from Sågverksfolket 1995.
Figure 4:3 displayed that the population stabilised during these years and did not start to increase until the early 1880s. At Ortviken, expansion did not occur until 1889 when an additional eight frame saws were added to the already existing two. Kubikenborg also expanded during the late 1880s, which makes it difficult to detect any sudden changes in population linked directly to increased production capacities. Johannedal was established with five frame saws and Vindskär with two, although, neither sawmill had time to expand during the period of study making it impossible to draw any links between expansion and population growth.560

- Njurunda and Tuna parishes

The sawmill populations in Njurunda grew rapidly after the construction of the mills. Klampenborg started with three frame saws in 1868 and one additional saw was added in 1882. There is, however, nothing to indicate in Figure 4:6 that expansion would have affected population growth. Essvik was initially constructed with two frames and one additional saw was added just shortly thereafter. The saw house burned down in 1884, after which a new mill was constructed with four frame saws. A slight population increase could be detected during mid 1880s that might be linked to this.

Svartvik had initially been constructed with three frame saws and an additional frame was added just shortly thereafter. A second saw house was built 1877/78 with eight frame saws and an additional four would be added during the following years.561 Just as the owners of Heffners, the owners of Svartvik invested in the industry at a precarious time, with an insecure economic market.562 There is nothing to suggest though, that the industrial expansion coincided with population growth. Svartvik did experience a population growth before the mill was constructed, from 1872 to 1873, but it is perhaps possible to tie this to the construction itself. Klampenborg, Stockvik, Nyvik nor Nyhamn displayed any results that would indicate a link between population development and industrial expansion. The only real interesting aspect regarding Svartvik is that it did not seem to have experienced the same negative population development during the late 1870s that occurred in other communities.

560 There is, however, a link to population development with regard to population loss at Vindskär after the mid 1880s, which might indicate towards a more difficult economic climate. A smaller production would have decreased the number of workers and inhabitants in the sawmill community.

561 Totally, Svartvik would eventually have 16 frame saws.

562 The Dicksons did the same at Matfors during the early 1870s, despite knowing that they would have to close down production within the near future. This clearly shows that the Dicksons had a great understanding of the market forces and were not late in turning it to their own advantage.
The largest sawmill during the 1870s was Matfors in Tuna parish. The first information on the mill’s size is dated 1861, when it had 12 frame saws. Investments during the 1869-1870 brought the number of frame saws to 18, which increased its capacity to an all time high. Östergren noted that it was remarkable that the owners invested so much money when it was fairly obvious that the water powered sawmills would not be able to compete with the steam powered sawmills for much longer. “The very size and importance of Matfors, however, seems to have been irresistible.” The registered population attached to Matfors grew continuously up until 1878, when the mill closed and the population drastically fell. There were no apparent connections between expansion and population growth.

- Alnö parish
The majority of the sawmill communities at Alnö remained small and Höglund indicated financial difficulties as a reason. Johannesvik with its two frame saws, constructed in 1874 had a cash flow problem and it is possible this was one of the reasons as to why it did not expand prior to 1890. Nacka built the same year, also with two frames, did not expand until after 1890. The mill exchanged owners three times during its first ten years of production and it was not until the late 1880s that it appeared to have developed a stable economy.

Eriksdal was the oldest sawmill in the parish and was originally a smaller mechanical saw with two frame saws. During the early 1870s, a new steam powered sawmill with four frames was constructed. The employment opportunities this must have generated can perhaps be linked to the population growth that occurred in the areas during this time as displayed in Figure 4:4. Not even Alvik that was established in 1869 had any greater population influx. The mill expanded from two to five frame saws in 1886 and there is a slight increase among the registered population during the mid 1880s, which might be connected to this as shown in Figure 4:5.

At Strand, the saw house with three frame saws burned down during the mid 1870s, whereof a new saw house with five frames was constructed. The registered population at Strand experienced a slight increase after this, which might be an indicator of a link between population growth and sawmill expansion. The only sawmill areas where a more noticeable link between rapid population growth and

563 During the 1870s, Matfors’ yearly consumption of logs reached over 200,000 (Östergren 1990, p. 28). Compared to Svartvik, which during the first years of production during the 1870s had an annual consumption of 100,000 logs (Höglund 1957, p. 150).
564 Östergren 1990, p. 28.
565 Höglund 1957, p. 93.
566 Ibid. pp. 80-83.
sawmill expansion occurred at Gustafsberg. The mill expanded from two to five frame saws in 1882 and as shown in Figure 4.4, the population went from 50 to 150 within just a few years. The sawmill also increased its registered population from 151 inhabitants in 1882 to 429 inhabitants in 1890.

Seven of the sawmills in the parish were constructed during the 1880s and would explain the low population because they had no real opportunities to expand within the scope of this study. This makes it more difficult to link population development in the sawmills in Alnö parish to industrial expansion. The only mill established during the 1880s that expanded before 1890 was Ankarsvik, which occurred in 1883 and 1889. Even though population development at the mill appears to have increased throughout the decade, it is difficult to say if this is supposed to be seen as a typical development or specifically linked to the sawmill expanding. Therefore, at Alnö, industrial expansion would not have been as important to population growth as the initial sawmill establishments must have been.

- Community construction and expansions

The study has shown that the economic climate and market demands would have played important roles in determining productivity within the industry, but it would not appear to have influenced the registered populations. It is reasonable to believe that when the sawmills were established and when they expanded, that the number of workers would have increased. Some sawmills have displayed a direct link between sawmill establishment and population increase, mainly because many areas did not have any registered settlers prior to establishment. However, these developments have been too insignificant to really say anything conclusive. It can be assumed though that it would have had a positive effect on population development in the sawmill communities.

It is likely that the presence of local workers during the first years of production would account for the low number of registered populations in many areas. While the detected population increases, especially during the 1870s, may well be linked to the expansion of the mills, these were more likely connected to the economic climate of the period. If there was a connection between population growth and expansion, it is possible that there was an increase among the temporary workers and the unregistered population. The number of temporary sawmill workers would have increased both in times of economic insecurity and in times of prosperity because it was cheaper to employ workers short-term. This would explain why it is so difficult to detect any sudden changes among the registered populations.

Number of frame saws at the sawmills established during the 1880s; Karlsvik 3, Hörningsholm 2, Myrnäs 3, Utvik 3 (Ibid.).
It also meant that the population developments among the registered populations within the sawmill communities would have been more typical and stable than what previously may have been assumed.

4.4 Population development and sawmill communities in Alnö
The sawmill industry had, on a general basis, a positive influence on population development and community construction in the Sundsvall district. Alnö parish, however, displayed such a different pattern that the sawmill communities in this parish must be discussed separately.

Alnö was one of the most densely sawmill located parishes in the entire district but despite several sawmills and an increasing population in the parish, the communities that emerged could not compete in population size or production with the sawmills on the mainland.

Because the majority of the sawmills were established so late in comparison to the other mills in the district, it could be supposed that Alnö was not initially seen as the most favourable location for sawmilling. Generally, the mills in Alnö had several disadvantages when they finally were constructed especially in relation to location, year of construction and expansion. Firstly, the sawmills limited themselves and any possible expansion because they were too closely situated to each other. Secondly, because they were constructed late they had fewer opportunities to buy forests and acquire logging rights. Thirdly, the geography of the parish coastal areas also had fewer possibilities to store timber, lacking the presence of small creeks and islands.568

Because many of the owners of the larger sawmills on the mainland were involved as part-owners in many of the mills that were constructed it may be reasonable to assume that the smaller mills in Alnö mainly should be seen as investments in land and storage. It was profitable adding a sawmill to an existing loading dock when the own sawmill on the mainland no longer had room to expand. Mill owners in Skön parish, for example, owned land and mills on both sides of the Alnö strait due to its strategic location. Community construction was probably far from their minds; Norberg wrote that they seldom built more than a few barracks.569 Not investing in creating proper communities but taking advantage of the already existing social environment and local workers in Alnö kept costs down. This must

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568 Wik 1950, p. 237.
have been a contributing reason as to why the sawmill communities at Alnö remained small. It was a strategy that made it possible for smaller sawmills to survive, despite competition from the larger mills on the mainland.

Not even the oldest sawmills, built before the construction boom, seem to have been able to take advantage of the possibilities offered. Despite that the populations in the oldest communities displayed large populations in 1890; they cannot be compared with the communities on the mainland. Höglund suggested that a negative development may have been a consequence of changing ownership structures during the first years in production accompanied by poor finances and fires. It is likely that this would have had a negative impact on both expansion possibilities and population development. It could possibly be claimed that the late 1870s and late 1880s offered a different climate due to more economically restrictive company finances, something that could have had a negative effect on population development and community construction.

Not even the same production capacity seems to have resulted in the same population developments. Alvik and Gustafsberg had, at least on paper, the largest production capacities in the parish but completely different population developments. Alvik was constructed four years earlier than Gustafsberg, but the latter mill still had a registered population that was twice as large. The population difference between the two sawmills continued and after 20 years of production Gustafsberg had a registered population of 408 registered inhabitants, while Alvik only had 78! The situation among the sawmill communities at Alnö did not only differ greatly from the communities on the mainland, but also between each other.

The sawmills’ closely spaced location would have limited geographical expansion. Could this have influenced population development? One “cluster” was located in the northern part of the island’s western shoreline during the first half of the 1870s, consisting of the sawmills of Johannesvik, Rödestrand and Nyvik. These mills were built only within a few years of each other, Nyvik in 1869 and the other two in 1874. The second “cluster” consisted of the sawmills of Strand and Gustafsberg, two of the older mills in the parish, located further south along the western shoreline.

The first group of sawmills displayed a visible difference between all three mills of which Rödestrand had the largest population. Population development at both Nyvik and Johannesvik was modest during the sawmills’ first years in production, but the latter still had the strongest population development during the first ten years of production. Interestingly though is that even after produc-

570 Höglund 1957, pp. 84-86, 105-107.
tion at Rödestrand had ceased, the community still had a larger registered population than either of the other two remaining sawmill communities. The close proximity between the mills sites would have made it possible for workers to still remain settled at Rödestrand while working elsewhere. Population growth at Nyvik, Strand or Gustafsberg during the second half of the 1880s could also suggest a certain level of relocation.

Table 4:3 Population development at sawmills in two clusters in Alnö parish according to specific year intervals established prior to 1800 with a minimum of 15 years of production*

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Sawmill</th>
<th>Year of construction</th>
<th>Reg. pop. after years of construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nyvik</td>
<td>1869</td>
<td>0 21 42 87</td>
</tr>
<tr>
<td></td>
<td>Rödestrand</td>
<td>1874</td>
<td>31 113 132 (99)**</td>
</tr>
<tr>
<td></td>
<td>Johannesvik</td>
<td>1874</td>
<td>21 49 68 77</td>
</tr>
<tr>
<td>2</td>
<td>Strand</td>
<td>1871</td>
<td>77 110 161 273</td>
</tr>
<tr>
<td></td>
<td>Gustafsberg</td>
<td>1873</td>
<td>1 82 144 408</td>
</tr>
</tbody>
</table>

Source: Höglund 1957.
Demographic Data Base, Umeå University.

* A third cluster was also detected, but these mills were all constructed during the 1880s and information on population development was limited.
**Rödestrand burned down in 1884, but the community remained.

Strand and Gustafsberg showed an uneven population development. Strand displayed a quicker population development during the first years of production, concurring with an expansion that occurred five years after construction. Population development at Gustafsberg appears to have been fairly stable up until ten years after. The differences in populations are quite substantial; however, this does not reveal how many were employed at the mills. Nor does it give any information about the number of temporary workers whose presence may explain the residential difference among the registered populations.

4:5 Population development when the sawmill closed
Not all sawmills survived the 19th century and this study includes three such mills. As has been indicated, industrial discontinuation did not have a positive influence on population development. Matfors was the only mill of the three where production ceased on the initiative of the owners and not because of an accident. Production stopped in 1878 and the owners of Matfors transferred all production.
to their new mill at Svartvik. Rödestrand sawmill had only been in production for ten years when it burned down in June of 1884. It was never rebuilt.

The mill at Vindskär, owned by a consortium of different local sawmill owners, met a similar fate in 1887. This complex also containing a shipyard, smithy, mechanical workshop was destroyed in a fire, but while the shipyard was rebuilt, the sawmill was not.

Table 4.4 Population developments in three sawmill communities in the Sundsvall district in relation to production stop and sawmill closure

<table>
<thead>
<tr>
<th>Population</th>
<th>Vindskär</th>
<th>Rödestrand</th>
<th>Matfors</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 years before closure</td>
<td>142</td>
<td>135</td>
<td>647</td>
</tr>
<tr>
<td>2 years before closure</td>
<td>130</td>
<td>138</td>
<td>662</td>
</tr>
<tr>
<td>1 year before closure</td>
<td>111</td>
<td>101</td>
<td>668</td>
</tr>
<tr>
<td>Year of closure</td>
<td>100</td>
<td>132</td>
<td>634</td>
</tr>
<tr>
<td>1 year after</td>
<td>88</td>
<td>123</td>
<td>395</td>
</tr>
<tr>
<td>2 years after</td>
<td>76</td>
<td>108</td>
<td>357</td>
</tr>
<tr>
<td>3 years after</td>
<td>69</td>
<td>112</td>
<td>341</td>
</tr>
</tbody>
</table>

Source: Demographic Data Base, Umeå University.

As displayed in Table 4.4, joined by their short time in production, Rödestrand and Vindskär had considerably smaller communities than Matfors and did not experience such a large population loss after production had ceased. While Vindskär lost around 22.0 percent of its population between the first years of closure to the next, Rödestrand only lost around six percent. Matfors lost almost 40.0 percent of its registered population between 1878 and 1879. Why the differences in population loss were so extensive between the different communities could have something to do with the fact that both Vindskär and Rödestrand were located considerably closer to other industries, which would have offered employment opportunities without having to relocate. Vindskär was closely situated to Stockvik, Svartvik, Klampenborg and Essvik, while Rödestrand was located in

571 Höglund 1957, p. 96.
572 Ibid. pp. 165-167.
573 These numbers confirm results from an unpublished undergraduate paper from the Department of Social and Economic Geography at Umeå University in 1983. Pär Lindberg found that within a few years of Matfors closure, almost 67 percent of the population had departed. The population would mainly relocate to Svartvik and in 1879, 210 people left for Njurunda and in 1883, and additional 68 followed. In all, 288 individuals from Matfors would settle in Svartvik between 1879-1883. (Pär Lindberg, Matfors sågs nedläggning och de påföljande befolkningsstrukturella förändringarna (1875-1895), Kulturgeografiska proseminariet, Umeå universitet 1983).
the highly sawmill dense areas of Alnö. Whereas for Matfors, as the only mill in the parish, the production stop meant that the workers who could not find other means of employment were forced to move. This would imply that the location of other mills was an important factor for maintaining a low population loss in times of adversity. Vindskär and Rödestrand had both experienced population losses the years leading up to the fires and this would continue in the years that followed closure. By 1890 the population at Vindskär was down to 69 residents and 93 at Rödestrand. Matfors would not experience a positive population development until the 1880s, which resulted that by 1890 the community had 502 officially registered residents.

4:6 Conclusions
Community construction and the sawmills’ populations were deeply intertwined. Population development in the sawmill communities in the Sundsvall district was to some extent individually linked to each sawmill, even though it also followed some similar time related patterns. Still, there was no set schedule when, how and by whom the areas surrounding the sawmills became populated.

Time seems to have had a great impact on the size of the sawmills’ populations, concluding it as a time linked phenomenon. Year of construction is one of the influencing aspects that appear to have had the greatest influence on population development, especially as it revealed strong connections to favourable economic periods. Sawmill communities in the district established prior to 1867 showed a similar pattern of having had slower population developments, but their populations had also been among the more stable. These communities, however, would have among the largest populations by 1890. Older sawmills had a considerably longer time to construct their communities and gather a settled population than communities that evolved close to the turn of the century. Comparing Alnö parish to Skön and Njurunda illustrates this very well, where populations and community construction were not prioritised during the sawmill establishments during the 1880s. Time would therefore have influenced community construction.

The specific location where the sawmill was established would also appear to have had an impact on population development. Sawmill communities in parishes Skön and Njurunda displayed considerably larger populations than in communities found in Alnö parish, despite that some of the oldest mills in Alnö were contemporary with the early mills in the other parishes. Another aspect that had a positive influence on population development was if the mill was constructed in an area with a pre-settled population, in what must be categorised as already established communities. Already established industrial communities were also
considerably larger at the end of the studied period. A sawmill established close to a populated area, but not directly in it, usually resulted in more moderate population development.

Sawmill communities at Alnö in general would differ, especially in relation to size, location and industrial expansion. They were by their close locations to each other limited with few possibilities to expand geographically. Still they managed to coexist with the larger sawmills on the mainland; this would suggest that an excessively large production size was not always a determinant for success.

The population differences between the sawmill populations make it important in trying to understand why they were populated so differently, at least when most mills outwardly had the same prerequisites. Community and industrial development would have been determined by the owners’ financial situation, which also decided if expansion was possible, which resulted in population growth. The sawmill owners would therefore have been highly important to sawmill communities’ constructions. This was especially evident in Alnö, where many of the owners also were involved in mills on the mainland. This would give a partial explanation to why the sawmills were able to compete with the mills on the mainland, because it would not have been about profiting from one mill, but from several. This expansion phase would therefore have been all about keeping costs down. By focusing on production and not community construction, this would have been achieved by taking advantage of already existing communities and their social infrastructure.

No apparent connection could be formed between previously work related activities at the mill sites and population development in the sawmill communities. Most sawmill areas displayed such activities. Nor could any apparent or definitive connections between industrial expansion and population be made, even though there were some indications. This in itself is an interesting result because it points towards the population development that did occur in the sawmill communities would have been the result of a natural population growth, at least during the last years of the century.
Chapter 5
MIGRATION

Migration was an integral part of rural community life, and had in pre-industrial times been dominated by circular short-distance migration. People were highly mobile and people experienced migration more frequently than marriage and childbirth. Entering industrialisation, this would not have changed, even though the direction, type and longevity of migration did.\textsuperscript{574} Thus, the frequency of migration would not change, but rather it would find a new importance during industrialisation, relocating large groups of people.\textsuperscript{575} This was especially evident in relation to the sawmill communities, especially because the bulk of their populations were made up of migrants. While industrial migration initially remained seasonal and temporary for many, others permanently left their home parishes to settle close to the sawmills. Migration would become essential in populating these areas and for the development of proper communities.

The aim of this chapter is to study the rural industrial migration that occurred to, from and within parishes Sköö, Alnö, Selånger, Njurunda and Tuna in the Sundsvall district between 1850-1890.\textsuperscript{576} How were the parishes’ migratory patterns characterised and was migration mainly local or long distance? Did male migration and female migration display any differences? This study will, in view of the many individual sawmills included in the study, treat the communities as one group and compare the results in relation to the non-sawmill populations in these parishes. How did migrations to and from sawmill areas differ from migrations to and from non-sawmill areas? Did migrants who registered arrive alone or did they arrive in groups?

In- and out-migration from the parishes and the sawmill communities is not the only type of migratory event that is of interest. Internal parish migration is also of importance, especially because local inhabitants usually are believed to have made up the basis of the initial sawmill populations. What presence did the local inhabitants have at the sawmills, and what was the character of the internal parish migration in the parishes? What areas exchanged populations and what role did internal parish migration have in populating the sawmill communities?

\textsuperscript{575} Eriksson & Rogers 1978, p. 185.
\textsuperscript{576} The material will only allow studies on migration that occurred within the district. The data itself is structured to focus on migration movements conducted within a parish and less frequently so, between parishes even though it is possible in some cases.
Earlier research has suggested that a migratory or economic barrier may have existed between sawmill communities and agricultural areas; but can this be substantiated in this study?

5.1 Migration in the Sundsvall district

The sawmill industry opened up a new labour market and the demands for workers sparked migration to the Sundsvall district from all directions in the country, ranging from local to international migration. Some migrants travelled very short distances to reach the sawmill communities, others migrated from the closest provinces or had even arrived from the neighbouring countries Finland and Norway.

Migration could be divided into three different categories; in-migration, out-migration and internal parish migration. Male migratory movements displayed the following percentages within these three categories; in-migration 41.5 percent, out-migration 26 percent, and internal parish migration 32.5 percent. Female migratory movements displayed percentages; in-migration 37.4 percent, out-migration 26.1 percent, and internal parish migration 36.5 percent.577

Migration could also be divided into five subcategories: international, national, regional, village to village and relocation.578 The latter two were tied to internal parish migration and village to village implied migration between two communities within a parish while relocation implied a move within a community. Of all male in-migrations, 57.2 percent were national in origin and 39.9 percent originated from within the district. For female in-migrations 49.9 percent originated from within the district while 45.7 percent were national. Neither male nor female in-migration displayed any larger percentages when it came to migrations that were international in origin, only 3.5 and 4.3 percent, respectively.

Out-migration displayed a greater difference between male and female migrations. While 14 percent of all male out-migrations were international in destination, only 8.9 percent of female migrations were international. Out-migration was also, for both male and female migrants, tightly linked to the district. 52 percent of all male out-migrations and 63.7 percent of all female out-migrations had a named destination within the district. The corresponding percentage for national out-migration was 34 percent for males and 27.4 percent for women. Thus, more men than women migrated internationally and while more male than female mig-

577 Male migrations N=27228. Female migrations N=30348. Does not include migration to and from Svartvik after 1853.
578 Regional in this context is the term used to imply the parishes included in the Sundsvall district.
rations had a national origin, both men and women displayed a strong willingness to remain in the district upon departing from the parishes.

*In- and out-migration according to parish*

In the Sundsvall district the population development in the parishes shows large differences compared to each other and this most likely can be derived from the different parishes’ different levels of industrialisation. Parishes with industries usually experienced greater population mobility than agricultural parishes. The industrialised parishes Skön, Alnö and Njurunda had among the highest number of in-migrants arriving during industrialisation. Skön in particular had one of the fastest growing populations of all Sundsvall parishes during the second half of the 19th century.

*Figure 5.1: In-migrations by individuals aged 15 and older to parishes Skön, Alnö, Selånger, Njurunda and Tuna 1850-1890*

Source: Demographic Data Base, Umeå University. Summariska folkräkningsredogörelser, Svartvik 1865-1890. *Information from Svartvik is missing 1854-1864.

** Skön N=13216, Alnö N=5629, Selånger N=3829, Njurunda N=9424, Tuna N=5670

Although in-migration was not always perceived as a positive thing by the local inhabitants, Olsson claimed that migration was believed to cause increases in illegitimate children, child mortality and crime. Economic concerns were also com-

579 Olsson 1949, p. 67.
mon; when the first migrants arrived to Skön parish to work at Tunadal, members on the parish council were afraid that these workers would become a burden on the parish relief funds. The council therefore demanded that the sawmills formed their own relief funds.580

Up until the mid 1870s, Skön parish had the highest in-migration among individuals aged 15 and older. As Figure 5:1 shows, it did encounter a slight recession during the second half of the 1860s, but rose again during the early 1870s, most likely as a response to the increasing demand for labourers within the sawmill industry. After 1875 in-migration displayed a declining development that continued throughout the 1880s, with only a few signs of increasing. This development could possibly be connected to a harsher economic climate, a halt in sawmill construction and a diminished labour demand within the industry.

In-migration to the other parishes prior to 1870 displayed several fluctuations. Tuna was on the same level as Skön by the early 1850s before decreasing and displaying the lowest in-migration of all the parishes after 1873. It was not expected that in-migration showed a steady decline even five years prior to Matfors closing in 1878. Although this was linked to agricultural migration, this was not reflected in the total population residing in Matfors, which increased up until 1877, reaching 668 officially registered residents.

Alnö displayed the second highest proportion of in-migrations from the 1870s. It was even higher in Alnö than it was in Skön during the mid 1870s and early 1880s. Still, population growth in Alnö never reached the same heights as it did in Skön. Njurunda also showed an increasing in-migration after 1870, while prior to this the town experienced fluctuating proportions of in-migration. Njurunda was the only parish that experienced a positive in-migration during 1879, even though it displayed a similar pattern with the other parishes of a declining in-migration during the first half of the 1880s.

Because the population turnover was high during industrialisation, it would be expected that out-migration would have matched in-migration. Instead, Figure 5:2 shows that out-migration was consistently low. An interesting aspect is that the years with the most stable, and among the lowest out-migration occurred during the 1870s, which could be described as the sawmill industry’s most turbulent decade. Another interesting result was that out-migration from Alnö and Njurunda displayed lower proportions during the 1880s than during the 1850s, despite the establishment of sawmills.

580 Ibid. p. 35.
That out-migration decreased in prosperous times is clear, but that it also was lower than in-migration during the economic crisis of the late 1870s may be more difficult to comprehend. However, as Norberg stated, moving to another sawmill community would have been rather counterproductive because the entire district had been affected.\textsuperscript{581} Wages would have been similar and employment was not easily come by. The only way of securing a better living situation would have been to leave the district entirely, although few migrants left officially.

The results show that despite a few peaks in the positive and negative, out-migration had fairly similar proportions in all parishes and developed in fairly stable downward curves. One of the most noticeable peaks in Figure 5:2 was found in Njurunda in 1854. This occurrence, however, is most likely linked to the sources and not some spontaneous exodus from the parish. 1854 marks the year when Svartvik was administratively separated from Njurunda parish. This was therefore an administrative migration that only occurred on paper. Njurunda also displayed a smaller peak in 1887 for out-migration, which nationally was a year when emigration to the North American continent rose.

Ahnö and Selånger displayed extremely low proportions of out-migrations in 1853 and 1856, respectively. Compared to in-migration, there were similar peaks during the same years, which could indicate a decreased movement of individuals aged 15 and older during these particular years. None of the other parishes appear to have experienced this phenomenon. Tuna displayed the two second highest peaks of out-migrations in 1879 and during the mid 1880s, which is linked to the mill closing in 1878 as discussed in chapter four.

Overall, out-migration decreased throughout the entire period in all parishes and resulted in that the individual parish populations continued to grow.\footnote{\textit{Tedebrand} noticed in his dissertation a trend of rising number of migrants leaving the sawmill areas after 1890. As the sawmill industry reached a stagnation period at the turn of the century, and later on a continuously decreasing expansion, there were also a stagnation within population growth (\textit{Tedebrand} 1972, pp. 100–101). In between 1900-1937 number of workers within the sawmill industry would decrease to less than half of its previous numbers. Västernorrland had the highest out-migration of all northern counties (\textit{Wik} 1950, p. 267).} It would appear that people became less prone to leave the parishes compared to what they had been earlier, suggesting more stable populations. Even the economic crisis of the late 1870s, when it might have been expected that people in the industrial parishes would have left to find better opportunities elsewhere, does not appear to have inspired migration.

\textbf{Migration to and from sawmill areas}

That employment opportunities within the sawmill industry were, more or less, exclusively male, implies that migration primarily should have been male. This should have had a strong influence on migration to and from the sawmill areas in the district and on the resident populations in the sawmill communities. Unfortunately, because a great portion of the migration to the mills was unofficial it has left no trace in official documents. This begs to question whether or not it is possible to detect a male surplus in the official migration or if this only was a result of temporary migration.

Migration flows to and from the sawmill areas appear to have been continuous throughout industrialisation, albeit fluctuating. While out-migration from sawmill areas decreased, in-migration remained fairly strong throughout the 1870s. Migration towards the industries was mainly economically motivated, and from the late 1870s so was many of the reasons for leaving employment at the sawmills. Still, out-migration would not have been as sensitive to the economic fluctuations and if employment could be secured, there would have been no reason to leave.
In-migration and out-migration had both decreased by the 1880s; out-migration from sawmill areas even displayed a lower proportion than out-migration from non-sawmill areas, which indicates that the population remained settled for longer periods. The sawmill communities were by the 1890s not just haphazard settlements based on labour demands, but actual communities in their own right, with functions beyond the obvious connection to the sawmill industry. It would suggest a population stabilisation, not only in regards to migration to and from the sawmill communities, but with regard to migration and population in general.

Figure 5:3 In- and out-migration to and from sawmill areas by division of gender in parishes Skön, Alnö, Njurunda and Tuna 1850-1890*

Figure 5:3 shows the differences between male and female migration to and from the sawmill areas in the district. It clearly shows that male in-migration was higher than female in-migration which displayed considerably lower proportions. Male in-migration shows a clear peak during the early 1860s and then again a steady increase from late 1860s through the late 1870s, which corresponds with the sawmill industry’s prosperous years. Female in-migration, however, does not appear to have been so affected and remained at a fairly stable proportion throughout the period.

Source: Demographic Data Base, Umeå University.
Summariska folkräkningsredogörelser, Svartvik 1865-1890
*Information from Svartvik is missing 1854-1864.
**Male migrations to sawmill areas N=4943, male migrations from sawmill areas N=3290, female migrations to sawmill areas N=4876, female migrations from sawmill areas N=3374
Figure 5:3 also displays a clear distinction in male in-migration before and after 1865. The high in-migration during the first 15 years of the study is most likely the result of small populations. Male in-migration fell abruptly to the same levels as female in-migration during the mid 1860s. In context it could be linked to a momentary halt in sawmill construction, but also to the economic recession that struck the country during the late 1860s.

Male out-migration was highly irregular until the 1860s; it appears to have decreased and remained on a more stable level, with the exception of 1879, the year of the strike. Out-migration was, however, superseded by in-migration in 1879. Male out-migration was actually at about its lowest proportion during the 1870s.

Female out-migration showed an interesting pattern of having a larger proportion of women leaving the sawmill areas than moving to them prior to 1865. It is only after 1870 that female in-migration superseded out-migration. Female out-migration did, however, display a slightly higher proportion during the 1880s. Male and female out-migration also shows greater similarities during the later decades.

Figure 5:4 In- and out-migration to and from non-sawmill areas by division of gender in parishes Skön, Alnö, Selånger, Njurunda and Tuna 1850-1890*

*Information from Svartvik is missing 1854-1864.
**Male migrations to non-sawmill areas N=12984, male migrations from non-sawmill areas N=11239, female migrations to non-sawmill areas N=14901, female migrations from non-sawmill areas N=14029
Comparing in- and out-migration from sawmill areas with migration to and from non-sawmill areas shows a few differences, but also some similarities. Migration relating to non-sawmill areas displays a more stable development, with a similar pattern of a lowered migration frequency during the mid 1860s. The major difference between Figures 5:3 and 5:4 is male migrations to the respective areas. Male migration to the sawmills was not only consistently higher, but also showed a larger tendency to fluctuate, something male migration to non-sawmill areas did not. Agricultural migration in general would not have been subjugated to market demands, so it was expected that male migrations to non-sawmill areas would not have been as high.

Migration in non-sawmill areas shows that from the mid 1860s, female migration is slightly higher than male migration as more women than men moved between non-sawmill areas. Male migration from non-sawmill areas actually displays the lowest migration tendency after 1870, suggesting that males aged 15 and older in non-sawmill areas were more reluctant to migrate than females. Similar proportions of in- and out-migration can also be found in relation to sawmill areas for women.

Compared to the proportion of men leaving sawmill areas, a similar pattern can be detected because this group also displayed the lowest migratory propensity. This would indicate that men in general were, and became, less mobile by the end of the century. It is not unlikely that a lowered mobility among men was linked to a more secure employment market, which would have decreased the inclination to migrate.

**Single and group migration**

Official migration to the sawmill communities was fairly similarly proportioned between men and women and even though many would have arrived alone, not all did. Previous research has shown that recruitment among family and friends was a common feature during industrialisation, which would have made several members or the whole family relocate to a sawmill community. Migrants arriving from the same geographical areas over a longer period of time were not uncommon. When the first migrants sent letters home, others would have been more induced to follow if the news was positive. Ostergren indicated that at “this level kinship and neighbour ties in the process of [e]migrant selection were especially strong.”583 For example, the 1879 lists showed a strong representation of workers born in Värm-

---

land province at all four sawmills, but held dominant positions at Klampenborg and Kubikenborg. At Klampenborg workers born in Värmland made up more than a third of all registered workers in the list. This suggests self-recruitment as a well used and successful practice. Other workers and their families migrated over a much shorter distance. When Matfors closed down production in 1878, many were transferred to Svartvik, such as the Wivägg and Bångfeldt families.

The data concerning migration may help in figuring out what was most common, migrating alone or migrating in groups, when it came to in-migration to the sawmill communities. There were two types of migrants, primary migrants and secondary migrants. Primary migrant was a migrant who was the head of a migration, while a secondary migrant was an attached migrant. A mother migrating alone with her children would have been counted as a primary migrant and her children attached migrants. In a migrating couple, the husband would be considered the primary migrant while his wife would be viewed as an attached migrant. Table 5:1 therefore only includes primary migrants.

Table 5:1 In- and out-migration to and from sawmill areas in parishes Sköö, Alnö, Njurunda and Tuna among primary migrants 1850-1890*585

<table>
<thead>
<tr>
<th></th>
<th>% Men</th>
<th></th>
<th>% Women</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In</td>
<td>Out</td>
<td>In</td>
<td>Out</td>
</tr>
<tr>
<td>N</td>
<td>3,420</td>
<td>2,652</td>
<td>1,973</td>
<td>1,527</td>
</tr>
<tr>
<td>Migrating alone</td>
<td>51.3</td>
<td>43.4</td>
<td>61.5</td>
<td>20.7</td>
</tr>
<tr>
<td>One attached migrant of opposite sex</td>
<td>11.3</td>
<td>11.0</td>
<td>29.6</td>
<td>20.7</td>
</tr>
<tr>
<td>One or more attached migrants of same sex</td>
<td>0.9</td>
<td>1.0</td>
<td>3.7</td>
<td>4.1</td>
</tr>
<tr>
<td>More than one attached migrant of both sexes</td>
<td>36.5</td>
<td>46.6</td>
<td>5.2</td>
<td>54.5</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Demographic Data Base, Umeå University.
*Information from Svartvik is missing after 1853.

584 Work related migration from Värmland could be linked to the coastal regions of Norrland and the timber trade ever since the beginning of the 19th century according to both Norberg and Johansson (Johansson 1988, p. 72, Norberg 1980, p. 34). Few labour opportunities in Värmland and an expanding industry in Sundsvall caused a steady flow of migrants arriving to the district (Norberg 1980, p. 39). Östergren showed in his study of immigrant communities that Swedish migrants from the same geographical areas commonly cluster together in groups that were similar from the communities from where they had migrated (Östergren 1979, pp. 199-200).

585 Migration to and from the agricultural areas displayed a lower tendency among both male and female migrations to have been conducted in group. Male in-migrations showed that as few as 38.1 percent of the migrations had attached migrants, among out-migrations the percentage was 36.1. In female in-migrations as few as 23.2 percent were conducted jointly and among out-migrations only 17.8 percent were conducted in group. It would thus appear that it was more common that in- and out-migration to the sawmill areas were conducted in group, that it was to and from agricultural areas. This was especially evident among the male migrations.
Table 5.1 shows that more than half of all male primary migrants arrived alone and left alone, 51.3 and 43.4 percent, respectively. Female migrants, however, display a slightly higher percentage in relation to in-migration, 61.5 percent, but a considerably lower percentage in relation to out-migration, 20.7. The lone migrant may have dominated migration to sawmill areas, but as the results show, it did not show corresponding numbers for migration from sawmill areas. Male out-migrations showed that more than half of all migrations were conducted by men with attached migrants, whereas the same percentages for women were even higher. Male migrations also show a lower percentage of one attached migrant, the percentage is almost double among female migrants. Women, more commonly than men, were attached migrants and in the cases where women were registered as primary migrants, they were usually single or migrated with their children. Males registered as primary migrants who migrated together with attached female migrants suggest married couples. Few migrations appear to have been conducted with an attached migrant of the same sex.

Male migrations did not have a difference between in and out, but female migrations display higher percentages in relation to in-migration alone or with attached migrants. This could indicate the sawmill communities as strong marital markets, especially for women. Unfortunately though, the data output did not contain information on when the individuals were married. The local study on kinship and marital status showed that of the 48 percent of kin connections identified through the 1879 lists that had been forged through marriage, a clear majority, 35.9 percent, had been entered after the workers had begun their employments.586

Even though migrants may have arrived alone, it did not necessarily mean that they were unmarried, which makes marital status important. This can, however, not be done only in relation to primary migrants but also has to include attached migrants, especially because women would have been registered attached migrants if they migrated with their husbands.

Table 5.2 shows that while the percentages for male migrations in and out from sawmill areas do not show any major changes, female migration does. Slightly more than half of all female migrations to and from sawmill areas were conducted by unmarried women, but almost as large percentages were married. The different numbers between female primary migrants and all female migrants confirm a high presence of married women as secondary migrants.

586 See Chapter 8, Table 8.4 When kin connections between the workers at Klampenborg, Kubikenborg, Heffners and Svartvik were forged in relation when the workers started working at the sawmills.
Table 5:2 In- and out-migration to and from sawmill areas in Sköns, Alnö, Njurunda and Tuna in relation to marital status among primary and attached migrants, 1850-1890*

<table>
<thead>
<tr>
<th>Marital status</th>
<th>% Men</th>
<th>% Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In</td>
<td>Out</td>
</tr>
<tr>
<td>N</td>
<td>3,672</td>
<td>2,889</td>
</tr>
<tr>
<td>Unmarried**</td>
<td>57.6</td>
<td>52.0</td>
</tr>
<tr>
<td>Married</td>
<td>42.4</td>
<td>48.0</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Demographic Database, Umeå University.
*Information from Svartvik is missing after 1853.
**Unmarried includes all individuals marked as unmarried, individuals with an unknown marital status as they most likely were married as well as widows/widowers.

The results also show that men in general had a considerably higher in-migration frequency both to and from sawmill areas than women. In-migration among unmarried and married men was high up until the mid 1870s, after which it declined considerably. Female migration among married and unmarried women did not display a similar pattern, but appears not to have been governed by the economy in the same way as male migrations would have been. Unmarried women had the highest frequency in regards to both arriving to and departing from sawmill areas. Although, a slight peak during the early 1880s among in-migrating unmarried women and out-migrating unmarried women corresponds with the male migration to the sawmill areas. While married women arriving to sawmill areas had the lowest frequency of all types of in-migrants, out-migration displayed a slight increase by the end of 1880s.

5:2 Internal parish migration

Norberg observed in Alnö what he called a frequent local migration between the sawmills and the villages and between the different sawmill communities. Because migration from the villages to the sawmill communities seemed to have been low, it indicated that few from the local populations lived in sawmill communities. He suggested that the most likely migratory pattern for the local population at Alnö was migration between the agricultural villages. Migration between the different sawmill communities was less frequent and was even triumphed by migration from the sawmill communities to the villages.

587 Norberg 1980, p. 89.
588 Ibid. p. 91.
Local and circular migration played an important part of the pre-industrial migratory patterns and there is nothing to suggest that this would have changed during industrialisation. It could even be assumed that it would have increased simultaneously as migration from agricultural villages to the industrial communities increased. Tedebrand found that there was a strong migration over shorter distances within the Sundsvall district, especially among seasonally employed and migratory workers. The parishes in the district were tightly linked to each other in local migratory patterns. When the demand for workers declined within the industry, migration within the agricultural parishes increased.589

Internal parish migration was as previously explained, made up of two types of migratory events, migration between villages or relocation within a particular village. Of all migratory events that took place in Skön, Alnö, Selånger, Njurunda and Tuna, 36.5 percent were conducted internally within the parishes. Village to village was the most common event that was registered, 70.2 percent of all male migrations and 75.6 percent of female migrations. Still, that also means that almost a third of the internal parish migrations were categorised as relocations within a village.590 In total of all internal parish migration, female migrations represented 55.6 percent of all events that took place.

Although, the data revealed that the annual frequency was considerably lower than expected. In fact, official internal parish migrations appear to have been fairly rare, at least in comparison to the total migratory events that took place during this period. It could therefore, on the one hand, either be presumed that internal parish migration was not as affected by industrialisation as one might have thought. On the other hand, it could also be presumed that internal parish migration in general was underrepresented and not officially registered as often as it must have occurred.

The question is what role internal parish migration may have had and what role it played in populating the sawmill communities? Norberg and Åkerman found that short distance migration was an “insignificant cause of the explosive population growth” in industrial settlements, at least when relating migration to industrial areas in the Jämtland province.591 This question is particularly interesting when it pertains to migration between sawmill communities, especially

589 Tedebrand 1972, pp. 37, 58, 90. Arthur Redford concluded in relation to British industrial workers that “when migrating in search of livelihood [workers] were influenced more by considerations of distance than of previous training.” This is no surprise in this according to Redford, because England was a country that relied and utilised children and teenagers in their industries. (Arthur Redford, Labour migration in England 1860-1850, Manchester University Press 1976, p. 186).
590 Male migrations N=8864. Female migrations N=11086. Does not include Svartvik after 1853.
because this is supposed to have occurred frequently, usually as a way of securing a higher income. Olsson wrote that an uneven distribution of work at the sawmills resulted in that many sawmill workers and their families frequently migrated between sawmill communities, although, he did not mention any official statistics to support his claim.  

**Internal parish migration according to parish**

Internal parish migration had been the continued circulation of people within a smaller geographical area for centuries. It was, as previously stated, a natural part of life and migration within the own parish occurred for both social and economic reasons. People migrated for work, because of marriages or in the event of an inheritance or taking over a parent’s farm. No parish was, however, alike, but had different factors affecting internal migration.

Internal parish migration developed slightly differently from in- and out-migration, at least the industrialised parishes such as Skön, Alnö and Njurunda. The overall internal parish migration displays more similarities with migration linked to agricultural parishes.

**Figure 5:5 Internal parish migration in relation to parishes Skön, Alnö, Selånger, Njurunda and Tuna 1850-1890**

Source: Demographic Data Base, Umeå University.

*Information from Svartvik is missing after 1853.
**Skön N=5083, Alnö N=2307, Selånger N=2362, Njurunda N=5712, Tuna N=4483

592 Olson 1949, p. 85.
Figure 5.5 shows that internal parish migration appears to have been more common prior to 1860. It would thereafter, with the exception of an unexpected and unexplained peak in Skön parish in 1869, continue to decrease. This development did not coincide with any peaks in either in- or out-migration. Only one mill, Kubikenborg, was established this year and as previous results have shown, few sawmills experienced any large in-migrations during the first years of production. Exactly what should have caused this peak remains unknown.

Njurunda and Tuna display the highest proportions of internal parish migration and Selånger the largest fluctuations. Because there was only a handful of sawmills established prior to 1860, it could hardly be linked to the industry. The parishes, even those that had sawmills, were still mainly agricultural. A high internal parish migration is therefore indicated to be linked to the agricultural, pre-industrial community more than it would have been linked to industrialism.

Figure 5.6 Internal parish migration in relation to population in Skön, Alnö, Selånger, Njurunda and Tuna 1850-1890*

Source: Demographic Data Base, Umeå University.
*Information from Svartvik is missing after 1853.
**Male migrations N=8864, female migrations N=11083

There was, however, a general decline of in- and out-migration by the end of the 1860s and it is possible this could have been a response to this development. Still, declining internal parish migrations would continue throughout the period. Norberg had noted in his study on emigration after the sawmill strike of 1879 that internal parish migration decreased, and claimed that it represented about 20 percent of all out-migration from the sawmill communities. As out-migration would
have decreased, internal parish migration increased and he suggested that it was
to be taken as a sign that the economic crisis was over.\textsuperscript{593} However, the result from
Figure 5:5 refutes this; internal parish migration reached its smallest proportion
around 1880 and the figure shows that this decline had started prior to 1879.

Reviewing the development of internal parish migration according to gen-
der, the declining mobility within the parishes becomes more evident. Figure 5:6
shows that the development of internal parish migration had been on a continu-
ous declining slope from the 1850s. Instead of showing signs of increasing as a
response to the population turnover generated by industrialisation, it decreased
quite considerably. Female migrations were slightly higher than male migrations,
which show that among the officially registered migration, women showed more
mobility within the local areas.

Figure 5:6 show that official population mobility within the parishes was con-
tinuously low, and continued to decrease. A decreased internal parish migration
may suggest that there was not much point in moving to another part of the parish
if it was not absolutely necessarily. Eriksson and Rogers did state that local migra-
tion seldom was the answer to economic problems and the presence of industries
does not seem to have been a factor.\textsuperscript{594} Considering what is known of mobility
within the parishes, the results may suggest that a substantial proportion of the
local mobility went unregistered to and from sawmill areas.

In- and out-migration displayed similar results of decreasing by the end of
the century, which shows that population turnover in general was reduced. It also
suggests that the populations would have become less inclined to migrate within
the parishes by the end of the century. This may suggest more established com-
munities with stable demographic developments.

\textbf{Geographical background}

The importance of internal parish migration to the populating of the sawmill com-
munities should be reflected in the geographical background of the male migrants
and workers employed. Studies of the 1879 lists showed that only 14.2 percent of
the 878 workers registered were born locally. There were also noticeable differen-
tes between Klampenborg, Kubikenborg, Heffners and Svartvik. Svartvik had the
largest group of workers born within the district while the other mills displayed
extremely low percentages of workers born within the Sundsvall district. At Heff-
ners, Sundsvall-born was only the third largest and at Kubikenborg and Klampen-
borg the fourth largest group. Overall, the place of birth among the workers in the

\textsuperscript{593} Norberg 1978, pp. 267, 280.
\textsuperscript{594} Eriksson & Rogers 1978, p. 185.
1879 lists shows a strong in-migration from areas outside the Sundsvall district during the first decades of the sawmill industry.\textsuperscript{595}

Table 5:3 Male migratory events going to and from sawmill areas and agricultural areas in Skön, Alnö, Selånger, Njurunda and Tuna relating to birth place 1850-1890\textsuperscript{*}

\begin{center}
\begin{tabular}{lcccc}
 & \% Men & & & \\
 & To sawmill areas & From sawmill areas & To agricultural areas & From agricultural areas \\
\hline
N & 3,674 & 2,889 & 15,717 & 12,727 & \\
Born in the Sundsvall district & 13.6 & 18.4 & 45.5 & 57.4 & \\
Born outside the Sundsvall district & 86.4 & 81.6 & 54.5 & 42.6 & \\
Total \% & 100 & 100 & 100 & 100 & \\
\end{tabular}
\end{center}

Source: Demographic Data Base, Umeå University.
\textsuperscript{*}Information from Svartvik is missing after 1853.

Table 5:3 shows that among the men who appeared in sawmill areas in the Sundsvall district between 1850-1890, only 13.6 percent were born in the district as opposed to 18.9 percent of the men that left sawmill areas. Male migrations relating to agricultural areas displayed a considerably higher share of locally born men; 45.5 percent who arrived and 57.4 percent of the male migrants who departed agricultural areas were born within the district. Sawmill communities would therefore, primarily, have been populated by men who were not locally born. It confirms the sawmill communities as migrant communities and with a low presence of locally born workers.\textsuperscript{596}

Female migrants displayed a higher local connection than male migrants as 23.3 percent of all female migratory events that went towards sawmill areas were undertaken by women born in the district. The corresponding number for female migrations from sawmill areas was 28.6 percent. Fewer women in non-agricultural areas were born outside the district. As many as 54.1 percent of female migratory events towards agricultural areas were undertaken by locally born women and 64.6 percent of all migrations from agricultural areas. This could have been a result of marriage migration. The results should therefore support earlier results that showed that female migrants were more prone to migrate locally than males.

\textsuperscript{595} Värmland-born men have already been declared to have constituted the largest groups in both the Klampenborg and Kubikkenborg lists, while workers born in Ångermanland were the largest group found in the list from Heffners.

\textsuperscript{596} It should be noted that even though a migrant was born in a specific parish, it did not necessarily mean that he/she had lived there all his life. The migrant could easily have moved to Sundsvall from somewhere else as a child or as a young adult.
Table 5:4 Female migratory events going to and from sawmill areas and agricultural Skön, Alnö, Selånger, Njurunda and Tuna relating to birth place 1850-1890*

<table>
<thead>
<tr>
<th></th>
<th>To sawmill areas</th>
<th>From sawmill areas</th>
<th>To agricultural areas</th>
<th>From agricultural areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>3,612</td>
<td>3,038</td>
<td>18,018</td>
<td>15,105</td>
</tr>
<tr>
<td>Born in the Sundsvall district</td>
<td>23.3</td>
<td>28.6</td>
<td>54.1</td>
<td>64.6</td>
</tr>
<tr>
<td>Born outside the Sundsvall district</td>
<td>76.7</td>
<td>71.4</td>
<td>45.9</td>
<td>35.4</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Demographic Data Base, Umeå University.
*Information from Svartvik is missing after 1853.

In relation to internal parish migration, however, the percent of the locally born migrants within the parishes increased. It showed that 63.4 percent of the men and 69.2 percent of the women who migrated internally were born in the district. Combined, 66.6 percent of all internal parish migrations were conducted by migrants born in the parishes in the Sundsvall district.

The results of this study are therefore in agreement with earlier research regarding the sawmill workers geographical backgrounds. Vikström showed that regional and local migrants in Sundsvall town were outnumbered by migrants having moved over longer distances. Cornell found in his study of Sund sawmill in 1869 that almost one-third of the workers were born in the parish in which the mill was located. Berglund-Lake went as far as to claim that compared to all industries in Norland, the Sundsvall district was the area that employed the fewest local workers. This would indicate that sawmill populations not only lacked local roots, but that internal parish migration would not have had a particularly prominent role in populating the sawmill communities, at least not officially, as Norberg and Åkerman suggested.

**Internal parish migration to and from sawmill areas**

Internal parish migration frequency for men in Skön, Alnö, Njurunda and Tuna varied between 150-250 migrations annually in all four parishes. The corresponding female migrations varied between 200-350 migrations annually. Frequency

597 Vikström 2003, p. 97.
599 Berglund-Lake 2001, p. 29.
600 Norberg & Åkerman 1973, p. 95.
peaked during the 1870s and mid 1880s when industrialisation and migration towards the sawmills had begun.

Table 5:5 Frequency of male migratory events between confirmed area types within parishes Skö, Alnö, Njurunda and Tuna 1850-1890**

<table>
<thead>
<tr>
<th>From area</th>
<th>To area</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sawmill areas</td>
<td>Agricultural areas</td>
<td>Other*</td>
</tr>
<tr>
<td>Sawmill areas</td>
<td>638</td>
<td>485</td>
<td>27</td>
</tr>
<tr>
<td>Agricultural areas</td>
<td>375</td>
<td>5,898</td>
<td>75</td>
</tr>
<tr>
<td>Other*</td>
<td>23</td>
<td>118</td>
<td>74</td>
</tr>
<tr>
<td>Total</td>
<td>1,036</td>
<td>6,498</td>
<td>176</td>
</tr>
</tbody>
</table>

Source: Demographic Data Base, Umeå University.
*Areas that were neither primarily agricultural nor industrial.
**Information from Svartvik is missing after 1853. Does not include Selånger on account of the migratory events within Selånger only took place between agricultural areas. Male internal migratory events were 1,151 whereof 865 events took place between different villages and 295 events were relocation within the same village.

Table 5:6 Frequency of female migratory events between confirmed area types within parishes Skö, Alnö, Njurunda and Tuna 1850-1890**

<table>
<thead>
<tr>
<th>From area</th>
<th>To area</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sawmill areas</td>
<td>Agricultural areas</td>
<td>Other*</td>
</tr>
<tr>
<td>Sawmill areas</td>
<td>614</td>
<td>643</td>
<td>24</td>
</tr>
<tr>
<td>Agricultural areas</td>
<td>601</td>
<td>7,589</td>
<td>121</td>
</tr>
<tr>
<td>Other*</td>
<td>19</td>
<td>173</td>
<td>88</td>
</tr>
<tr>
<td>Total</td>
<td>1,234</td>
<td>8,405</td>
<td>233</td>
</tr>
</tbody>
</table>

Source: Demographic Data Base, Umeå University.
*Areas that were neither primarily agricultural nor industrial.
**Information from Svartvik is missing after 1853. Does not include Selånger on account of the migratory events within Selånger only took place between agricultural areas. Female internal migratory events were 1,211 whereof 918 events took place between different villages and 293 events were relocation within the same village.

Male migrations between two different sawmill areas displayed a frequency of 638 migratory events over 41 years. Migrations occurring between agricultural areas completely dominated. Female migrations also show migrations between agricultural areas as the most common migratory event, but show migrations from sawmill areas to agricultural areas as the second most common migration. Considering the results from in-migration and out-migration it can be assumed that more
women than men left the sawmill environments. More female migrations also went towards sawmill areas from agricultural areas than male migrations. In fact, female migrations were almost double the frequency of male migrations. Thus, more women than men migrated to sawmill areas from within the parishes.

Male migrations between agricultural and sawmill areas were extremely few and migrations in the opposite direction was only slightly higher. These results would indicate that the majority of migratory events between these particular area types must have occurred across parish borders and not within the parishes, or that it largely went undocumented. Despite that few men were locally born, these results point towards a certain hesitation in migration between agricultural and sawmill areas.

Village to village migration and relocation

Because internal parish migration consisted of two types of migration, village to village and relocation, it is also important to review migration from this perspective in relation to migrations between agricultural areas and sawmill areas.

Table 5:7 shows that the internal parish migrations are placed in a different light when village to village and relocation have been separated. Male migration between two sawmill areas mainly consisted of relocations within the respective communities and not migrations between two different communities. Female migrations display the same pattern. This means that actual migration between sawmill communities within the same parishes was even lower than the numbers first indicated. In truth, there are only 137 confirmed male migrations that went from one sawmill community to another, divided between four parishes, over a period of 41 years! Official migration between sawmill areas in the same parish was therefore extremely rare.

Migrations between different agricultural areas display a more similar proportion between village to village and relocation than had been expected in relation to migration between sawmill areas. Table 5:7 shows that almost one-third of all male migrations were relocations within the same area, while the corresponding number of female migrations was just slightly more than one-fifth.

601 Blumenthal wrote that more women than men seemed anxious to leave the community because they wanted to acquire husbands who were not involved in mining (Blumenthal 1932, p. 50).

602 Men – relocation 29.9 percent. Women – relocation 23.8 percent.
Table 5:7 Frequency of internal parish migration divided according to gender and migration type within parishes Sköns, Alnö, Njurunda and Tuna 1850-1890*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Sawmill to sawmill</th>
<th>Sawmill to agriculture</th>
<th>Agriculture to sawmill</th>
<th>Agriculture to agriculture</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men Village to village</td>
<td>5,126</td>
<td>137</td>
<td>485**</td>
<td>375</td>
<td>4,140</td>
<td>7,396</td>
</tr>
<tr>
<td>Relocation</td>
<td>2,270</td>
<td>501</td>
<td>-</td>
<td>-</td>
<td>1,758</td>
<td></td>
</tr>
<tr>
<td>Women Village to village</td>
<td>7,126</td>
<td>130</td>
<td>643**</td>
<td>601</td>
<td>5,782</td>
<td>9,447</td>
</tr>
<tr>
<td>Relocation</td>
<td>2,321</td>
<td>484</td>
<td>-</td>
<td>-</td>
<td>1,807</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>16,843</td>
<td>1,252</td>
<td>1,128</td>
<td>976</td>
<td>13,487</td>
<td>16,843</td>
</tr>
</tbody>
</table>
5.3 Migratory hesitations

Previous research has frequently discussed the phenomenon of a possible barrier existing between industrial and agrarian areas. In Carlgren's descriptions of the development of the Swedish sawmill industry a possible beginning to such a situation could have been found in the relationship that evolved between the foundry estates and the agricultural villages. The local farmers usually developed a resentment towards the foundry estates' priority over the natural resources and their exploitation of the forests. Carlgren wrote that conflicts concerned everything from suppressed sales, logging rights to access to natural resources.\(^605\)

This would then have been the basis from which the agricultural communities opposed the construction of larger sawmills; it did not only become another institution they had to fight when it came to the use of common land, but it also meant that they lost their monopoly over the sawmill industry. The smaller water driven mills were also easily driven out of business. This opened up for new conflicts, especially when negotiating transportation contracts and timber sales. The peasants wanted to avoid the same forced delivery and sales to the mills as they had been obliged to by the foundry estates.\(^606\) Rolén also mentioned conflicts involving log-rafting and farming during spring and summer and claimed that wages between the two occupations may have made it difficult for farmers to hire farmhands. Many had to make due with the workers who were available, because they could not employ the experienced workers they normally preferred.\(^607\)

Tables 5.5 – 5.7 showed that the official internal parish migration between agricultural and sawmill areas was low. Migration was either not officially registered or did not occur at all. Vikström stated in relation to migration to the town of Sundsvall that the drop in short-distance migration “over time might illustrate the decline of circular migration that frequently operated in pre-industrial times and in these parts of Sweden.”\(^608\)

Is it possible then that a barrier may have existed on a more fundamental level within the parishes themselves resulting in a lowered migration frequency between agricultural and sawmill areas within the parishes?

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\(^{606}\) Ibid. pp. 70-71.


\(^{608}\) Vikström 2003, p. 97.
Considering a possible migratory barrier between rural and industrial areas, any positive aspects of the relationship discussed by Carlgren, must also be discussed. During the first years of industrialisation, there would most likely have been fewer requirements in hiring skilled workers meaning that recruitment should, at least initially, have been local. Sawmills would therefore have increased employment opportunities for the local rural population, giving them incentives not to leave the area. Industrialisation would also have been profitable for those outside of the mill; it opened up a new market for farmers to sell their surplus.609 Agricultural wages in sawmill areas would also have increased when labour demands within the sawmill industry rose.610 Those among the peasantry who owned forests and land were also in possession of a highly valued commodity that the sawmill companies wanted. Many made profits selling land and logging rights.611 These aspects would therefore dispute a negative economic barrier between these two environments and rather suggest that the sawmills would have been a positive addition to the economy in the rural landscape and for the agricultural communities.

Migratory barriers
The early sawmill communities are often characterised as strong patriarchal environments that over time may or may not have dissolved and that this, just as with the foundry estate, would have created a strong sense of identity and seclusion towards other areas. The sawmill communities were by definition separated from the agricultural communities by their geographic location, and this brought with it symbols meant to bring a heterogeneous population together. There is nothing to suggest though, that this would not also have been an important structure of the agricultural communities. Even more so than the sawmill populations, they should have been gathered in social environments with a strong sense of self, where residency, family and birth were fundamental and symbolic for feelings of belonging.612

611 Wik 1950, p. 275. Log-raffing, however, also caused conflicts. The sawmills’ use of the rivers and streams as a means of transport did not always agree with the agricultural populations (Rolén 1979, p. 30. Carlgren 1926, pp. 71-77).
Table 5:8 Migration between sawmill areas and agricultural areas in Skön, Alnö, Njurunda and Tuna 1850-1890**

<table>
<thead>
<tr>
<th></th>
<th>Skön</th>
<th>Alnö</th>
<th>Njurunda</th>
<th>Tuna</th>
<th>% of N</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>19,947</td>
<td>4,656</td>
<td>2,183</td>
<td>8,118</td>
<td>6,430</td>
</tr>
<tr>
<td>From sawmill to sawmill</td>
<td>1,252</td>
<td>15.2</td>
<td>0.04</td>
<td>6.0</td>
<td>3.0*</td>
</tr>
<tr>
<td>From sawmill to agriculture</td>
<td>1,128</td>
<td>10.6</td>
<td>10.7</td>
<td>2.2</td>
<td>4.8</td>
</tr>
<tr>
<td>From agriculture to sawmill</td>
<td>976</td>
<td>11.5</td>
<td>0.3</td>
<td>2.8</td>
<td>5.0</td>
</tr>
<tr>
<td>From agriculture to agriculture</td>
<td>13,487</td>
<td>54.2</td>
<td>83.5</td>
<td>88.8</td>
<td>88.0</td>
</tr>
<tr>
<td>% of all internal parish migration</td>
<td>67.4</td>
<td>91.6</td>
<td>94.6</td>
<td>99.1</td>
<td>93.3</td>
</tr>
</tbody>
</table>

Source: Demographic Data Base, Umeå University.
*This only represents relocation within Matfors, because Tuna only had one sawmill community.
**Information from Svartvik is missing after 1853. Does not include Selånger on account of the migratory events within Selånger only took place between agricultural areas. Total internal migratory events in Selånger was 2,362, representing 9.4 percent of all internal migratory events in category village to village and relocation in relation to agricultural areas.

Migrations between agricultural areas appear as the most frequent migratory event taking place between 1850-1890. It represents the highest proportion of the internal parish migration in all parishes, mainly over 80 percent. It is only in Skön that it barely represents half of all internal migratory events. The level of circular migration within the parishes’ agricultural areas would therefore still have been consistently high. However, when sawmills are introduced as a place of origin or destination, the migratory events dwindle. Migrations from agricultural areas to sawmill areas actually display the lowest frequency of the categories in Table 5:8, with 976 events over a 41 year period, divided between four parishes. Migration between sawmill areas was also consistently rare. There is clearly a pattern here as Skön is the only parish displaying numbers that confirm that this type of migration actually took place. Johansson did write that the management at Stocka had difficulties with persuading the local populations to contract for longer periods.613

Migrations between sawmill areas in Skön represented 15.2 percent of the internal parish migration. In consideration of the number of sawmill communities in the parish and their individual sizes, this percentage might be low, but it is still within accepted proportions. In Alnö, not even one percent of the internal parish migration occurred between sawmill areas and this is surprising, especially considering the number of sawmills located in the parish.

Migrations between sawmill areas only represented five percent of the internal parish migration, which clearly demonstrate that migrations of this kind were very

613 Johansson 1988, p. 332.
unusual, at least officially. If these numbers were to be taken at face value it would be clear that if such migration was undertaken, as previous research continuously has claimed, it must have occurred between different parishes and not within a parish. This echoes what Eriksson and Rogers claimed; that usually there were no great economic differences between the different communities within a parish, unless they housed some sort of industry. This means that there were perhaps no real economic gains to be made by internal parish migration, even though it may have occurred between sawmill communities. It was perhaps better to migrate between sawmills in different parishes. Circular migration therefore “resulted in little change in the demographic and social structure of the region” but could still have had a great impact on the individual migrants.614 This would also explain why migratory events such as these cannot be detected in this material.

Migration from sawmill areas to agricultural areas displays a considerably higher percentage and shows that such migration was more often occurring officially. Skön and Alnö both showed that approximately one in ten migrations went in this direction, whereas Njurunda and Tuna displayed significantly smaller percentages (not unlike the percentage going from agricultural to sawmill areas). In Alnö, where it could be assumed that the closely spaced sawmills and agricultural areas would have had a continuous population exchange, only 0.3 percent of the parish internal migration went towards sawmills from agricultural areas. That Njurunda with its sizable sawmill communities and many employment opportunities would not appeal to the local population is nothing but an anomaly, especially considering that Tuna, which only had one sawmill in the parish, displayed a higher percentage. Although, missing information from Svartvik should account for a part of the low result, but not all of it. That it was less infrequent in Alnö than in Njurunda was only to be expected due to the lack of proper housing and consistently smaller mills. However, is it possible that there was a barrier between the agricultural and industrial environments or is the result this study has produced just a result of migratory events being neglected and not registered?

Table 5:7 introduced internal parish migration divided into its two subcategories, village to village and relocation. Those results clearly depicted village to village migration as the most common event for both men and women, but that relocation still was highly present, especially in the sawmill areas. It is therefore also important to do so in relation to migration between specific area types. Dividing these categories according to parish, there were clear differences between the parishes and their different areas.

Table 5.9 Frequency of migrations between sawmill areas and agricultural areas in Skön, Alnö, Njurunda and Tuna 1850-1890 divided on migration type**

<table>
<thead>
<tr>
<th>Migration Type</th>
<th>N</th>
<th>Skön</th>
<th>Alnö</th>
<th>Njurunda</th>
<th>Tuna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village to village</td>
<td>1,252</td>
<td>173</td>
<td>1</td>
<td>93</td>
<td>-</td>
</tr>
<tr>
<td>Relocation</td>
<td>600</td>
<td>0</td>
<td>252</td>
<td>133</td>
<td>-</td>
</tr>
<tr>
<td>Village to sawmill</td>
<td>1,128</td>
<td>541</td>
<td>207*</td>
<td>126</td>
<td>213</td>
</tr>
<tr>
<td>Village to village</td>
<td>1,252</td>
<td>585</td>
<td>8</td>
<td>161</td>
<td>222</td>
</tr>
<tr>
<td>Village to agriculture</td>
<td>13,487</td>
<td>1,752</td>
<td>1,688</td>
<td>3,840</td>
<td>2,642</td>
</tr>
<tr>
<td>Relocation</td>
<td>1,005</td>
<td>238</td>
<td>1,187</td>
<td>1,135</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>19,947</td>
<td>4,656</td>
<td>2,183</td>
<td>5,659</td>
<td>4,345</td>
</tr>
</tbody>
</table>

Source: Demographic Data Base, Umeå University.

*41 migrations were characterised as relocation when they in fact should have been village to village. The same problem appeared in Table 5.8, where it is also discussed.

**Information from Svartvik is missing after 1853. Does not include Selånger on account of the migratory events within Selånger only took place between agricultural areas. Total internal migratory events in Selånger was 2,362, representing 9.4 percent of all internal migratory events taken place between village to village and relocation in relation to agricultural areas.

Norberg and Åkerman wondered how the resistance to migrate between sawmill areas and agricultural areas had been overcome; the answer provided by this study is that it was not, at least not prior to 1890. The subcategories of internal parish migration divided according to parish confirm that sawmill to sawmill migration mainly concerned relocations within communities. This means that the frequent migration between sawmill communities that Olsson and Norberg both mentioned, did not occur within the same parish. Migration from sawmill to sawmill in Skön and Njurunda was dominated by relocations, whereas in Alnö official migrations never occurred between sawmill communities or within them. Tuna, with only one sawmill community; displayed a higher relocation frequency than Alnö that had more than a dozen sawmills operating simultaneously. What is also striking when it comes to the results from Alnö parish is that even relocations within agricultural areas appear to have been extremely infrequent. Could this be a result of too small villages, too closely spaced villages or a case of villages that were neither primarily agricultural nor industrial? Villages as well as sawmills would have been closely spaced in Alnö, but as to their size it is difficult to say. Nor could migration to and from mixed villages have affected the results; those types of migratory events only amounted to 409 for men and women in all parishes combined. It is perhaps prudent to apply Eriksson and Rogers again and state

that such short migration would have had little effect as a way of changing one's financial circumstances.616

The question of a barrier
The question is how these results are to be interpreted? The impact the sawmills may have had on the internal parish migration in their individual parishes would, in general, not have been too strong. Migrations between and to agricultural areas appear to have been more attractive, which is perhaps not surprising because the majority of the population was registered in agricultural areas. Berglund-Lake did state that despite a high mobility and the mental shift that rural to urban migration required, most workers’ mentalities remained anchored in the importance of farming the land.617 Norberg stated that migration tended rather to go from sawmills to agricultural areas than the other way around. He linked this to both a population development in the agricultural villages and a rural/industrial barrier.618 Still, if migrating from an agricultural area to a sawmill was less attractive, what happened when the sawmill residents left the communities?

Norberg’s study showed that migrants from Värmland who had registered in Alnö parish, seldom went back home after they had left the sawmills in Alnö. His result showed that they never migrated especially far, but often chose to move to nearby parishes in the district.619 Rondahl had similar results regarding seasonal workers originating from Värmland who had migrated to Hälsingland. Return migration to the home province or parish seldom occurred. The workers knew that they had better employment opportunities in the sawmill districts along the coast of Norrland.620 Unlike Norberg though, Rondahl claimed that the migrants who ended up in village environments again, chose to emigrate rather than to stay.621 Returning home seems to have been the least appealing alternative.622

The result of this study does give some support to previous claims of a barrier, especially in Alnö. Still, the failure to register must also be considered as distance between sawmills and agricultural villages was close. This could, however, at least for Alnö, also imply that instead of being a parish of barriers, it was a parish

616 Eriksson & Rogers 1978, p. 185.
618 Norberg 1980, p. 78. He only studied Alnö and the results from this study showed that 207 migratory events went from sawmill areas to agricultural areas and eight events in the opposite direction; which proves him right, at least in relation to migratory direction.
619 Ibid. p. 92.
621 Ibid. p. 76.
622 Norberg 1980, p. 93.
void of barriers. If there were no real sawmill communities, there could have been no barriers to the agricultural areas where the majority of the parish’s registered population resided. The hesitation Norberg noticed with regard to marriages between local inhabitants and in-migrants may just be explained by the normal level of suspiciousness against newcomers. Alnö parish itself had the structure of a typical smaller community that would have reacted as a family group against outsiders. A possible explanation may be that the sawmill industry in Alnö did not result in separate sawmill communities, even though the parish had specific sawmill communities.

The problem is that the situation in Alnö is not applicable to the other parishes in the district. In the case of Tuna, Norberg and Rolén claimed that there were no geographical reasons for a rural/industrial barrier; distances between the villages and Matfors were short. Despite this, a barrier was present and they derived that it must have been located on a different level, not only related to the economy, but also to social and cultural aspects. As Norberg later did in Alnö, they concluded the existence of a rural/industrial barrier based on the low frequency of marriages occurring between locals and in-migrants and between the agricultural and sawmill population. A barrier in Tuna though, could perhaps also be linked to Ostergren’s findings that seasonal workers mainly were chosen from a select number of villages in the parish. This may have influenced the raising of barriers associated more with favoritism than with marriages, but, this could have been reinforced though marriages between specific groups of people within the parish.

The differences between the parishes and the sawmills should also produce different results, as shown by this study. That this pattern also applied to the other

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624 Anders Norberg & Mats Rolén, "Migration and marriage. Some empirical results from Tuna parish 1865-94," Time, Space and Man. Essays on microdemography, Jan Sundin & Erik Söderlund (eds.), Stockholm 1979, p. 134. Norberg and Rolén wrote that “almost no marriage contacts were found between Tuna and the sawmill communities.” The villagers married amongst themselves and the inhabitants in Matfors married among themselves, which leads to the conclusion of the existence of a rural/industrial barrier during the time period studied (Norberg & Rolén 1979, p. 135). “Mixed marriages between industrial workers and the agricultural population have been rather uncommon” (Norberg & Åkerman p. 100). Norberg drew similar conclusions regarding marriage between in-migrants and locals in his dissertation on Alnö parish (Norberg 1980, pp. 65, 82).
625 Ostergren 1990, pp. 58-60.
626 Strathern suggested that physical distance could be used as a measure of social distance, at least in relation to kinship ties. The village, she wrote, could function as a boundary “in such a way as to diminish the maintenance of ties beyond it.” Strathern was thus implying that most villages created clear borders and did, despite frequent interaction between different villages, become isolationistic in some respects. What you cannot see does not exist (Strathern 1980, p. 158).
industrial parishes would indicate a migratory hesitation, or a general preference that existed among the parishioners in the entire district. Even though the study lacks information on migrations between area types across parish borders, it may be assumed that migration between agricultural areas would have dominated. It could thus be concluded that there seems to have existed a certain degree of hesitation preventing migrations to the sawmills among the local agricultural populations. The results therefore share similarities with Rondahl’s study, that migration from local villages to industrial areas displayed a very low frequency.

However, it should not be forgotten that a barrier is always a two-way street. Assuming Strathern’s idea of all populated areas and villages as isolationistic to some degree, there would be boundaries, barriers and rivalry between all types of areas, even between different agricultural villages. One could perhaps even talk about barriers on such a sublevel as between residential areas within the sawmill communities. In further studies, it would perhaps be possible to find specific migratory patterns between certain agricultural villages as well. Delving into migratory patterns between agricultural and sawmill areas across parish borders would provide more definite answers regarding a possible barrier. Barriers in general though, agricultural or industrial areas notwithstanding, should have been highly local with many different variations.

5:4 Conclusions

Migration was a vital part of community construction in populating the sawmill areas, especially because the presence of local inhabitants appeared to have been scarce. This was closely connected to the fact that the majority of the sawmills had been constructed areas without registered populations. Just slightly more than one in ten male in-migrants was born in the Sundsvall district and slightly more than one-fifth of all female in-migrants. This created sawmill populations with few or no ties to the surrounding agricultural communities. Sawmill communities were therefore almost entirely migrant communities, something that should have separated them further from surrounding settlements. However, as the local study showed, the geographical background of the workers differed between mills and there were several differences between different populations. This suggests that the sawmills’ recruitment strategies would have created specific workforces, individual to each mill.

In-migration to the parishes fluctuated throughout the second half of the 19th century. Men dominated in-migration to sawmill areas and while half of these male migrants arrived alone, female migrants displayed a slightly higher percentage. Out-migration was more stable and showed a declining development, sug-
suggested more stable and less mobile populations by the end of the century. Slightly less than half of all male migrants leaving the sawmill communities still left alone, while only one-fifth of the female migrants left by themselves. Interestingly though, more men than women arrived to sawmill areas in the company of more than one attached migrant of both sexes, whereas the reverse was true for out-migrants. These results are, however, not as surprising, as almost half of both in-migrants and out-migrants were married. A strong presence of married couples would have continued to influence the development of the sawmill communities in a positive direction because their presence would have made the communities more family oriented, which would have been reflected positively in the community construction process.

The proportion of internal parish migration displayed a decreasing development among both men and women during the period 1850-1890. Fluctuations within the parishes were more common prior to 1870 than after, where the proportion of internal parish migration in the individual parishes held similar results. All parishes displayed a declining internal parish migration and even though men had a high parish migration, women displayed a higher propensity to migrate locally.

The possible existence of a barrier as described by previous research appears to have some merit to it, even though it most likely is not as easily explained as it might seem. It is difficult to talk about a barrier separating the rural and industrial areas because the majority of the sawmills in the Sundsvall district actually were located in rural parishes. The results of the study did show similarities with previous results, which have suggested the existence of a migratory hesitation that was more prominent when it came to migration to sawmill communities than from them. If local migration to sawmill communities were the result of a physical hesitation or occurred unofficially is difficult, if not impossible assess with the available sources. Unfortunately, the phenomenon of a barrier creates more questions than it answers and more studies on migration between sawmill areas across parish borders is required before any definitive answers can be given.
Chapter 6
RESIDENCY AND REGISTRATION

The establishment of sawmill communities required that there were individuals willing to settle in the sawmill areas. Residency must therefore have been an imperative part in creating the basic structure of the communities. Similar to Strathern’s claim of the importance of birth in Elmdon, residency within the sawmill communities would have become synonymous with belonging, correlating individual with place. Hence, “real” sawmill workers would have resided in and participated in community life.627 In such a structure, the longest settled families would have regarded themselves as the original core of the community and would most likely also have been viewed as such. Long-time settlement should therefore have been linked with social status.

Johansson wrote that the decision to move to the sawmill communities would to some extent have been based on an assumption that settled workers were given priority when it came to work and that the migrants, by settling, would become part of the core population.628 The question of the importance of residency becomes slightly difficult when the entire sawmill population is regarded, because there were different types of populations; the registered and the unregistered residents. According to sources, the registered population was officially residing on site and represented the communities’ core population. The unregistered population, although residents, never appear in official sources and were therefore not included in the core population. Their temporary status suggests that while they may have played an important part in industrial development, they would not have been as important for the development of the communities.

The situation at different sawmills must also be considered. Johansson claimed that even though the number of the salaried workers increased between 1863-1891, the majority of the workers still lived elsewhere. Workers from the lower strata of society were used to migrating between different kinds of employments. According to Johansson, it was highly unlikely that those who lived close to the mill would be offered residency in the company housing, which is why it was fully possible to live within a 20 kilometre radius of the sawmill and still be employed full time.629

628 Johansson 1988, pp. 75-76.
629 Ibid. pp. 78-79.
The aim of this chapter is to delve into the question of presence among registered and unregistered populations and discuss the importance of residency for the sawmill populations. Official church registration gives an estimation of *de jure* population, while place of residency as registered in the 1879 list shows parts of the *de facto* population. What was the importance of residency? Settlement and assets within the communities are other important aspects with regard to church registration and residency. Were all sawmill workers officially registered? While some only stayed for a brief time, others remained settled within the same communities for years. For how long did the workers remain settled?

**6:1 The *de jure* and *de facto* populations**

Erik Johan Holmberg and his family were officially church registered and residing in Nolby village in Njurunda parish in 1879. The 1879 list, however, has Erik Holmberg living in company housing at the owners. According to Njurunda parish registers, all of his children were born and registered in Nolby. The birth and death registers from Svartvik offer a slightly different version of events. Four of the children had been born in Svartvik during the 1870s, and according to the church registers two children had died in Svartvik. This could suggest that Erik Holmberg and his family may have gone back and forth between Nolby and Svartvik. However, on further study of the children’s exact birth dates it shows that the family was present in Svartvik past the sawing season and during the winter. This would imply that Erik Holmberg and his family may all have lived at Svartvik consecutively throughout the 1870s, without an official registration. The family did not relocate officially from Nolby to Svartvik until 1881.

Unregistered and unofficial residents is a constant problem when trying to reconstruct the sawmill populations. Alm Stenflo claimed that as many as 10-13 percent of the populations in the industrial areas in the Sundsvall district were unregistered. This would have increased by the end of the century. As displayed in the example of Erik Johan Holmberg, the church registers are many times conflicting and create an administrative reality that did not agree with actual reality. This is why it is important to use other sources in trying to overcome this particular problem.

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630 Alm Stenflo 1994, p. 53. The presence of unregistered residents would especially be noticeable in Sundsvall town.

631 This means that the church registers can create events that never took place and not include all that did happen. Norberg exemplified this and wrote that this could mean that a child could be born in Alnö, while officially be registered in the parents’ home parish. If the family later on officially moved to Alnö that child would be counted as having moved in to his birth parish, without even having left at all (Norberg 1980, pp. 21-22). Alm Stenflo also mentions the problems with individuals moving cross parish
The situation of a registered population and an unregistered population not only created two very distinct populations, but also two distinct communities. The large sawmill communities, vibrant with action and productivity, which is usually associated with the sawmill industry, came to life during the spring and lasted all through the summer and early autumn. They were crowded with seasonal and temporary workers and their families, the de facto population, as well as including the de jure population, those inhabitants that were registered in the parish catechetical register.

The other type of sawmill community emerged during late autumn when production slowed down and when the temporary populations left; leaving mainly the registered inhabitants in residence. The difference between the winter and summer populations would however lessen during the 1880s, because seasonal employment gave way to full-time employment and because the labour demand within industry began to decrease.

There was a considerable difference between the registered population and the actual population in residence. It could be argued that the seasonal and migratory workers created an economic underclass to the permanently settled and registered populations, because they were not a part of the regular core. However, the sawmill population was not only made up by the de facto and the de jure populations, it is also important to differentiate between temporary and permanent residents. There were different types of unregistered workers; all-year residents and part time/seasonal residents. The first group was individuals who had settled permanently, but for some reason had failed to hand in a moving certificate and become officially registered. The second group included the workers who left the mill sites after the season was over. Few of the seasonal workers set up permanent residency in the district and even fewer registered officially.

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635 Ibid. p. 218.
637 Reasons why some individuals never had this done could have been many; they may have forgotten, others had simply never requested one in their old parish; and some may have been the result of clerical errors in the actual registration by the local clergy. "Rapid population growth made it difficult for the clergy to keep the books up to date. Consequently there is a time lag between actual migration and registration of it" (Alm Stenflo 1994, p. 51). Increased migration and the lack of moving certificates trading hands caused problems in the official statistics (Norberg 1980, p. 22).
639 The sawmill companies did not want them to register and they did their best in trying to minimize the non-settled workforce (Cornell 1982, p. 295. Berglund-Lake 2001, p. 33).
Workers included and identified
The 1879 lists include 878 workers from four sawmills; Klampenborg (93), Kubikenborg (138), Heffners (212) and Svartvik (435). By linking the lists to the church registers, 69 percent of the workers could be identified, but not all had a confirmed registration in 1879.

The lists include both registered and unregistered workers and provide, unlike the church registers, information on where the workers resided, official registration notwithstanding. There was no cohesiveness in the structure of where the workers were registered, while some were registered at a specific sawmill, others in a specific parish, province, county or even country, many simply had no registration at all recorded. Despite the uneven structure of the lists though, they provide information on parts of the de facto populations in these specific sawmill communities that cannot be found elsewhere.

The workers could be divided into three distinct groups; workers registered at the mill sites, workers registered elsewhere in the district and unidentified workers.

Church registration according to the 1879 lists
Table 6:1 relies solely on the information found in the 1879 lists and shows that about two-thirds of the workers recorded had a confirmed church registration. More than half of them were officially registered within the Sundsvall district in 1879. This fact hints towards a high concentration of local workers, however, as discovered previously, few were actually locally born. It would suggest though, that official registration in the district was an important aspect in acquiring or maintaining work over an extended period of time.

Table 6:1 Church registration according to the 1879 lists

<table>
<thead>
<tr>
<th></th>
<th>No. of workers</th>
<th>% of 878</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>878</td>
<td>100</td>
</tr>
<tr>
<td>Sundsvall district*</td>
<td>493</td>
<td>56.2</td>
</tr>
<tr>
<td>Other counties**</td>
<td>21</td>
<td>2.4</td>
</tr>
<tr>
<td>Other countries***</td>
<td>28</td>
<td>3.2</td>
</tr>
<tr>
<td>Unknown registration</td>
<td>336</td>
<td>38.3</td>
</tr>
</tbody>
</table>


*Included parishes: Njurunda, Skön, Tuna and Sundsvall town.
**Included provinces/counties: Värmland, Hälsingland, Ångermanland, Dalarna and Västerbotten.
***Included countries: Finland and Norway.
The lists revealed several differences in recording the workers. Svartvik and Klampenborg registered their workers directly at the mill site, whereas the Heffners and Kubikenborg lists only used the parish name.640 However, the majority of the workers employed at Klampenborg and Kubikenborg were church registered in the same parish in which the mill was located.641 Heffners and Svartvik both displayed considerably smaller groups of workers registered in the parish of the mill.642 About 17 percent of the workers at Svartvik were registered in Tuna, or more precisely, in Matfors. As Heffners and Svartvik were somewhat larger than the other two, it may be suggested that they would also have had larger populations of temporary, unregistered workers. Whether or not this meant that workers at Klampenborg and Kubikenborg showed a stronger tendency to register in the parish, or that these specific list authors were more particular with their recording, is difficult to say.

Despite the disappearance of large parts of the sawmill populations when using the official registrations and the apparent inconsistencies when comparing to other materials and records, church registers are still the best source for reconstructing the populations, de jure or de facto notwithstanding.643

Identified workers with unofficial presence644

The majority of all workers who came to the mills did not register because their employments were only temporary. For research purposes this is a problem; especially as those who resided outside the mill site could not be identified as sawmill workers, even though they might have been registered as workers.645 It also makes the sawmill workers as an occupational group and the de facto sawmill populations highly underestimated.646

One way of trying to estimate the de facto population from the de jure population can be done, as already have been suggested, by utilising other materials,
which is what this dissertation does. The 1879 lists offer a unique possibility regarding this predicament, because they grant us access to parts of populations that were not registered in the sawmill communities, allowing for this group to be highlighted as residents, albeit temporary. The linking process did not only reveal a group of workers unregistered with unofficial presence, but also a group of workers who had a registration, not at the mill sites, but elsewhere in the district. These workers were not official residents of the sawmill communities according to the church registers. Registration and actual presence had therefore in reality very little to do with each other.

Table 6:2 Identified workers with unofficial presence at sawmills Klampenborg, Kubikenborg, Heffners and Svartvik in 1879

<table>
<thead>
<tr>
<th>N</th>
<th>Klampenborg</th>
<th>Kubikenborg</th>
<th>Heffners</th>
<th>Svartvik</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>878</td>
<td>93</td>
<td>138</td>
<td>212</td>
</tr>
<tr>
<td>Identified workers with unofficial presence 1879</td>
<td>168</td>
<td>1</td>
<td>10</td>
<td>51</td>
</tr>
<tr>
<td>% registered in the parish of the mill</td>
<td>62.4</td>
<td>100.0</td>
<td>80.0</td>
<td>70.6</td>
</tr>
</tbody>
</table>


Table 6:2 shows that a group of 168 workers in the lists were identified as having official registrations elsewhere in the parishes, but unofficially living in the sawmill communities in 1879. These results could be derived after a cross-reference between the information provided in the 1879 lists and information about registration in Indiko. These workers could be identified due to the fact that they appeared as registered at the mill sites prior to 1879 or after 1879. For example, eight workers who lacked a registration in 1879 were all officially registered at Svartvik by 1890.

The result showed that a clear majority were church registered in the parish in which the mills were located. At Klampenborg there was only one identified, unregistered worker, but this individual was registered in the parish of the mill. At Kubikenborg eight workers were registered within walking distance in Skön parish and in the town of Sundsvall. One additional worker was registered in Ljustorp

647 Alm Stenflo suggested that using separate sources such as birth records and death registers would be good sources because they recorded deaths among both registered and unregistered residents (Alm Stenflo 1994, p. 52). About 18 percent of all deaths after 1850 were unregistered residents (Ibid. p. 53).
parish. At Heffners, the majority of the identified, unregistered workers officially resided in Skön parish, while slightly more than one in five was registered within walking distance to Sundsvall town.

The largest group of identified workers with unofficial presence was found in the Svartvik list, where 75 workers were registered in Matfors. This represented 41.9 percent of the identified unregistered workers residing in Njurunda.

Identified workers with unofficial presence and residency
It is difficult to assess if the unregistered workers were permanently settled in one place or if they in fact only resided in the sawmill communities for shorter periods. It was uncommon for local, temporary workers to go back and forth between their home and the mill sites. Even though the result showed that the majority of these workers were church registered in the parishes in which the mills were located, it is still not taken for granted that the men actually resided in the communities.

Reviewing the information in Indiko and trying to link the workers to the mills, there were 12 workers who at some point had been officially registered in the sawmill communities a few years prior to 1879. Twenty-three workers gained an official registration after 1879, while the bulk of the unregistered workers never officially lived at the mills at all according to the church registers. So, to assess where they actually resided it is necessary to turn attention back to the 1879 lists and analyse the information given in the residence column.

Table 6:3 Place of residence according to the 1879 lists for identified workers not registered on site

<table>
<thead>
<tr>
<th>N</th>
<th>Klampenborg</th>
<th>Kubikenborg</th>
<th>Heffners</th>
<th>Svartvik</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>168</td>
<td>1</td>
<td>10</td>
<td>51</td>
</tr>
<tr>
<td>No specific residence indicated</td>
<td>23</td>
<td>-</td>
<td>-</td>
<td>45.1</td>
</tr>
<tr>
<td>At the mill/owners</td>
<td>125</td>
<td>100.0</td>
<td>40.0</td>
<td>27.5</td>
</tr>
<tr>
<td>Own place</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Own place at owners</td>
<td>6</td>
<td>-</td>
<td>60.0</td>
<td>-</td>
</tr>
<tr>
<td>Crossed over</td>
<td>14</td>
<td>-</td>
<td>-</td>
<td>27.5</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

All of the identified workers lacking a sawmill registration at Klampenborg, Kubikenborg, Heffners and Svartvik, did in fact reside within the confines of the sawmill communities in 1879, despite what their official registration may have indicated. It is really only at Heffners that the 1879 lists suggest that not all of the workers may have resided in the community. 45.1 percent lacked information of specific residence and it is difficult to say if this meant that they lived at the mill. Most temporary workers would have resided at the mills’ sites for shorter periods during the most hectic months of their employment, and thanks to the lists it is possible to confirm this. Even though previous research by Ostergren and Norgren show that many local workers, temporary employed or not, remained registered in their villages does not dispute these results.648 All of the workers in the 1879 lists were present at the mills during 1879, at least temporarily.

**Unidentified workers with unofficial presence**

One-third of the 878 workers recorded in the lists (272) fell into the category of unidentified workers with unofficial presence, because they could not be linked to any parish in the Sundsvall district through available church registers. While Heffners had as many as 37.7 percent of its total 212 recorded workers fall into this category, the Kubikenborg list only included 22.5 percent, with Klampenborg and Svartvik close in-between.649 Once again, this would point to a local presence among the employed workers; but it is important to differentiate between local workers and workers locally registered, because it was the latter that was more common.

The information in the 1879 lists also gives some indications from where the unidentified workers hailed from. The largest group of 117 did not have any information in the lists apart from their names. The second largest group of 36 workers was actually recorded in the lists as registered within the Sundsvall district. They could, however, not be located in the church registers. According to the lists, 17 workers were officially registered in the closest counties/provinces, whereas 23 workers hailed from Finland and Norway.

These workers were presumably seasonal and temporary workers and therefore not permanently settled in any of the sawmill communities, or even the Sundsvall district. This group, consisting of both sawmill workers and most likely also their families, has to be highlighted despite there being little or no information regarding their presence apart from what the lists can reveal. Included in the larger

649 In the Klampenborg list 31.2 percent of the workers could not be identified and in the Svartvik list 30.3 percent of the workers.
group of migrants who arrived in the Sundsvall district, the unidentified workers become a small group of the *de facto* population who at least can be identified by name thanks to the 1879 lists, even though they cannot be linked to official residency in the district.

6:2 The importance of residency

It was more productive and economically sound to have the workers live close to the mill with their families, than it was to rely on workers who lived further away. This had initially not been the preferred strategy. Norberg, for example, showed in his Alnö study that the majority of in-migrating workers lived in rural villages up until the 1880s and how this was connected to the sawmill owner’s unwillingness to build company housing. When the realisation of the cost benefits of having the workers live close became apparent, housing distribution was used as a means to regulate the employment of desirable and undesirable workers. This also placed the full-time workers and those fortunate to receive quarters in the company housing on a different level than the rest of the population, because they had been selected by management.

*De facto* residency among the workers

The early residents in the sawmill areas could not claim belonging on account of birth, other factors to define belonging had to be established; one of these would have been residency.

To have the population live near by also enabled the owners to exercise a greater degree of control over the production and the workforce. Tying larger populations to the sawmills created a larger pool of workers, which increased the possibility of expanding production, more so than if populations would have been smaller or further away. This further suggests that the majority of the temporary workers also resided at the mill sites during their employment, official registration notwithstanding. Still, exceptions cannot be excluded, as in the example of Alnö, where the sawmill communities remained small and where even a large part of the full-time workers resided elsewhere in the parish. Then again, within the scope of this study those sawmill communities showed few signs of expansion and did not become large.

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650 Norberg 1980, p. 82.
651 Berglund-Lake 2001, p. 34.
652 Hjulström 1955, p. 113.
Table 6.4 Workers residence according to the 1879 lists

<table>
<thead>
<tr>
<th></th>
<th>Klampenborg</th>
<th>Kubikenborg</th>
<th>Heffners</th>
<th>Svartvik</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>878</td>
<td>93</td>
<td>138</td>
<td>212</td>
</tr>
<tr>
<td>No specific residence indicated*</td>
<td>-</td>
<td>-</td>
<td>50.9</td>
<td>-</td>
</tr>
<tr>
<td>At the mill/owners</td>
<td>708</td>
<td>88.2</td>
<td>71.0</td>
<td>43.9</td>
</tr>
<tr>
<td>Own place</td>
<td>11</td>
<td>11.8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Own place at owners</td>
<td>40</td>
<td>-</td>
<td>29.0</td>
<td>-</td>
</tr>
<tr>
<td>Crossed over</td>
<td>11</td>
<td>-</td>
<td>-</td>
<td>5.2</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>


*No specific registration still indicates that they might have lived at the mill, especially because it only occurred in the list from Heffners where we find the majority of the identified workers with unofficial presence.

The 1879 lists revealed that 80.6 percent of the workers were directly marked as living either “at the mill” or “at the owners”. The percent is even higher when considering the workers marked as having their “own place,” and “own place at owners.” Exactly what these markings specifically indicated have been difficult to assess; they might have lived in smaller cottages on the sawmill estate, which they might have owned or rented or in specific types of housing.\textsuperscript{653} The term “own place” could be construed as workers living in their own homes based on the original markings in Swedish.\textsuperscript{654} Nothing has, however, suggested that any of these workers lived anywhere else other than at the mill, unlike the results from Johansson’s study of Stocka.\textsuperscript{655} It is therefore probable that all of the recorded workers in the lists were residing at the mill sites in established sawmill communities during the spring of 1879 despite the fact that some lacked official registration or were registered elsewhere in the district.

A home of one’s own

Instead of trying to cover the demand for proper housing, the sawmill owners only tried to accommodate the imminent needs for housing by building cheap and

\textsuperscript{653} Swedish term, \textit{hus på ofri grund}, means that an individual owned the house, but not the land on which it was built. This was a practice that was favoured by landowners because they had the right to reclaim their land whenever they wanted. This placed the house owners in a difficult position because they could be evicted from their homes and not be compensated if it was torn down. This practice is not unheard of even today, especially within state-owned protective land areas.

\textsuperscript{654} In Swedish: \textit{egen boplats} or \textit{egen boplats hos egaren}.

\textsuperscript{655} Johansson 1988, pp. 78-79.
practical two or three story houses in conjunction to the industries. The apartments and rooms became smaller as the industry expanded and the need to accommodate more people in the same space grew. People were used to living close to each other but the situation in the industrial communities was special because it was a forced situation. Because the sawmill owners could not offer rooms in the barracks to all their workers, the workers were more or less forced to search for other alternative living arrangements. According to Norberg, this was the reason why so many workers bought land and felt inclined to build their own homes in Alnö.

A house of one's own becomes an important symbol of independence to most workers, something that was bought and paid for by their own labour. Ambjörnsson implied that being called a house or farm owner instilled individuals with pride and gave a higher social status. It was not only the acquisition itself that was important, but also the possibility to create a home to include family patterns and ideals of one's own choosing. The dream of a home of one's own continued to have a strong appeal, even though housing situations were debated and started to show improvements during the last decade of the 19th century.

Some workers had such a strong drive to make it a reality, not wanting to reside in the company housing, while others had little choice. It should not be assumed though, that the families who acquired their own homes had a better financial situation than those who remained living in the company housing. With the separation of residence from place of employment, workers avoided living with and on land owned by their employer and a careful consideration of place of residency enabled workers to more easily break free from the employers' legal and moral

656 It was in the best interest of the mill owners to provide their workers with accommodations and social services.
658 Norberg 1983, p. 163. Another strong incentive would have been that may of the workers came from agricultural backgrounds and being able to farm a small patch of land and be a little self sufficient helped to improve living standards (Ibid. p. 169).
659 Fjellström utilised the term symbolical capital and wrote that even in the temporary living quarters present during the early stages of industrialisation, wives managed to create a feeling of home using small means. It could also be economically beneficial for the companies to give the workers loans to buy either land or building material as it created a stronger bond between owner and workers that went beyond tenancy and employment, strengthened the bond between worker and employer and increased dependency (Ericson 1987, p. 185).
660 Ambjörnsson 1988, p. 207. Seccombe meant that "[t]o possess one's own domicile maximises a person's autonomy from parents, employers and state authorities" (Seccombe 1993, p. 6).
662 Fjellström 1990, pp. 116-118. It was in the best interest of the mill owners to provide their workers with accommodations and social services.
663 Ibid. p. 126.
authority. However, building a house did not come without an economic and social cost. As Strathern wrote, people who lived elsewhere were not only “hard to reach – they oriented differently” and never became real members of the village, either being viewed as strangers or outsiders. Excluded from community life, few workers were also able to keep their houses because many found it difficult to manage payments on the loans they would have been forced to take. Many were forced to sell their property just after a few years and move to cheaper housing, others sold out in order to enable emigration.

**Assets 1879**

Most workers did not have any financial assets because it was all spent to cover the weekly expenses. The 1879 lists do, however, offer a slight insight into the economy of a handful of the employed sawmill workers. Despite the fact that the lists differ from each other in what was recorded and in what fashion, a majority of the workers appear to have had some sort of assets ascribed to their name. Some of the workers had acquired smaller possessions, in terms of good assets and some assets. These generic terms most likely included some sort of personal and household related items. All 435 workers recorded in the Svartvik list had, for example, been registered as owners of household goods. The sawmill companies may have provided housing, but the workers usually had to acquire kitchenware and furniture themselves.

Four workers at Svartvik had been registered as being in possession of larger sums of money; three workers had 500 Swedish crowns each and one worker had managed to save 2000 Swedish crowns.

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665 Johansson 1988, p. 84.
666 Strathern 1981, p. 161. Blumenthal indicated that the stranger or outsider would have to have been in residence for many months or years before becoming truly accepted by the long-time settlers. “By nothing excepting long participation in the activities of town do the people grow to accept him as one of them” (Blumenthal 1932, p. 121). It is not unusually a feeling of physical nearness but social isolation (Ibid. p. 123).
668 Ibid. p. 164. It would have been more difficult for an in-migrant to keep his house, than it would have been for a locally born worker. In-migrants lacked the economic security that came with large kinship and social networks (Ibid. p. 165).
670 The workers had seldom the same opportunities as the farmers to house furniture from older generations. Families usually only had one set of furniture and children had to acquire their own when they set up house, which required newlyweds having to buy new furniture when economy and space allowed them to do so (Fjellström 1990, p. 125). Johansson, however, wrote that furniture was often, if not inherited, something that the workers themselves had made. Workers had seldom enough money to buy furniture (Johansson 1987, p. 220).
Only 2.1 percent of the workers could be identified as property owners through the 1879 lists. A small group of 19 workers had been marked as house, farm and land owner in the lists and as Table 6:6 displays, these were to be found at Kubikenborg and at Heffners. Twelve of the 15 house owners were found in the Heffners’ list and both land owners were identified workers lacking a site registration. They were all marked as residing at the mill site, but house owners Jakob Bolin and Jonas Sjölund were both officially registered in the town of Sundsvall. However, the 1879 list did not disclose the location of these houses, if they were located at the mill sites or if they were located in closer proximity to the town of Sundsvall.671

The two house owners found at Kubikenborg were both residing in their own homes, but as the list also indicates that they resided at the mill site it is likely that they had their own place at the on the sawmill owners land. Among the 15 land owners and two farm owners found in the Heffners’ list, all were listed as living at the mill site and while the two land owners also were registered in Skön parish, they too lived at the mill. Almost all of the land and farm owners were officially registered elsewhere and not at the mill sites. The majority of the farm, land and house owners were found among the 93 workers who lacked registration at the mill sites but were officially registered somewhere else within the Sundsvall district. It would also appear that sawmill workers who owned assets were marked as having either some assets or good assets in addition to being registered as property owners.672

671 It would appear that identified, unregistered workers were more likely to have assets than their registered counterparts at the sawmills.

672 Monetary savings also appear to have been linked to emigration. 20.5 percent of the workers with some financial assets chose to migrate to America; only 17.1 percent of the workers who had no financial assets managed the cost of emigration. Whereas only 0.2 percent of the workers with household goods and only 5.9 percent of the workers with an unknown financial situation emigrated. Seccombe wrote in relation to British working class families that if there were any chance at all for a family to save money, the responsibility lay solely upon the wife. Especially because women were more prone to

### Table 6:5 Sawmill workers and ownership according to the 1879 lists

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>% of 878</th>
<th>Kubikenborg</th>
<th>Heffners</th>
</tr>
</thead>
<tbody>
<tr>
<td>House owner</td>
<td>2</td>
<td>0.2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Farm owner</td>
<td>15</td>
<td>1.7</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>Land owner</td>
<td>2</td>
<td>0.2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>19</td>
<td>2.1</td>
<td>2</td>
<td>17</td>
</tr>
</tbody>
</table>

6:3 Becoming settled

Sawmill worker Per Viklund settled in Svartvik sawmill community in 1877 with his wife and children. He had previously been employed at Skönsmon sawmill for 22 years before coming to Svartvik where he would remain until his death in 1893. During the course of his life, Per Viklund gained 38 years of experience of sawmilling and had lived for more than ten years each in two different sawmill communities in the district. He would by definition therefore have been considered a “real” sawmill worker and a full-fledged member of the sawmill community with children belonging to the sawmill generation. Workers who spent such a long time employed at the mills and living in the communities may in general be believed to have been rare. The result from the 1879 lists would, however, suggest that this may not have been the case.

Brändström, Sundin and Tedebrand suggested that migrants who stayed more than five years in the town of Sundsvall or Linköping would have considered themselves as settled and belonging to the local communities. The question is if this also is applicable to the sawmill communities, especially because they differed from these towns. For migrants to remain settled in the sawmill communities opportunities of employment would have had to have been recurring. The longer migrants stayed in a particular area, the larger likelihood of their social ties to grow stronger and their networks to expand, inhibiting rash decisions of leaving.

Still, neither employment nor the closeness to kin was a guarantee that an individual would stay, even though it would have induced it. The make up and stability of the core populations would have been different in individual sawmill communities and lightly linked to from where the workers had been recruited. Community life would therefore have had different meanings to different residents depending on time stayed and employment, which means that belonging, would have ranged from the fluid to the more profound.

Time spent at the sawmills

Industrial development in the Sundsvall district prompted more migrants to settle for longer periods and this became more noticeable when the sawmills began

“lay some aside; yet the allowance they received rarely permitted them to do so” (Seccombe 1993, p. 148).
674 Vikström 2003, p. 128. Muriel Neven also wrote that “Essentially, the more the individual could rely upon a broader potential family network, the higher was the chance that he/she would remain in his/her village. This result applies to all people, single or married and the elderly” (Muriel Neven, “The influence of the wider kin group in individual life-course transitions: results from the Pays de Herve (Belgium) 1846-1900,” Continuity and change 17, Cambridge University Press 2002, p. 430).
to keep production going all year round. However, the belief that all established residents belonged to long-time settled families associated with the areas was not always the case, especially in connection to sawmill communities.675

Because the sawmills were built in different years, it may be claimed that the result could be misleading due to the fact that the digitised church registers ended in different years. Klampenborg (1868-1891) had a total of 23 years of digitised registers, Heffners (1868-1895) had 27 years, Kubikenborg (1869-1894) had 25 years and Svartvik (1873-1901) allowing a maximum of 28 years. It is within these parameters that time spent at the sawmills by the 1879 workers’ group have been estimated. End date has been calculated from out-dates, death dates and from the year the digital parish register ended. This means that several workers spent more time at the mills than this particular estimation will show. For those workers with a missing in-date but with a given out-date, official presence has been calculated from 1879. Even though most of these workers spent their time at the sawmills consecutively, it is worth keeping in mind that these calculations are estimations only, because they do not necessarily constitute consecutive time or official residence in 1879.

Many communities would have had two different types of core populations, those who had been among the first inhabitants and those who had been incorporated into the core due to longer settlement. Because of the high population turnover in the sawmill communities, it is likely that a resident having been permanently settled for five years would have regarded themselves as belonging to the population core. However, because the sawmill communities differed from each other in many aspects, it is not unlikely that also length of residency and belonging would have been individual to the community they had settled in. For example, in a community with an extremely high population turnover that would have resulted in a less stable population core, five years would probably have been time enough. While within a community with a larger, more stable population core, five years may not have been enough time to feel included in the local community and be accepted by the locals.

Still, the seemingly closed geographical and social boundaries created within and around the sawmill communities would have guaranteed a certain level of social interaction and exchange. As Strathern pointed out there would have been individuals who did not want to belong or be included. Communication on belonging would therefore have had to be a two-way street. It would therefore have

675 Strathern 1981, p. 14. Even so, Strathern claimed that this was an attitude and belief shared by both residents and in-migrants.
been equally important for temporary residents to communicate that they did not belong.\footnote{Ibid. p. 14. This would also have been highlighted from the sawmill companies’ side with difference in wages and residential situation, innately creating a sense that they did not belong.}

\textit{Table 6:6 Time spent among identified workers in the 1879 lists from Klampenborg, Kubikenborg, Heffners and Svartvik*}

\begin{tabular}{|c|c|c|c|c|}
\hline
\textbf{} & \textbf{Total} & \textbf{Klampenborg (1868-1891)} & \textbf{Kubikenborg (1869-1894)} & \textbf{Heffners (1868-1895)} & \textbf{Svartvik (1873-1901)} \\
\hline
\textbf{N} & 878 & 93 & 138 & 212 & 435 \\
\hline
\textbf{Excluded} & 386 & 34.4 & 29.7 & 63.2 & 41.1 \\
\hline
\textbf{Less than a year} & 6 & - & 2.9 & 0.5 & 0.2 \\
\hline
1-4 & 64 & 18.3 & 8.7 & 4.7 & 5.7 \\
\hline
5-9 & 104 & 15.1 & 16.7 & 8.0 & 11.5 \\
\hline
10-14 & 94 & 16.1 & 21.0 & 8.5 & 7.4 \\
\hline
15 years or more & 224 & 16.1 & 21.0 & 15.1 & 34.0 \\
\hline
\end{tabular}


\footnote{This group of included workers represents 56 percent of the 878 registered in the lists. Klampenborg 65.6 percent (61), Kubikenborg 70.3 percent (97), Heffners 36.8 (78) and Svartvik 56.9 percent (256).}

Table 6:6 shows that there were clear differences regarding lengths of stay within the different sawmill communities. It would also appear that the majority of the combined group of identified workers in the lists spent more than five years at their 1879 sawmill of employment. All but workers from Klampenborg displayed an extremely high propensity to stay for more than five years. It was only workers at Klampenborg who displayed a higher tendency to shorter periods of settlement. Almost one-third of the workers, 27.9 percent, officially remained settled and registered between 1-4 years.\footnote{Blumenthal found in his study of Mineville that the largest groups of heads of household had spent between 10-20 years (20.6 percent) and 30-40 years (26.3 percent) settled in the area. 16.4 percent had spent between 0-5 years, 8.5 percent 5-10 years and 8.9 percent 20-30 years settled. The numbers represented a central core of the population that remained through economic prosperity and recessions. 186 adults “had spent either their entire lives in the community or all of their lives excepting early childhood” (Blumenthal 1932, p. 32). There would, however, have been differences between both industries and workplaces. Ericson confirmed this in his study of mechanical industries in southern Sweden that there were considerable differences between different workplaces. Longer time of employment was in many cases linked to age, especially to younger age groups, at some of the industries, while not at all at the other. At Jönköping, for example, only two percent of the workers stayed for more than ten years, while the corresponding percentages for Norrahammar and Huskvarna were five and six years,}

\textcopyright 187
More workers at Klampenborg and Kubikenborg could be linked to church registers and identified than workers at Heffners and Svartvik. This suggests that the latter two may have had larger groups of temporary, unregistered workers, even though both display low percentages of workers staying for only a few years. Surprisingly, many appear to have stayed for more then 15 years. At Heffners 41.0 percent of the workers included were settled for 15 years or more and at Svartvik the percentage was 57.8 percent. At both Klampenborg and Kubikenborg the percentage in these categories displayed less than one-third of the identified workers.

Still, the settled time period was more varied at Klampenborg and Kubikenborg. They had a more even distribution than Heffners and Svartvik, which displayed surprisingly low percentages of workers staying for less than 15 years. In the same way it could be concluded that Heffners had the lowest number of included workers, it can also be deduced that Svartvik would appear to have had the largest, and most stable core population that included many long-time settled residents. The fact that Svartvik also had the largest proportion of workers born in the district brings us back to Strathern and her suggestion of the importance of birth. It is perhaps possible that not only belonging, but also long-time settlement can be connected to a local origin? Answering this would, however, require a re-examination of the original material and the linking, which lies beyond the scope of this study.

Even though the results show that the core workers at most mills spent more than ten years within the different sawmill communities, Svartvik appears to have been one of a kind. This was also noticed by Norberg who wrote that Svartvik differed from the other sawmill communities in the district. The community had, in comparison to other communities in the district, a larger resident and officially registered population. He also claimed that the probability that residents would remain within the community was considerably higher than any other sawmill community in the district.678

Norberg suggested that the time spent at the sawmills could be used as a measure of assimilation.679 By studying the time spent by the migrants from Värmland in Alnö parish, he found that they were more prone to leave during the first ten years, but that only 20 percent of the in-migrants from Värmland returned to their home county. The average official time registered in the parish by migrants who

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678 Norberg 1978, p. 269.
679 Norberg 1980, p. 91.

respectively. The workers spent the longest time at Norrahammar, where every fifth worker had been employed at the company for at least 20 years (Ericson 1987, p. 166).
later left was 4.5 years.\textsuperscript{680} Vikström found in her research that migrants arriving between 1865-1880 “were more likely to settle for longer periods than were those who arrived before the development of the lumber industry.”\textsuperscript{681}

In view of the results of this study, it has to be concluded that many of the employed workers in 1879 remained extremely loyal to the mill of employment for many years. The most interesting question though, which is next to impossible to answer, is whether or not they stayed because they had a good living and employment situation or if they were rewarded with better conditions because they stayed and showed loyalty towards the company.

6:4 Conclusions

After migration, settlement and residency were the cornerstones of community construction. A settled population created a population core that would propel community construction forward and be the foundation for the communities’ social development. Residency does, however, offer a challenge because the communities had different types of residents, official and unofficial residents. During the winter months, most communities were only inhabited by the registered population, the core of the communities. This changed during the summer months, production increased and larger groups of seasonal and temporary workers arrived. Utilising the 1879 lists and comparing these to the church registers have further highlighted the methodological problem caused by a \textit{de facto} and a \textit{de jure} population, as well as showing the discrepancies between actual residence and official registration. There was a great difference between the \textit{de facto} populations and the \textit{de jure} populations. Still, the list showed that the majority of the workers were registered in the district according to the lists, but there were differences between the different sawmill populations.

Sawmill workers becoming settled displayed differences between the sawmill communities. This indicated what previous research already has suggested, that inhabitants in Svartvik displayed a higher degree of remaining settled. The proportion of population turnover among the registered populations should therefore have been considerably higher at the other three mills than what it appeared to have been at Svartvik. How many years it would have taken to become an accepted member of the community would, however, have been different depending on sawmill. It is likely that Svartvik, with its more stable core population of long-time residents.

\textsuperscript{680} Ibid. p. 92.
\textsuperscript{681} Vikström 2003, p. 129.
settlers would have been more difficult to become accepted within, than within the cores at Heffner, Klampenborg and Kubikenborg.

These aspects stress the importance of residency, especially those cases where official registration and residency did not correlate between the 1879 lists and the church registers. This was not necessarily temporary workers; the 1879 lists in conjunction with especially birth registers indicate that many had relocated their entire families without officially changing their registering.

Registration and actual residence did not necessarily have anything to do with each other because there were workers who resided permanently in the sawmill communities and never officially registered, but remained registered in their villages. This most likely applied to workers who were registered within the same parish as the sawmill or came from adjacent parishes. Some sawmill workers were registered as property owners but this does not appear to have been an impediment for them to reside at the mill sites, at least on a temporary basis. Almost all of them were registered elsewhere and not in the sawmill communities. Another important aspect that highlights the importance of residency is the fact that a clear majority of the workers were marked as residing at the mill site, despite being employed on a temporary basis.

Employment and residency seem to have been highly intertwined aspects, and residency should therefore have been synonymous with being a sawmill worker. It would have been an important part of community life and a symbol of belonging, especially in the beginning when birth could not have been a deciding factor. It should also be assumed that its symbolism and feelings of belonging would have differed between different workers. Even though employment and residency were linked, the seasonal workers would eventually have returned to their home parish and to a different kind of life and a different type of belonging based on other aspects than occupation.
Sawmills have for the most part been viewed as predominantly male environments, but how accurate is this assumption? The sawmills’ core populations, or the de jure populations, were the only populations that officially resided within the sawmill communities; while the registered males represented the sawmill workers who can be identified. It is true that the sawmills attracted large groups of male in-migrants in search of employment, nor is it disputed that the sawmill communities would have had a male dominance, but only for parts of the year, and never officially. As discussed in chapter six, the sawmill populations differed greatly from summer to winter. When the season ended and the temporary workers left the communities, only males remaining in the communities would, for the most part, have been the officially registered.

Family was an important feature of the creation and establishment of the communities and contributed to the social networks and participated in industrial work when needed. As communities therefore, the sawmill communities should not have differed from others in the areas. The registered core populations would have included men, women and children because many workers settled with their families or were married on site. Tunadal, for example, had by 1863, 15 full-time workers employed; in 1864 it had risen to 22. Twelve years later the sawmill had 82 workers and together with their wives and children, the entire community was made up of 332 officially registered individuals.

The aim of this chapter is to study the demographic structures of the sawmill communities in the Sundsvall district between 1850-1890. A special focus is on the presumed male dominance in these communities, which includes looking at the number of sawmill workers and the occupational outline of the communities. How were the sawmill communities demographically proportioned between men, women and children and did this differ from non-sawmill areas? Did the summer’s male dominant populations also reflect the situation among the registered populations? To what extent were the male and female residents of the sawmill communities married? What was the role of family and marriage within the sawmill?
communities? How old were the workers in 1879 and were they married? Did the demographic structures change during the course of the 19th century?

7.1 A male-dominated community?

Number of sawmill workers

The number of temporary workers employed at the sawmills differed from year to year, all in accordance with the market economy regulating the industry’s supply and demand. The fact that the number of available males registered in the communities did not cover the supposed workforces is one concern when it comes to estimating the number of sawmill workers on site. The presence of temporary workers meant that the sawmills employed more men than the number registered on site, but another problem with estimating the number of sawmill workers is the issue that all men residing in the sawmill communities would not have been sawmill workers.685

Most men had different jobs according to the season; a crofter may have worked part time at the mill during the summer, as a logger during winter, while tending to his land and animals in-between.686 It was even possible for a man to have two occupational titles in the church registers making it even more difficult to know which occupation was the primary one.687 Cornell reasoned that this posed certain problems of representation in the church registers and that the church registers’ usefulness is troublesome because they did not depict a truly accurate picture of how things were.688

Estimating the number of sawmill workers and trying to get an approximation of the de facto workforce is a difficult task because there are few reliable sources. Most official estimations of how large the sawmills’ workforces were, are therefore either based on the sawmills’ annual production or their taxable value. These only included sawmills with a particular production capacity, meaning that sawmill workers at smaller mills were excluded from these estimations.689 Considering that Olsson wrote that the sawmill owners had a habit of not reporting the correct number of employed workers to the authorities would make any estimation inaccurate.690 Svartvik, for example, had 600 workers during the spring of 1879, as reported to authorities by the owners.691 The 1879 lists, however, had 435 workers

686 Ibid. p. 231.
687 Ibid. p. 242.
689 Wik 1950, p. 265.
690 Olsson 1949, p. 85.
691 Björk and Schnell 1979, p. 45.
recorded, while the church registers only had 223 males aged 15 years and older registered as official residents. This means that the number of temporary and seasonal workers would have made up a considerable group.

During the 1860s, there were somewhere around 2,000 sawmill workers in the entire county of Västernorrland. Olsson estimated that the steam powered mills in operation, which according to his information was eight at the time, had between 313 to 385 full-time employed workers between 1861-1865. Water powered sawmills during the same period had a workforce fluctuating between 319 and 354 full-time employed workers. He indicated that even though steam mills were considerably fewer, they employed more workers.

For the time period 1871-1875, there were, according to Olsson, 1,090 full-time employed workers divided among 24 sawmills in the district. Cornell wrote that the number of workers during the 1870s should have doubled, but that only about 1,500 workers would have been employed full time. The entire industry, however, would have salaried somewhere around 20,000 workers all together, temporary and permanent. About 60 percent of all sawmill workers in the Sundsvall district during the early 1880s would have been un-contracted seasonal and migratory workers according to Cornell.

Wik argued that the number of sawmill workers during the 1870s would have been exaggerated in comparison to other occupations. The total number of sawmill workers in 1900 almost certainly would have been underestimated, especially because Wik could not figure out how an occupational group could have quadrupled when production capacity had not even tripled. He claimed that Västernorrland would have had 3,400 sawmill workers between 1871-1875 and 12,800 sawmill workers in 1900.

Occupational titles within the sawmill communities
During their first years in production, most sawmill communities would not have been especially diverse socially. Only a few workers in managing positions and their personnel would have been employed full time with an annual salary. As the communities and their social environment developed, new occupations would appear, while others would disappear. Unfortunately, the sources display certain

693 Olsson 1949, pp. 31-32. The number of workers at the different mills would, however, have varied depending on their production capacity.
695 Wik 1950, pp. 265-266.
flaws with regard to specific occupational titles, especially when it comes to sawmill workers.\textsuperscript{696}

According to the 1880 census, Svartvik sawmill community had 252 sawmill workers employed and an additional 21 different male occupational titles. There were titles that were directly connected to sawmilling, such as, supervisors, overseers, \textit{sågfilare} and \textit{sågställare}, just as there were others that did not have a direct connection to the mill’s main production, such as, a master builder, a groom, priest, carpenter, gardener, shoemaker, mason and customs officer.\textsuperscript{697} By the time of the 1890 census, the number of sawmill workers had grown to 281 and while some titles like carpenter and shoemaker had disappeared, others reflecting the development and need of the sawmill community and its population had been added: teacher, milliner, telegraphist and shopkeeper. In the census from 1900, greater differences in occupational titles can be seen. For the first time, the 329 sawmill workers are mentioned as such and not only as workers.\textsuperscript{698} Compared with two decades earlier, in total, 13 titles had disappeared and eight had been added. The community did no longer include sorters, engineers, grooms, supervisors, charcoal-burners or masons. It did, however, include a post office manager, treasurer and even steamboat officers.

Svartvik sawmill community also had a few female occupational titles registered in the censuses. According to the census of 1880 there was a midwife, two cooks, a female farmhand, a teacher and eleven domestic servants. By 1890 the midwife was still present as well as a teacher, the domestic servants had grown to 14 and there was also four women registered as housekeepers. In the census from 1900 the community was still the home of a midwife, five domestic servants, two teachers and one cleaning woman.\textsuperscript{699}

From an occupational perspective, men and male occupational titles dominated, which also reflect the time period. Despite the fact that women mainly could be linked to domestic employment, the occupations of both men and women illus-

\textsuperscript{696} Johansson 1988, p. 76. Folkräkningen 1880, 1890, 1900, SVAR – Svensk arkivinformation.
\textsuperscript{697} \textit{Sågfilare} - Responsible for the maintaining and sharpening of the saw blades and tools.
\textit{Sågställare} - Oversaw and managed work in the saw houses. Primary responsibility was to enable the most of each log that passed through the saw frames.
\textsuperscript{698} It was initially impossible to differentiate between different kinds of workers; it was not until the last decades of the 19th century that the church registers began using more specific occupational titles in relation to the worker. The changed registration practices were the result of demands from the authorities for increased statistical accuracy. They also reflect a sort of occupational consolidation. Workers were differentiated from each other and sawmill workers emerged as an occupational group of their own.
\textsuperscript{699} Folkräkningen 1880, 1890 and 1900, SVAR – Svensk arkivinformation. Folkräkningen 1890, Forskningsarkivet, Umeå Universitet.
trate an important part of the formation of the community through the services it
provided to the resident population.

Registered males

The number of sawmill residents changed from year to year due to the massive
in-migration and it is likely that so did the number of workers at the mills. Con-
sidering that most mills had large groups of temporary and seasonally employed
workers, whose size varied from half of the permanent labour force to being even
larger than the group of full-time employed workers would indicate that adult ma-
les in the registered core populations were a rather small group.\textsuperscript{700} The number
of male employees at mills should therefore exceed the number of males registered
in the communities.\textsuperscript{701}

To get a general idea of how large the \textit{de jure} male population in the sawmill
communities would have been, all registered men 15 years and older have been
extracted and compared to males in non-sawmill areas.

\textbf{Figure 7:1 Percent of males aged 15 and older in sawmill areas and non-sawmill
areas in Sköns, Alnö, Selånger, Njurunda and Tuna 1850-1890*}

\textsuperscript{700} It was not until the mid 1890s that the number of all-year residing workers at the saw-
mills rose above 10,000 (Cornell 1982, p. 235).

not even make up one third of the populations, which instead of being in a domi-
nant position, would actually mean that adult males among the registered popula-
tions were a minority group. There was a slightly higher percentage of men in the
sawmill areas during the early 1850s than during the following decades. Even if
this shows that the early sawmill populations would have had a larger proportion
of males, it must also be taken into consideration that the early populations were
considerably smaller and that would affect the results. The result would, howe-
ver, agree with the migration study, which suggested that the populations became
more stable by the end of the century.

Compared to the adult males in non-sawmill areas, the agricultural areas had
a considerably higher proportion of males in their populations. The figure also
displays that the proportion of adult males slowly decreased, starting during the
mid 1860s and continuing throughout the period. It coincides with the increased
out-migration from agricultural areas to industrialised areas. The sawmill areas
are therefore shown to have experienced an increase of adult males during the
early 1870s. Within the sawmill communities in the district after the 1870s, the
decreasing proportion of males indicates that the proportion of women and child-
ren would have increased.

So, in general, men aged 15 and older did not dominate the registered popula-
ations in the sawmill communities in the Sundsvall district. This would also mean
that the number of temporary workers should have been considerably larger than
what previous estimations have suggested.

The question is whether the male proportions applied to all sawmill commu-
nities or whether there were differences. In order to get as representative a selec-
tion of sawmills as possible, six mills from the three area types were chosen. This
included one of the largest and smallest mills with a minimum production time
of 15 years.

Figure 7:2 shows that there were differences between different sawmill com-
munities, but that these dissimilarities were not as far apart as one might have
expected. Nor does there seem to have been a connection between an already
registered population on site and number of males in the core population; even
though it has been established that mill sites, which were already inhabited when
the mills were constructed, had a tendency to become larger. The male population
at Tunadadal, for example, had a high proportion of men during its first decades in
production, but fell rather quickly during the 1860s before slowly reaching pro-
portions of slightly less than one-third of the population. The proportion of re-
istered males at Johannesvik showed great similarities with the other mills and
what appears to have been a general pattern after 1870. Kubikenborg showed a
high proportion of males prior to the sawmills’ establishment, but as most of the high peaks prior to 1879, it would have been the result of small populations.

Figure 7:2 Percent of males aged 15 and older within sawmill areas in the Sundsvall district according to population presence at time of construction and a minimum of 15 years of production* (a selection**)

Source: Demographic Data Base, Umeå University.

Tabellverket

*Information from Svartvik is missing 1854, 1856-1859.

**Tunadal and Johannesvik (unpopulated) Kubikenborg and Nyhamn (sparsely populated) Svartvik and Essvik (populated).

The proportion of males at Nyhamn decreased by the end of the 1870s, but did increase slightly by the end of the 1880s, where for a few years it appeared to have had the highest proportion of males among the sawmill communities in Figure 7:2. Svartvik displayed a fairly stable male population representing slightly less than one-third of the population while Essvik represented one of the sawmill communities with the lowest proportion of males aged 15 and older among its registered population after 1870.

The proportion of males registered in the sawmill communities did not show any major differences, at least after 1870. Then the proportions of males displayed a general average of having made up between one-fourth and slightly more than one-third of the populations. The economic difficulties by the late 1870s and early 1880s are clearly reflected in these communities, displaying a decreased proportion of men. It confirms yet again that males did not make up the majority within the registered populations. The results have also indicated that the sawmill areas
had higher proportions of males prior to 1870. On occasion this has proven to have been the result of an extremely small registered population, but it does suggest that during early industrialisation, sawmill areas attracted more males per registered resident than it did after 1870. This development is most likely linked to the formation of the communities and the development these areas underwent from being work sites to becoming proper residential areas.

**Figure 7.3** Percent of males aged 15 and older registered in the oldest sawmill areas in the Sundsvall district 1850-1890

![Graph showing the percentage of males aged 15 and older registered in the oldest sawmill areas in the Sundsvall district 1850-1890.](source)

Source: Demographic Data Base, Umeå University.

Specifically focusing on the oldest communities included in the study shows that even though some of the older sawmill communities had higher proportions of males prior to 1870, the variations were still highly noticeable. Tunadal, Eriksdal and Ortviken all had extremely small populations in general during the first production years, which is why there appears to have been extremely large groups of males in these areas. Ortviken belonged to the sparsely populated sawmill type and appears to have had a high proportion of males prior to the establishment of the mill. But in 1862, when the mills were built, the proportion of adult males fell drastically, suggesting an increase of women and children. Sund appears to have had a slightly different development, the proportion of men appears to have risen

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702 Eriksdal had less than ten registered inhabitants during its first nine years in production and Ortviken, which was inhabited prior to the mill being established had a population fluctuating between 5-13 inhabitants during the decade before the mill was built.
as the mill was established, which would have been consistent with the new employment opportunities created. Matfors is the community with the most stable proportion of adult males. Then again, by 1850 Matfors was already a well-established community.

What has become apparent is that migration prior to 1870 would have affected the proportion of males among the registered population to a larger degree because the populations would have been smaller than after 1870; hence the large fluctuations in Figure 7:3. It would also appear that four of these six mills experienced a decreased proportion of males in their registered populations during the 1860s, as well as the fact that all of the mills experienced a slight increase during the early 1870s. An interesting aspect is that although in-migration in relation to construction years of Tunadal, Skönsmon and Sund was positive, it only seems to have increased the proportion of men for a short time. In-migration after 1870 would appear to have had a more negative effect on the proportion of registered males. This firmly establish adult males as a minority group within the registered core populations in the sawmill communities in the Sundsvall district.

Registered females

The result from the migration study showed that more women than men migrated to the sawmill areas in the Sundsvall district. From the above results we know that registered males did not represent the majority within the sawmill communities, but did at best represent approximately one-third of the sawmill populations. How large was the female proportion of the sawmill populations?

Contrary to adult males in the sawmill communities, women aged 15 and older would appear to have made up an even smaller proportion of the core populations. Men would therefore not have been the smallest of the three demographic groups. Figure 7:4 does, however, display an interesting development in the sawmill areas. Prior to 1870, the pattern was similar to that of men, fluctuating but also displaying among its highest proportions, which was connected to the small populations. During the 1860s, the proportion of women decreased, just as the men did, only to rise slightly during the mid 1870s and then decrease again after 1875, again following the development of male proportions.
The proportion of adult women within non-sawmill areas showed a declining trend throughout the entire period, but while the proportion of men within the sawmill areas also displays a slight decline during the 1880s, males in non-sawmill areas remained more or less the same. It can thus be deduced that the proportion of children in both areas would have increased by the end of the century. It should indicate a more prominent presence of families with young children, or even a higher fertility among the settled populations. It may also be linked to an overall decreased in-migration to sawmill areas as well as a continued in-migration and population growth in non-sawmill areas. A reduced population turnover as a result of the industry’s economic fluctuations may have reduced the sawmill populations ability to procure more residents; something that would have made the already resident populations more stable.

Registered children

The number of children within the sawmill areas and the non-sawmill areas differed, as well as there were differences between different sawmill communities. Studying the proportion of children from a parish level shows that Skön parish displayed the highest and most stable proportion of children aged 0-14 years throughout the entire period. One of four residents in the parish was below the age of 15. Alnö and Njurunda would not reach similar levels until the 1880s. The industrial parishes displayed the largest proportion of children annually after 1870,
compared to agrarian parishes Tuna and Selånger. All parishes, however, except for Tuna, displayed an increasing proportion of children. Tuna did not really show any increase until the second half of the 1880s. The result suggests that the industrial parishes, especially Alnö and Njurunda, experienced an increased presence of children.

Figure 7:5 Percent of children 0-14 years in relation to total population in sawmill and non-sawmill areas in Skön, Alnö, Selånger, Njurunda and Tuna 1850-1890*

![Graph showing percentage of children 0-14 years in sawmill and non-sawmill areas from 1850 to 1890]

Source: Demographic Data Base, Umeå University.

*Information from Svartvik is missing 1854-1859.

Figure 7:5 shows that children within the sawmill areas constituted a higher proportion of the total, officially registered population than within non-sawmill areas. During the late 1860s, more than one-fourth of the sawmill populations consisted of children between the ages 0-14 years. That the proportion of children was reduced by the early 1870s can probably be seen as a consequence of an increased in-migration of a different type of migrants, mainly unmarried adults. The proportion of children rose again after the mid 1870s and reached similar levels during the 1880s as it had twenty years earlier. This development either suggests that the younger, unmarried adults who had arrived during the 1870s had married and started families or that there had been an increased in-migration by married workers with families. The result shows that children had a high

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703 There was, however, a slight difference between boys and girls. While girls in general appear to have constituted a higher proportion of children 0-14 within the sawmill communities, it would appear that boys displayed a slightly higher proportion within non-sawmill areas.
presence within the sawmill communities and that they, in fact, were the largest demographic group.

7:2 Sawmill workers and age

Because sawmilling for a long time had been local and seasonal and had functioned as a supplemental income to farmers and crofters, it might be reasonable to assume that there would have been few younger workers. Ostergren found in his study of Matfors that the mean ages for seasonal workers in 1846 was 38 years. More than half of the workers were between the ages of 30-44; very few were younger than 30 years or older than 50 years. Ostergren concluded that seasonal work at Matfors did not seem to have been an activity for younger males. The seasonally employed men were all married, had families and were well established in the surrounding environment. The mean age changed very little, even though the structure displayed somewhat more diverse age categories by the 1860s. The middle-aged workers would continue to dominate the seasonal labour force in Tuna.

Ostergren found that young, less established workers were given more opportunities to acquire seasonal employment during the 1860s. A result of this change was that the age structure at Matfors mill subsequently displayed its widest distribution during the 1870s. For the first time the workforce included men in their teens. The increased age diversity, observed between 1846-1860, had by 1873 resulted in two distinct age groups. Even though the distribution of age widened between 1846-1860, it was something that was more noticeable among individual workers.

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704 Ostergren 1990, p. 59. Ostergren could find no evidence of any teenaged workers having been present in 1846. Seccombe came to a similar conclusion in his studies of industrialised Britain. He wrote that during the first stage of industrialisation, young people comprised of a substantial minority of the labour force (Seccombe 1993, p. 35).

705 Ostergren 1990, p. 60. Another interesting age-related aspect to Ostergren’s study was that age also seemed to have been related to what kind of task the workers performed; for example, the seasonally employed workers in the mill were usually younger than the workers involved with log-rafting. Ostergren drew the conclusion that millwork required a regular physical presence on the industrial estate and often, in the case of seasonal employees, work that was subordinate to that of more skilled permanent employees, was less open to older men. Other tasks performed outside the industrial estate were more independent and would not have had the same age restrictions as long as the work was conducted satisfactorily (Ibid. p. 61).

706 Ostergren 1990, p. 63.

707 This also worked in the opposite direction, as Ostergren noted that in 1873 there was also a worker in his 70s who was still employed at the mill. Ann-Kristin Högman showed in her dissertation that 75 percent of males in their 60s and 76 percent of males in their 70s, registered in the town of Sundsvall, had a recorded occupation in 1880 (Ann-Kristin Högman, Ageing in a changing society. Elderly men and women in urban Sweden 1830-1930, Umeå 1999, p. 69).
those employed full time than the seasonal workers. The highest concentration of workers could now be found in age groups 30-34 and 45-54. The result showed that the workforce in 1873 was no longer dominated by middle-aged workers.

**Age according to the 1879 lists**

It would seem that from the 1870s and onwards, younger workers became more prominent within the workforces in different working communities. Ericson found in his study of mechanical industries that they had a young labour force between 1880-1909. The strongest concentration of workers was found in age groups 20-39 years. The workers usually started at a young age but it was rare that workers were younger than 20 years or older than 50 years.

**Table 7.1 Mean age for the employed workers at Klampenborg, Kubikenborg, Heffners and Svartvik sawmills according to the 1879 lists (N=600*)**

<table>
<thead>
<tr>
<th>Mean age 1879</th>
<th>Klampenborg</th>
<th>Kubikenborg</th>
<th>Heffners</th>
<th>Svartvik</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age 1879</td>
<td>33.8</td>
<td>33.7</td>
<td>32.0</td>
<td>35.8</td>
</tr>
</tbody>
</table>

A review of the workers’ mean ages at the different sawmills linked to the 1879 lists shows that there were few differences. Svartvik had a slightly higher mean age. Workers at Heffners also displayed a wide range of workers from different ages, but still had the lowest mean age. Compared to Ostergren’s results, these workers appear to have been somewhat younger. This difference may be explained by an increased frequency of hiring younger workers, but also that Matfors might have had a slightly different recruitment strategy than the other sawmills in the district, as they had a greater focus on local labour.

According to both Ostergren and Ericson, certain age structures seem to have dominated among the employed workers within the industries throughout the second half of the 19th century. Can similar age group clusters be found at the mill in the Sundsvall district?

708 Ostergren 1990, p. 60.
709 Ibid. p. 64.
710 Ericson 1987, p. 166.
Figure 7:6 Age structure among employed workers at Klampenborg, Kubikenborg, Heffners and Svartvik sawmills according to the 1879 lists (N=600*)

*Klampenborg (N=64) Kubikenborg (N=107) Heffners (N=132) Svartvik (N=297).

Figure 7:6 shows that workers in age groups 20-29 and 30-39 dominated the workforce recorded in the 1879 lists at all four sawmills. These age groups incorporated slightly more than one-third each of all workers. Age groups 20-29 were larger than 30-39 at Klampenborg and Svartvik, while the opposite was true for Kubikenborg and Heffners. Only 4.7 percent of the workers were found to have been younger than 20 years and only 15.3 percent were 50 years or older.

The sawmills displayed a different percentage of workers in the older age groups. The fewest workers aged 50 years and older were found at Kubikenborg (8.4 percent), whereas Heffners displayed the highest percentage (20.5 percent). The younger age groups were more distinct at Svartvik, 8.1 percent of the workers were younger than 20 years. Together with Klampenborg, Svartvik had the largest percentage of workers below the age of 30. Klampenborg also displayed the highest concentration of workers in the fewest age categories, having no workers below the age of 20 or above 59. Svartvik’s workers, however, had the most varied age diversity compared to the workers at the other sawmills. The oldest worker
recorded was born in 1803 and the youngest in 1862. Svartvik was therefore the only mill where the same family members from more than two generations could be found employed simultaneously. This may be connected to that Svartvik had a previously settled population, which would have allowed for more sons to follow in their fathers’ footsteps, resulting in a greater age distribution and may account for the largest group of workers younger then 20. The results from Svartvik therefore display some similarities with Ostergren’s study, which showed an increased presence of teenaged workers during the 1870s.

7:3 Marital status among the sawmill populations

Previous research has stated that the first inhabitants and migrants to the sawmill industries were families and that it was these inhabitants who would make up the core of the sawmill communities populations. Cornell even stated that families made up the core of the workforce even during the early stages of industrialisation. Tedebrand claimed that there would have been an exceptionally high proportion of married workers during the expanding phases of industrialisation.

According to Figure 7:7, the proportions of married men and women in sawmill areas appear to have been slightly higher than the proportion of married men and women in non-sawmill areas. Within the sawmill communities a larger proportion of women appears to have been married than men. This is perhaps not a complete surprise because the populations would have consisted of fewer women. The female proportions display a slight peak during the late 1870s and might be linked to the fact that the proportion of men in general decreased. The proportions of married men and women within the sawmill communities appear to have been considerably high already among the first officially registered inhabitants. This would confirm previous research that stated that there was a strong in-migration to industrialised areas by married individuals and families.

711 A 76 year old worker may, however, be questioned, but there is no reason to believe that the list would have included non-active workers. Högman indicated though that the number of elderly men involved in industrial work would have been low. “A maximum of five percent of all industrial workers were over the age of 65 and the rate did not change between 1880 and 1930. She concluded that this was connected to an increased importance of having a skill base linked to the new technology (Högman 1999, pp. 78, 83).

712 Ostergren 1990, p. 64.
714 Ibid. pp. 118, 225.
715 Tedebrand 1977, p. 257. The high proportion of married women also led to high birth rates within the sawmill communities. However, Tedebrand claimed that after the recession during the 1890s, the family’s central role within the sawmill community was weakened (Ibid. p. 258).
The proportions of married men and women within non-sawmill areas displayed a similar pattern of a higher proportion of married women than men. These proportions were more equal to each other and while the difference in sawmill areas remained highly noticeable, it was less detectable in non-sawmill areas. In fact, from the early 1880s, the proportion of married men and women in non-sawmill areas was practically identical.

Figure 7:7 Percent of married men and women among individuals aged 15 and older in sawmill and non-sawmill areas in Skön, Alnö, Selånger, Njurunda and Tuna 1850-1890*

Source: Demographic Data Base, Umeå University.
*Information from Svartvik is missing 1854-1859.

The proportion of unmarried in general appears to have been rather constant throughout the second half of the 19th century. Unmarried adults within the sawmill communities’ core populations would, however, have been in a clear minority. While there was a slight decrease among unmarried women in non-sawmill areas, unmarried men and women within the sawmill communities actually showed signs of having increased by the end of the period. That fewer women within sawmill areas than in non-sawmill areas remained unmarried is not in the least surprising because the sawmill areas had fewer women in residence. The results from chapter five showed that slightly more than half of all female migrations towards sawmill areas were conducted by unmarried women. Even though as many as 48.1
percent also were married, this would suggest that few adult women would have remained unmarried for long.\textsuperscript{716}

\textit{Marital status 1879}

There was a strong growth in marital frequency in Sundsvall during the 1870s according to Tedebrand. The reason for this was that many migrants who had postponed marriage, finally married while in the district. In fact, Tedebrand claimed that the industries stimulated the growth of families and all through the 1880s family growth continued to be strong and marriage frequency high.\textsuperscript{717} That the proportions of married men were high in Figure 7:7 suggests that the majority of the men in the 1879 lists also should have been married.

\textit{Figure 7:8 Married workers among the 1879 employee group at Klampenborg, Kubikenborg, Heffners and Svartvik (N=605*)}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{married_workers.png}
\caption{Married workers among the 1879 employee group at Klampenborg, Kubikenborg, Heffners and Svartvik (N=605*)}
\end{figure}

Demographic Data Base, Umeå University.

\textsuperscript{716} Blumenthal wrote in relation to Mineville that “women were so scarce in the early days that men stared at them almost as if they were circus freaks.” A woman interviewed stated that it was nice to be interesting but that it was uncomfortable being stared at (Blumenthal 1932, p. 76).

\textsuperscript{717} Tedebrand 1977, p. 261.
As expected, the majority, 69.9 percent, of the workers in the 1879 lists were married. The differences between the communities were small, but Kubikenborg and Svartvik appear to have been the two communities in which the largest proportion of men were unmarried. The low proportions of women of marital age should also have meant that men rarely should have hesitated getting married. The reason as to why so many workers were married is most likely connected to the fact that sawmill owners preferred to hire married workers because they were regarded as more reliable.718 It was beneficial for the workers to be married because married workers were given better accommodations than single workers if they were accompanied by their families.719

7:4 Family and household size
People were supposed to grow up, find employment, a spouse and start a family. It was what society dictated and everyone expected.720 Although the idea of large families during the 19th century is to some extent exaggerated. It was true that many women gave birth to half a dozen children, but these really large families were only a reality if women married early in life and were lucky enough to survive multiple childbirths.

Eriksson and Rogers showed that the mean household size in east central Sweden did not change considerably between 1790 and 1890. Household size in pre-industrial Sweden was fairly low and displayed average sizes of four individuals. Among the peasantry the average household consisted of five individuals while the households among the landless groups were among the smallest.721 Household and family size were dependent upon the age of the children and when they eventually left home. Children within the landless families usually left home earlier, whereas almost 70 percent of children in peasant households remained with their parents.722

Children born
Local research has shown that fertility in general continued to decrease during industrialisation, but the reasons as to why is still debatable. Ambjörnsson made a distinction between different family types rather than trying to connect a specific family size to industrialisation. He claimed that families either planned for the fu-

718 Berglund-Lake 2001, pp. 30, 123.
719 Gustafsson 1965, p. 158.
722 Ibid. p. 154.
ture or not. Those who did would usually have utilised family planning strategies and limited the size of their families, whereas families without specific strategies consequently would have been larger.\footnote{723} Christina Fjellström carried out a cross-section study of the residing families in Stocka sawmill community in 1877 and 1882; she found the almost 50 percent of the families had four children or more. She concluded that the average family size was large even during the early stages of industrialisation.\footnote{724}

Figure 7:5 clearly displays that the proportion of children within the sawmill areas increased from the mid 1870s and all through the 1880s, which may suggest that families either grew or that family in-migration increased.

Figure 7:9 Frequency of children born within sawmill areas and non-sawmill areas in parishes Skön, Alnö, Njurunda, Selånger and Tuna 1850-1890*

\begin{figure}
\centering
\includegraphics[width=\textwidth]{frequency.png}
\caption{Frequency of children born within sawmill areas and non-sawmill areas in parishes Skön, Alnö, Njurunda, Selånger and Tuna 1850-1890*}
\end{figure}

\footnotetext[*]{Source: Demographic Data Base, Umeå University. *Does not include stillborns.}

\footnotetext[723]{Ambjörnsson 1989, p. 227. Interestingly, Ambjörnsson found in his interviews that the majority of the men who grew up in large families during the turn of the century had few children themselves. William Skinner suggested that “in many if not most populations, families did what they could (and do what they can) to shape the size and configuration of their progeny [...] In consequence, while some families may consciously strategize, i.e., engage in family planning, others in the same population may simply follow customary practices that willy-nilly favour certain ‘family planning’ objectives” (William G. Skinner, “Family systems and demographic processes” \textit{Anthropological Demography. Toward a new synthesis}, David Kertzer & Tom Fricke (eds.), University of Chicago Press 1997, p. 66).}

\footnotetext[724]{Fjällström 1990, p. 161.}
The number of children born within the sawmill areas and the non-sawmill areas show a clear increase during the last decades of the century. The result in Figure 7.9 seems to contradict that families became smaller because more children clearly were born, however, one also has to consider in-migration and a natural population progression as a result of larger populations in general. In relation to the total population, children born within both area types showed extremely small proportions, even though children born within the sawmill areas were higher than within non-sawmill areas. Again, this would have been a result of small populations, at least in the beginning of the time period studied.

Tedebrand wrote that the marital fertility in Sundsvall decreased during the 1880s and he wanted to link this with the families’ adjustment within the industrial community.725 Still, the high proportion of married women led to high birth rates within the sawmill communities. However, Tedebrand claimed that after the recession in the 1890s the family’s central role within the sawmill communities weakened.726

Household size 1879

In the local study of household size in 1879 at Svartvik in Njurunda parish and Kubikenborg in Sköns parish, small families appear to have been the most common. This could probably be linked to the workers’ ages. Mean ages indicate that they would just recently have been married and not have had time to father many children yet. Although, considering the dispersed age categories, it would suggest that some of the older workers may have had adult children who had left their parents’ households. It is therefore difficult to say anything conclusive about the married workers who resided in the community without any children living in the household.727 The group was, however, small in relation to the group of workers who lived with children in their households.

The majority of the workers experienced the birth of their firstborn child prior to 1879. The largest group became a father for the first time during the 1860s and

725 Tedebrand 1977, p. 263.
726 Ibid. p. 258.
727 In most cases though, the information provided by lists reflected the information that was recorded in the church registers, which indicate that the workers included in the study did not have other children registered in the vicinity. That the majority of the workers in the lists also were married and that the average worker was in his 30s would indicate that even if the workers did not have families registered in the church registers or in the lists, did not necessarily mean that they did not have one. Based on this it is likely that a clear majority of the workers actually had children. When compared to the church registers it also showed that 54.5 percent of the 878 workers who could be identified, became fathers prior to 1880. Thus indicating that almost 50 percent of the workers in the lists actually had fathered children, even though they may not have resided with them in the sawmill communities in 1879.
1870s. Assuming that all children below the age of 20 still resided with his or her parents, it presents a total of 36.3 percent of the households in 1879 that contained children between the ages of 0-19. Also remembering that 48.2 percent of the workers were married, it can be estimated that more than two-thirds of all married workers in 1879 should have had children present in the household.

Table 7:2 Children present in households at Kubikenborg and Svartvik sawmill communities according to the 1879 lists*

<table>
<thead>
<tr>
<th>No. of children in the household</th>
<th>No. of workers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>111</td>
<td>46.3</td>
</tr>
<tr>
<td>3-4</td>
<td>64</td>
<td>26.7</td>
</tr>
<tr>
<td>5-6</td>
<td>19</td>
<td>7.9</td>
</tr>
<tr>
<td>7 or more children</td>
<td>4</td>
<td>1.7</td>
</tr>
<tr>
<td>Foster children</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Married, no children present</td>
<td>41</td>
<td>17.1</td>
</tr>
<tr>
<td>Total</td>
<td>240</td>
<td>100</td>
</tr>
</tbody>
</table>


*This study is based upon information provided by the 1879 lists and only includes information about 41.9 percent of the workers registered in the Svartvik and Kubikenborg lists. Information about household size was not provided in the lists from Heffners and Klampenborg.

According to Table 7:2, the majority of the workers, 46.3 percent, had between one and two children present in the households, whereas slightly less than one-third had between three and four children present. The fact that less than ten percent of the workers had more than four children present in the household in 1879 would not indicate smaller families in general or a low marital fertility, but it does suggest that the sawmill workers in these communities did not have many children residing with them in the households simultaneously.

One interesting result is that a considerably larger percent of workers actually lived without children in their households, than workers living with more than four children. Compared to Fjellström’s results from Stocka sawmill, families at Kubikenborg and Svartvik would therefore have been small. The number of families included in the study at Stocka was, however, considerably fewer and the different results may therefore not be as compatible as one would have wished.

Nor did Fjellström offer any information about the workers’ ages. The results show

that there were considerable differences in household sizes between different sawmill communities.

Even though children within the sawmill communities in the Sundsvall district grew in proportion to the total population, the research would seem to suggest that the average family and household size would have decreased before industrialisation began and continued to do so during the 19th century. It is in agreement with Tedebrand’s findings that showed that the nuclear family, married couples with or without children accounted for 71 percent of the population in Skönvik sawmill community in 1890. He concluded that families with many children did not appear to have been common at the mills in Sundsvall during the end of the century, nor were three-generational households.729

Still, as results from this study have shown, children were the largest demographic group within the sawmill communities. This is why it is slightly difficult to place the results, which are primarily based on the 1879 lists, in a comparative perspective with the longitudinal study. Especially because the longitudinal study showed that children at Svartvik in 1879 constituted 39.1 percent of the total population and 44.1 percent at Kubikenborg. Despite the small number of children who were recorded in the 1879 lists, it is clear that they were an important part of the sawmill communities; even though the proportions between sawmills would have varied.

7.5 Conclusions

The demographic proportions of the sawmill communities were an important aspect of their development and usually reflected both the need of the industry and the development of the communities. The demographic proportions within the sawmill communities’ de jure populations created family-oriented mills where children were the dominant demographic group. They made up almost half of the registered populations. Males aged 15 and older within the core population only made up approximately one-third of the registered sawmill populations. In fact, the low number of adult males, in relation to the employed workforces at the sawmills, suggests that the number of temporary and seasonal workers may have been considerably higher than previously estimated. The presence of women in the sawmill communities were highly irregular during early stages of industrialisation, most likely due to small populations. The largest proportion of women could be detected during the mid 1870s when migration would have been the most

729 Tedebrand 1977, pp. 266, 268.
extensive. The proportion of women, in relation to men though, remained low and showed a continued decline after 1870.

The sawmill communities' *de facto* populations created a dominating male environment which would have been reflected in the social environments within the communities, like the popular movements. This duality would have been reflected in the communities' different population structures during summer and winter.

The proportions of married individuals in the sawmill areas were high and would indicate that married couples may have made up the core populations. The results from the local study, which showed that the majority of the marriages had been entered after employment had begun, show the sawmill communities as marriage facilitators. This is especially apparent considering that the longitudinal study displayed that a higher proportion of the populations within the sawmill areas were married in comparison to populations in non-sawmill areas. A larger proportion of women than men within the sawmill communities would have been married and fewer women unmarried. A likely prospect was that few unmarried adult women remained settled and/or unmarried women; being a minority group it is likely that they were well sought after by the males.

The local studies from 1879 on household size and age, which exemplify the longitudinal study, disclosed a fairly low mean age and that few workers had many children living in the household. The sawmill communities were therefore fairly "young" communities in the respect of being fairly newly established communities and having a young population. This would have contributed in making the sawmill communities more family oriented and this would have positively influenced community development because it would have pressured the owners to offer different social services.

In 1879, the majority of the workers at Svartvik and Kubikenborg had one or two children present. Even though the age groups were more dispersed than the mean age indicated, it also suggested that many of the workers could have had adult children who did not reside in their parents' household. The results of the local study on children were confirmed by data from the longitudinal study, which showed that the number of children present in the sawmill areas showed its lowest proportion during the mid 1870s. The results displayed a larger proportion of children in the sawmill areas by the end of the century. This would suggest that it might have become more common for workers during the latter phase of industrialisation to have slightly more than one child present in the households. It also showed that more and more children were born within the sawmill communities, which would have been a natural progression of larger and more stable populations settling.
The importance of family and kin during industrialisation has long been discussed. Many studies have shown that family and kin continued to be an important feature within the industrial communities during the 19th century. The family continued to take advantage of its strong bonds, even though industrialisation would have changed the family's roles. It has also been indicated that people managed to remain close to their agricultural pasts by means of family migration, kinship recruitment and temporary migration. It has even been suggested that kinship was strengthened, even though industrialisation and migration would have made it difficult to keep families and kin together in the same place. Norberg stated in his dissertation that the move to the sawmill communities would have dissolved the sense of community and the networks of family and relatives from back home. However, Norberg also claimed, in a paper with Åkerman, that the family unit did not lose its importance or that kinship ties became weaker because family and kin were important to the migrants' adjustment within the industrial communities.

The question of family and kinship is an important aspect in understanding the development of the sawmill communities. If kin were present, they should have played an important role within these areas, especially among the registered core populations around which the communities had been socially structured and organised. A stable core that would have included kinship networks is believed to have had a positive influence on community construction, as well as being a consequence of it.

This chapter aims to study the presence of kin between the sawmill workers registered in the 1879 lists from Klampenborg, Kubikenborg, Heffners and Svartvik. It has already been established that the majority of the adult core populations were married and that almost all workers resided at the mill sites. This has enabled a view of this cohort of workers as close-knit groups, not only belonging to the

734 Norberg 1980, p. 79
735 Norberg & Åkerman 1979, p. 113.
same workforces at their respective mills, but also to the same residential communities. It has also, in effect, made it possible to identify family units belonging to the core populations and to tie kinship networks and relationships within these groups specifically to the sawmill communities.

Kinship is discussed in relation to marriage, migration and recruitment. What role did these aspects have in relation to kinship structures? Whom did the workers marry and when? How common was kinship recruitment? Were there any noticeable differences in networks and relationships between communities? How extensive were the kinship networks and relationships within these four sawmill communities? Special focus is placed on the Svartvik sawmill community from where four extended kinship networks have been reconstructed.

8:1 Reconstructing kinship networks

Ostergren claimed that the challenge with a sawmill population was to find the mechanism by which kinship was relevant to a migration population. From the results in chapter four, it could be established that the sawmill communities in the Sundsvall region differed from each other with regard to population size and development. This would suggest that the mechanisms of kinship and their relevance also might have differed between different core populations and communities. This would make it more difficult to find a specific or common pattern of kinship relating to all sawmill communities.

The ties surrounding family and kin are usually dependent on emotional bonds between members of different family units. It is therefore difficult to talk about the family as only consisting of the nuclear unit because families and kinship networks consisted of several different kinsmen interacting with each other on different levels. “In other words, kinship relationships, whether of blood or marriage,” do not necessarily function to link groups, or depict actual situations. This would imply that no kinship network or family would have had the same structure or included the same connections.

Andrejs Plakans wrote that kinship roles only achieve meaning in the context of reciprocity. If they are not acknowledged nor reciprocated, kinship ties could not be sustained; they would therefore lack meaning and, in a sense, cease to ex-
ist. This makes the question of biology extremely difficult. Plakans noted that it is easy to assume that a father-son relationship would have lasted a lifetime.\footnote{Ibid. p. 89.}

Blood relations may be everlasting from a biological aspect, but are by no means uncomplicated, nor does kinship cease to be infinitely fluid in interpretation and consequence because of a biological relationship.\footnote{Davidoff 1999, p. 83. “If recognition extended so far as to include everyone who is related by blood, though however distant a tie, clearly everyone would be considered a relative of everyone else. The network of kinship is definitely extensible” (Goode 1964, p. 56).} In the event of a death or divorce, relationships to in-laws would grow more restrained and would eventually lose their value, especially in the event of re-marriages. Then, in part, kin connections would be dissolved.\footnote{Plakans 1984, p. 89. According to Strathern though, there exists an “ambiguity about the extent to which relatives by marriage are counted as ‘relatives’ at all.” People would not, Strathern claimed, include relations of an in-coming spouse as kin, something that would also apply to offspring of second marriages (Strathern 1981, p. 158). Links created to older generations through kinship lines would still be considered and valued among the living offspring. Even though the relationship roles provided by the departed generation would have lost their physical meaning, they would still be valued because they provided background and legitimacy to an ancestral line. It is a constant reminder that kinship roles are not static (Plakans 1984, p. 189).}

Most families have some relatives that were classified as being closer than others, biological connection notwithstanding. It would have been too difficult and too costly to include all kin into the most private sphere, which would have included parents and children and some or all of the closest blood relatives, such as, siblings, grandparents, grandchildren, aunts, uncles and cousins.\footnote{Strathern 1981, p. 159. Plakans 1984, p. 89.} Although, a problem when it comes to kinship is that in a sense it can be seen as trivial because it really does not determine anything definitely “wider than the nuclear family.”\footnote{Strathern 1982a, p. 75.} Nor can it be graded because there are no apparent distinctions that distinguish distant kin circles. They are just seen as a weaker form of closer kin and mentioned as distant kin, remote aunts and uncles.\footnote{Plakans 1984, p. 89. Strathern 1981, p. 160.}

\textit{Perhaps most families have some tie with one or more relatives still further away in the kin network. Those noted above seem to be linked to the nuclear family in an inescapable way; it is difficult to ignore or reject any of them without simultaneously rejecting a fellow member of one’s own nuclear family. The child can not ignore his uncle without hurting one of his own parents, and reciprocally. A sister may not neglect the relationship with her sister-in-law without impairing her relationship with her brother.}\footnote{Goode 1965, p. 10.}
Despite this, all families is included in a wider network of kin and in-laws, once or even twice removed and sometimes relatives of even more remote connections. This means that extended kin should not be dismissed; kinship had many functions and played an important part in certain aspects in life relating to marriage, employment and migration.747

The linking process and network structure
The 1879 lists and their linking to the church registers allowed for a kinship study to be performed. Emanating from the preset cohort of identified workers from the four sawmills, this group innately formed a limit of the size of the networks and made the networks less infinite and more manageable. This also means that the actual kinship networks were far more extensive than this study will be able to show. Even though the primary source used is static, the kinship networks depict a longitudinal perspective due to them being linked to the church registers. By focusing on the sawmills as separate enclaves, all individual relationships present offer a clearer structure on how kinship networks developed in specific environments. Still, the family unit is not an encapsulating group because the networks go beyond a single household structure. This will provide insights into the importance of families in community construction and the level of family cohesiveness in a time of migration and industrialisation.

The linking process was a four stage process. First, during the initial linking process suspected kinsmen were only marked. Second, the workers marked were analysed, and all suspected kin were extrapolated to a temporary database. Third, the connections underwent a verification process using the church registers and specific variables, such as last names. This process excluded many suspected kin on the basis of too little information. The fourth stage, a second verification took place, after which all confirmed kin relations were compiled in a separated database. This enabled kinship networks to be reconstructed.

The reconstructed kinship networks in this study have, despite the complications of kinship relationships, included all verified kinship connections. The networks were reconstructed from the assumption that all connections within a migrant community would have had a social relevance and been reciprocated and therefore unique and equally valued. This includes both relationships between blood relations and in-laws.748 Because all relationships were unique and had an

748 Goode claimed that especially siblings could have strong emotional bonds to each other and as a consequence, when they got married, their kinship circle came to include not only the new spouses but also a variety of new in-laws (Goode 1965, p. 10).
equal value, each separate relationship has been individually displayed from the perspective of all involved kinsmen.749 This could be argued to create a doubling effect in relation to the relationships, but it cannot be avoided. As Plakans wrote, kinship roles cannot be graded.750 A relationship must be viewed from both kin involved as one individual's perspective cannot be claimed to be more important. It is only in the kinship reconstructions that relationships have been described from the perspective of one central individual. These individuals should be viewed as starting points though, because they are not connected to all individuals that can be tied to the networks. They usually represent the oldest individual in the network from which the largest number of relationships and networks could be tied.

Defining kinship networks
A kinship network is defined from its social properties and its possibilities to relay information.751 These aspects would have been important during industrialisation, helping migrants on the move and migrants that settled.752 Having kin present within the sawmill communities would have had similar functions, but may also have been given a symbolic value.753 As migrant communities, most sawmill areas would have lacked pre-settled populations and for a migrant to be able to claim kinship to one or two other new settlers is likely to have enabled a stronger connection to the area to be formed.754 Kinship networks are presumed to have contributed to the creation of more stable population cores. The presence of especially family units would therefore have had positive influences on community construction and social structures within the communities.755

Identified relationships
A total of 34 different kinship relations could be identified in the material. These relationships ranged from relationships within the family unit and the closest blood kin (eight such types were identified) to more extended relationships having been acquired through marriage. Eight relationships were connected to in-laws

749 This means that an individual with several kin relations is featured in several rows. For example, Olof Högfeldt (Klampenborg) worked with both his sons at the mill. He has therefore been displayed twice, once for each relationship. Whereas the sons in their turn also have been featured in two rows, one individual displaying their relation to their father and the second displaying their relation to each other.
750 Plakans 1984, p. 89.
753 Molloy 1986, p. 222.
754 Goode 1964, p. 59.
755 Bott 1971, p. 75.
while 15 relationships were connected to in-laws and blood connections acquired through marriage, once or even twice removed.

Connections such as father/son, brother/brother and father-in-law/son-in-law appear to have been among the most prominent within the 1879 employee group. The most common kinship relationships were, in descending order:

- Brother (77)*
- Son (53)
- Father (36)
- Brother-in-law (35)
- Son-in-law (28)
- Father-in-law (24)
- Wife’s brother-in-law (16)

*Numbers within brackets indicate number of individual workers to which this type of relationship applied.

Among biological kin, it was most common to work with a brother. A total of 32 pairs of brothers could be identified and even 13 cases where workers had two of his brothers present at the mill at the same time. This means that of all kin-connected workers, 39.9 percent were employed simultaneously as a brother.

The label ‘father’ applied to 36 of the workers and together these men had 53 sons present, whereof 12 fathers were employed alongside two sons simultaneously. Two fathers had three sons each employed at the same time, while the remaining 22 men had been verified working alongside one son. These results would imply that kin recruitment within the closest family was likely to have occurred and that fathers may still have been responsible for finding their sons’ employment.756

There was also a strong presence of wives’ kin in the sawmill communities. Almost one-fifth (17.9 percent) of the workers worked with their brothers-in-law; six workers had two brothers-in-law present, five workers had three present and

756 Davidoff mentions the fathers’ responsibilities towards their adolescent sons, but also that other persons within a family’s kin and social networks could be leaned upon for help in finding the children employment (Davidoff 1999, p. 148). Davidoff also discussed Talcott Parsons and wrote that he believed that industrialisation widened the nuclear families’ kin network. “Obligations to this wider kin group were more significant than within the smaller, nuclear group in order to ensure that the wider group remained cohesive” (Ibid. p. 21). Finding employment for your children was also a way for parents to exercise authority over the children’s occupational choices (Ibid. p. 30).
one worker had five brothers-in-law present simultaneously! Two workers labelled fathers-in-law had two sons-in-law each at the mill, whereas one worker had three sons-in-law present at the same time. When reviewing the situation for the fathers-in-law and sons-in-law in this study, the situation may be similar to that of fathers and sons. As the fathers, the fathers-in-law could have asserted authority in some form over their sons-in-law. It is not impossible that they might have facilitated employment opportunities.

The only extended kin relation represented that lay outside the family unit are the workers who worked with their wives’ brothers-in-law. The majority had only one of his wives’ brothers-in-law present; nine workers had two of their wives’ brothers-in-law present, while four workers were employed alongside three of their wives’ brothers-in-law simultaneously.

8.2 Kinship networks in the sawmill communities

Kin-connected workers

The 1879 lists included 878 workers of which 69.1 percent could be linked to the church registers. Of these, a total of 196 workers, or 22.3 percent had verified kin connections within their communities, with other workers from the 1879 employee group. Because these lists include parts of both the de jure and the de facto populations, they offer a rare insight into the lives of the sawmill workers residing in these four sawmill communities in 1879.

Table 8.1 Kin-connected workers at Klampenborg, Kubikenborg, Heffners and Svartvik working with existing or future kin in 1879

<table>
<thead>
<tr>
<th></th>
<th>No. of kin-connected workers</th>
<th>% of 196</th>
<th>% of mill workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Klampenborg</td>
<td>12</td>
<td>6.1</td>
<td>12.9</td>
</tr>
<tr>
<td>Kubikenborg</td>
<td>22</td>
<td>11.2</td>
<td>15.9</td>
</tr>
<tr>
<td>Heffners</td>
<td>21</td>
<td>10.7</td>
<td>9.9</td>
</tr>
<tr>
<td>Svartvik</td>
<td>141</td>
<td>71.9</td>
<td>32.4</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100</td>
<td>22.3</td>
</tr>
</tbody>
</table>

The results showed that slightly more than one-fifth of the workers recorded in the lists had at least one confirmed kinship relationship with another worker. Still, it also means that 77.7 percent of the workers recorded in the lists did not have a verified kin connection to a fellow worker. As migrant communities, the sawmill communities would have had a high population turnover and as Seccombe suggested, it would have made it difficult to keep families together.\footnote{Seccombe 1993, p. 19.} The possibility of finding more kin may have been higher had other church registers beyond the Sundsvall district been included in the study.

Svartvik sawmill community is where kin most frequently appear to have been employed simultaneously, 71.9 percent of the 196 kin-connected workers identified were employed there. This means that more than one-third of the 435 workers registered in the Svartvik list were connected through kinship. At Kubikenborg and Klampenborg, 15.9 and 12.9 percent of the respective workforces were connected through kinship. Workers at Heffners displayed the lowest percentage, only 9.9 percent of the employed workers in 1879 could be verified having existing or future kin employed at the mill. The differences between the sawmills are highly noticeable regarding kin-connected workers. This seemingly strong presence of kin-connected workers at Svartvik indicates that family and kin were more prominently featured among the core population in this particular community.

**Kinship networks**

Among the 196 kin-connected workers, 87 separate networks could be reconstructed. The majority of these networks were limited to the closest blood relations and in-laws. This was the case for the workers at Klampenborg, Kubikenborg and Heffners. The study showed that the majority of all workers only were involved in one network each, while at Svartvik more than one-fifth of all kin-connected workers were involved in two or three networks simultaneously. It was therefore possible, from the Svartvik list, to reconstruct larger and more complex networks, displaying connections beyond the primary family unit. It showed that an individual could be included in several units or a smaller network of kin through different connections.\footnote{Twenty workers were connected to two networks at the same time, while five workers were linked to three separate networks simultaneously.}

Even though several networks could be linked, it is difficult to assess the degree of interaction that might have taken place within the networks and between different networks. It is difficult to know to what extent people interacted with their extended families and whether or not they were called upon for help, espe-
cially in areas where nuclear family households dominated.\textsuperscript{759} Laslett speculated on what sort of obligations family and kin really had towards each other.\textsuperscript{760} The most effective kin relations would, according to Laslett, have been found within the immediate family group and not within a wider kinship network including extended kin. In fact, he suggested that social networks would have been more important than relationships with extended kin. This reinforces the belief that the local community in which people resided had a prominent and important role in an individual’s life.\textsuperscript{761} Social networks is unfortunately very difficult to reconstruct, kinship networks can, however, be reconstructed and they are not without relevance when discussing belonging and a sense of community that would have arisen within smaller communities.

Table 8:2 Number of kinship networks at Klampenborg, Kubikenborg, Heffners and Svartvik sawmills 1879-1900 among the 1879 employees

<table>
<thead>
<tr>
<th></th>
<th>No. of kin networks</th>
<th>% of 87</th>
</tr>
</thead>
<tbody>
<tr>
<td>Klampenborg</td>
<td>5</td>
<td>5.7</td>
</tr>
<tr>
<td>Kubikenborg</td>
<td>11</td>
<td>12.6</td>
</tr>
<tr>
<td>Heffners</td>
<td>10</td>
<td>11.5</td>
</tr>
<tr>
<td>Svartvik</td>
<td>63</td>
<td>70.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>87</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>


The 87 kinship networks found in these four sawmill communities were of various sizes and complexity and included a total of 398 individual kinship relationships. Because it could be established that the majority of the kin-connected workers were employed at Svartvik, it is not surprising that the largest number of networks was also found in this community. The apparent difference between Svartvik and the other sawmills is once again highlighted. Even if it is taken into consideration that the networks among the workers were more extensive because not all could be verified and were excluded, there is still a major difference between the mills.

\textsuperscript{759} Peter Laslett, ‘Family, kinship and collectivity as systems of support in pre-industrial Europe; a consideration of the ‘nuclear-hardship’ hypothesis, Continuity and Change 3:2 1988, p. 160.

\textsuperscript{760} Ibid. p. 157.

\textsuperscript{761} Ibid. p. 166. It can only be assumed that blood relations may have had considered their relationships and their roles more important than they would have with their extended kin (Plakans 1984, p. 90).
The results show that kinship networks and relationships were far more complex and extensive at Svartvik, than within the other sawmill communities. It is likely though that this was connected to Svartvik’s unique status, having had a pre-settled population, unlike the other communities. This would, to a larger degree, have enabled different family units to merge and for kinship networks to become more firmly established before the mill had even been built. This facilitated the workers at Svartvik to manage their networks and kinship ties over a longer period of time.

The smaller number of kin networks present at Klampenborg, Kubikenborg and Heffners and the results regarding time settled from chapter six would support that the population at Svartvik tended to settle for longer periods of time. It would suggest that the populations at Klampenborg, Kubikenborg and Heffners would have been characterised by short-time settlement. Nor would it appear that the other mills had core populations of similar standing as Svartvik, which could be explained by their lack of a pre-settled population. Their core populations would have been smaller and less stable and the registered residents would have fairly recently acquired official registrations. Svartvik’s more stable population core should therefore have resulted in a higher degree of official registrations. This in turn, should imply that more workers from Svartvik would have been identified through the linking process. However, the results showed that Klampenborg, Kubikenborg and Heffners all had a higher percentage of identified workers in relation to the total number of workers recorded. Svartvik actually had the largest group of unidentified workers, despite the fact that the community also had the largest group of workers born within the district.

*Kinship relationships*

The number of different connections between the 196 kin connected workers amounted to 398 individual relationships.\(^{762}\) This, if nothing else, clearly displays that many workers had more than one type of kin present. Among the kin-connected workers, 18 relationships could be found at Klampenborg, 22 at Kubikenborg, 24 at Heffners and 334 at Svartvik. Svartvik alone represented 83.9 percent of all identified relationships between kin-connected workers.

About half of the kin-connected workers, 53.1 percent, had only one type of relationship.\(^{763}\) This was mainly prevalent at Klampenborg, Kubikenborg and Heffners. Even though almost a third of them were registered in Svartvik, over

\(^{762}\) Of these relationships, 52 percent were blood relations and 48 percent had been forged through marriage.

\(^{763}\) Klampenborg 3.1 percent, Kubikenborg 11.2 percent and Heffners 9.2 percent.
40 percent had more than one relationships present in 1879 with existing or future kin.764 Workers at Svartvik were the only workers involved in extended kin relationships; there are, for example, two networks that contained 36 individual relationships each.

Table 8:3 Number of kin-connected workers at Svartvik employed alongside existing and future kin in 1879

<table>
<thead>
<tr>
<th>No. of relationships</th>
<th>No. of Svartvik workers</th>
<th>% of 196</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>58</td>
<td>29.6</td>
</tr>
<tr>
<td>2</td>
<td>40</td>
<td>20.4</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
<td>9.2</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>3.1</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
<td>4.6</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>2.0</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>141</td>
<td>71.9</td>
</tr>
</tbody>
</table>


Displaying the percentage of kin-connected workers at Svartvik and their relationships gives a fairly good indication of the complexity and extensiveness of these networks, even though workers most commonly worked with only one or two different existing or future kinsmen at the same time. Almost one fifth of the workers (9.2 percent) had three existing and future kinsmen present; one worker was even employed with nine different kinsmen simultaneously. Among the Svartvik workers, there were even results to suggest that workers could have had more than one relationship to the same kin. For example, Albert and Wilhelm Tolf were not only brothers but also became brothers-in-law after having married sisters. Relationships at Svartvik were therefore far more complex and extensive compared to the relationships found at Klampenborg, Kubikenborg and Heffners, which only included the immediate family group and the occasional in-law.

764 Klampenborg 3.1 percent, Heffners 1.5 percent.
The stronger presence of kin at Svartvik and lower presence of kin at the other mills clearly suggest different types of recruitment strategies. Thus, the differences in presence of kin may therefore have been contingent on how the sawmill owners recruited workers and more specifically from where. While kin recruitment seems to have been far more favoured at Svartvik, it would appear that the other sawmills favoured to employ workers from outside the district, which was discovered when looking at the workers’ geographical background in chapter five.765

Start of kin relationships
The high percentage of relationships forged through birth would indicate a certain degree of family and kin migration, even though the majority of these were found among the pre-settled population in Svartvik. Still, only 12.1 percent of the relationships were entered through marriage before employment began. It is, however, somewhat difficult to talk about before and after arrival in relation to the workers at Svartvik as most of them already lived in the area when the sawmill was built. It was the only area, which in 1879 had workers employed who also had been born on site. The results showed that none of the kin-connected workers at Klampenborg were even born within the district. At Kubikenborg only brothers Erik and Lars Wickholm were born locally, in the town of Sundsvall. Workers at Heffners had a slightly stronger local connection with seven workers born within the district.766

As previously shown in chapter five, the local anchoring was most prominent among workers at Svartvik where 14.2 percent of the recorded workforce was born within the district. Six workers had been born in Njurunda parish, three each in Attmar and Stöde and one in Hässjö; not to mention the extremely large group of workers hailing from Tuna parish, Matfors specifically. Unfortunately, due to the state of the church registers in Svartvik, birth information was missing for the majority of the workers. Three workers could, however, be tied to the area through birth; Gustaf Ericsson, P.O Englund and Johan Arvid Edberg, all born in 1862. Ericsson was employed alongside his father and older brother in 1879 and was still registered in the community in 1901. Englund is included in the Hägglund/Uppling networks described in Figure 8:2. He too was still registered in 1901. In 1879,

765 The recruitment strategies found at Svartvik may even be linked back to those utilised at Matfors. Östergren mentioned that sawmill work had been a task that was passed on between the generations within a household (Östergren 1990, p. 60-61). The Dicksons’ were therefore used to hiring workers within the same families.

766 Brothers Olof and Johan Backberg were born in Indal parish, father and son Olof and Eric Söderberg had been born in Ljustorp parish, Erik Eklund in Selängar, Jonas Sjölund born in Sköns parish and his son in Sundsvall town.
Edberg was employed alongside his father and future father-in-law and in 1895 he left the community for unknown reasons.

Table 8.4 When kin connections between the workers at Klampenborg, Kubikenborg, Heffners and Svartvik were forged in relation to when the workers started working at the sawmills*

<table>
<thead>
<tr>
<th>Start of kin connection</th>
<th>No. of relationships</th>
<th>% of 196 individuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood relation</td>
<td>207</td>
<td>52.0</td>
</tr>
<tr>
<td>20-15 years before employment</td>
<td>6</td>
<td>1.5</td>
</tr>
<tr>
<td>14-10 years before employment</td>
<td>12</td>
<td>3.0</td>
</tr>
<tr>
<td>9-5 years before employment</td>
<td>10</td>
<td>2.5</td>
</tr>
<tr>
<td>4-1 years before employment</td>
<td>20</td>
<td>5.0</td>
</tr>
<tr>
<td>Starting year of employment</td>
<td>25</td>
<td>6.3</td>
</tr>
<tr>
<td>1-4 years after start of employment</td>
<td>69</td>
<td>17.3</td>
</tr>
<tr>
<td>5-9 years after start of employment</td>
<td>32</td>
<td>8.0</td>
</tr>
<tr>
<td>10-14 years after start of employment</td>
<td>13</td>
<td>3.3</td>
</tr>
<tr>
<td>15-20 years after start of employment</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Unknown</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>398</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>


*64.1 percent of the relationships were forged prior to construction/arrival to the mill. 35.4 percent of the relationships were forged after construction/arrival to the mill.

The majority of the kin connections had been forged through birth and would thus indicate a degree of family migration, especially because so few workers could actually be identified as having been born on site. Migrants would thus have brought part of their networks with them when entering the sawmill communities. While 52.0 percent of the relationships were a result of biology, 48.0 percent of all relationships had been forged through marriages, whereof 12.0 percent had been entered before employment had begun and 35.9 percent had been entered after construction. That as many as 23.6 percent of the marriages had been entered within the first four years of employment would imply that the sawmills did provide a viable marriage market, despite low proportions of women within the populations. That so few of the marriages had been entered before employment had begun suggests that many workers arrived unmarried.

Even though social networks and friendships would have been helpful in acquiring a partner, the sawmills as smaller geographical environments would have
had a limited pool of potential partners. Married couples would have had a positive affect on community construction, not only by begetting children but also creating new kinship networks. As the extended reconstructed networks from Svartvik show, an anchoring to the community appears, at least in Svartvik, to have been an attractive feature when choosing a partner.

**Kinship relationships through male or female kin**

Bott and Hareven both suggested that because females were the natural kin keepers, it was also contact with the wives’ kin network that dominated.\(^{767}\) Although, Goode implied that more frequent contact with the wives’ kin networks was more common if neither the husbands’ nor the wives’ networks were close.\(^{768}\) Even though women in general appeared to have acted as kin keepers to a larger extent than men, it must also be considered that some women may not have cared at all.\(^{769}\) It should be assumed though that the importance of kinship would have been bilateral and applied to both parents’ respective networks. But it would, of course, also depend upon which kin were closest geographically and what kind of relationships were acknowledged.

In areas where residents did not have an apparent kin connection to one another, the family unit would have become more important in contributing to the community structure, as would social networks. This also connects to Laslett’s claim that social networks could have been more important than extended kin.\(^{770}\) Bott therefore had a valid point when she suggested that the husbands’ connectedness with his neighbours would be dependent upon his occupation. If his neighbours were also his colleagues his network would have been more firmly established and close-knit.\(^{771}\) It would thus seem that in relation to these kin-connected workers kinship could be connected with the male occupation.

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\(^{768}\) Goode 1965, p. 76.
\(^{770}\) Laslett 1988, p. 166.
\(^{771}\) Bott 1971, pp. 105-106.
By studying the connections forged through male or female kin it could be determined that 55.0 percent of all relationships were forged through a male kin and 45.0 percent through a female kin. That kin connections mainly were forged through men may not be surprising, especially considering the specific cohort. However, that connections through female kin displayed 45 percent of all relationships speaks for the importance of marriage and women in general, when it came to kin networks in the sawmill communities. Among the relationships forged through a male kin we find that biological kin, in-laws and extended kin relationships were dominating. The relationships constructed within the extended networks were dominated by connections forged through female kin by marriage.772

There was a considerably higher number of relationships forged through sons than daughters. This suggest that sons might have been more inclined to stay within the immediate area if employment was offered, while daughters left and married outside of the community. However, it became apparent during the study that daughters to these sawmill workers were likely to marry sawmill workers, but they did not marry into the 1879 employee group to any greater extent.

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772 Female blood relations represented 1.3 percent of the relationships, most commonly the mother, while 14.8 percent of all kin relationships had been forged through the father and his relations. As many as 22.6 percent of all kin relationships were directly linked to both parents, indicating a strong presence of brothers working side by side. This gives us a total of 38.7 percent of relationships forged through the workers’ parental line and 32.9 percent that were forged through marriage.
8:3 Marriage in the sawmill communities

Marriage
From the 17th century, Sweden started to experience a decline in marriages.773 During the 19th century, this became more noticeable as large groups of men and women remained unmarried.774 Within the agricultural communities, kinship networks were in large part “a reflection of the efforts made by households to bolster their security through advantageous alliances.”775 To have kin close by was a great relief and alliances between households through marriage were a way of ensuring cooperation and help in economic hardship.776 However, there is nothing to suggest that constantly being surrounded by kin was better than only being close to a few. Belonging to a large network with many relatives might even have made some individuals regard their networks with little interest. Smaller groups of kin might have appreciated their networks and their kin more and have had a stronger relationship to fewer kin.777

A lack of a well functioning kin network was often a hindrance to people who wanted to advance socially.778 For migrants arriving to the industrialised communities and who lacked kin they may have wished to acquire the stability of kinship and family and marriage would have been an option because it would have facilitated settlement and belonging. Persuading kinsmen from their own networks to settle would also have helped, but as the results from this study have shown, it would not appear to have been an extremely successful practice, at least not among the registered populations.

Sabean found among German working groups in the Rhine area that “marriage dominated the construction of social and business networks.”779 This is a pattern that could also be detected among the sawmill owners as discussed in chapter three. However, due to the similar social and economic circumstances of the inhabitants in the sawmill communities, people could hardly have been accused

773 Christer Lundh, Giftermålsmönster i Sverige före det industriella genombrottet, Lund 1993, p. 3.
774 Ibid. p. 5.
775 Ostergren 1982, p. 299.
776 Ibid. p. 300.
777 Ibid. p. 307. Ostergren wrote that few individuals in a kinship network would have induced people to migrate, more so than if the network was larger.
778 Goode 1965, p. 12. Ann-Sofie Kälvemark claimed that people continued to marry as long as the advantages of marriage were greater than remaining unwed. Still, in certain occupational groups the only way of keeping a decent standard of living was not to marry (Ann-Sofie Kälvemark, “The marriage decline in Sweden. Changing marriage patterns and sexual norms in the 19th and 20th centuries,” Statistisk tidskrift 1982:2, p. 86).
779 Sabean 2001, p. 123. Strathern suggested though that because kinship ties through marriage that lie beyond village boundaries only are important to the individuals concerned, “people pay little attention to the contacts of others” (Strathern 1981, p. 174).
of ‘marrying up’ or ‘marrying down’ to any greater extent, rather than ‘marry in’. This would have granted the migrant a certain status through association.\textsuperscript{780}

Men were not alone in wanting a suitable partner, women also wanted to marry advantageously.\textsuperscript{781} Margareta Matovic found in her study of 19\textsuperscript{th} century Stockholm, that fewer women than men managed to marry their way into established families. It was however “difficult to consider the factors influencing the choice of a marriage partner by women.” Many usually “had to make do with what was available, rather than what was desirable.”\textsuperscript{782} A lack of locally born available men also forced women to choose partners born outside of Stockholm.\textsuperscript{783} Even though larger freedom in partner choice opened up for love-marriages, it would also mean a higher risk for women especially if the woman did not live close to her family. Suitors were often strangers and unknown to her family. There was no way to check his credentials to make sure that he would be a good husband. It was not uncommonly preferred by a woman’s family that she married a local man because it then was easier to ensure that she would be taken care of.\textsuperscript{784}

\textit{Partner selection and kin}

It may be argued that marriage and family were the cornerstones in the community structure, because they were important tools in expanding social and kinship networks. It has been suggested that industrialisation had an impact on people’s possibilities of getting married and their choice of who to marry as mobility would have increased. Seccombe noted within British industrial communities that the close residential situations led to an increased parental authority over children and their courtships. Young people became more closely monitored in a way that Seccombe describes as resembling the patriarchal power wielded in early modern villages, rather than a less authoritative view one would have expected to find in the loose-knit urban communities.\textsuperscript{785} Goode claimed that social demands on individual family members usually could have been so strong that most acted in accordance to their families' wishes. “Almost everyone either conforms, or claim to con-
form, to family demands.”

Although, there is also enough evidence to suggest that “young people were frequently active in the selection of their own partners.”

In other industrial areas, partner selection during industrialisation would become less controlled by parents. Especially because it became easier for children to marry against their parents’ wishes due to longer distances. Although parents may not have lived close by, it did not mean that they still did not continue to assert a certain degree of influence over their offspring’s partner selection.

Legally almost any man could marry almost any woman, but partner selection showed that the pool of eligible partners was limited and highly restricted. Especially geography and class were two influential and delimiting factors. Partner selection was therefore primarily limited to the immediate area; travelling far to meet a future spouse was not only costly but also impractical. Social norms and a pool of available and suitable partners therefore usually dictated that “like marry like.” The reason behind this has been explained as an easy way of having one’s partner being accepted by parents and general society. Despite that industrialisation opened up communities with new means of transportation and communication, the majority still chose their partners among those who lived close by. Due to geography and the marriage markets’ limitation of appropriate matches, a small minority of individuals even married relatives, primarily their first and second cousins. This was, however, more frequent within the agricul-

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786 Goode 1964, p. 4.
789 Dribe & Lundh 2002, p. 155. Dribe and Lundh also wrote that parents in southern Sweden were more influential over their children’s choice of spouse than parents in the northern parts of the country. Marriage in the agricultural community were, however, more supervised and enforced with stricter rules (Ibid. p. 153).
790 Goode 1964, p. 32. Goode wrote that “[f]reedom, after all, never means absolute freedom.” (Goode 1965, p. 33). There were always reasons why sanctions on marriage were inflicted. Families from the lower strata of society could, for instance, not permit their children to marry without having the means to support a family (Goode 1964, p. 41). If the social and economic differences between the couple were too great, the less fortunate party was either not successful in persuading the other to marry or they would have to face their families’ opposition to the match (Ibid. p. 33).
791 Goode 1964, p. 34.
792 Goode 1965, p. 28.
793 van Leeuwen & Maas 2002, p. 102. Marriage, in general, was not something that only involved those getting married, but could involve a large number of family, neighbours and acquaintances.
794 Goode 1964, p. 29.
795 Ibid. p. 39. Sabean’s study of a rural village in South Germany indicated that almost half of the marriages entered during the 1860s had been conducted between kin (Sabean 2001, p. 123).
tural areas than in urban areas, as such marriage allegiances were primarily used to consolidate or secure property.\textsuperscript{796}

The choice of marriage partner could also, as Strathern wrote in connection to Elmdon, make a point about village solidarity and belonging.\textsuperscript{797} In smaller communities where people had been settled for longer periods of time it would involve more than the two individuals to be wed, resulting in extended and complex relationships and networks.\textsuperscript{798} Strathern also noted the importance of finding the right partner especially in communities in which the majority of the inhabitants did not belong to the core populations. The choice of partner would then be crucial to a person’s social status.\textsuperscript{799} Seccombe, for example, noted that residents within working-class neighbourhoods in London showed a strong tendency to marry locally, “as country folk traditionally had. […] In Huddersfield in 1880, only one marriage in five was conducted with an outsider.”\textsuperscript{800}

\textit{Partner selection at Svartvik}

Svartvik sawmill community displayed different patterns than the other three communities, not only by its size and large workforce, but also because the mill employed several groups of kin of different ages and generations. The community at Svartvik appears to have had better prerequisites for network construction and management than for workers employed at Klampenborg, Kubikkenborg and Heffners. The social networks that long-time residency would have created would in many cases probably have been the actual facilitator for some of the marriages that had been entered. The existence of kin and kinship networks would also have created boundaries effectively cutting outsiders off.\textsuperscript{801}

- The Tolf family

The marriages and kin networks involved in the extended family of Tolf were extensive and had mainly been generated though the marriage of individuals be-

\textsuperscript{796} Kälvemark 1983, p. 16. Goode wrote that for the lower strata, especially the farmers, youths could not marry without consent from their parents, “because by his own effort he could not gain enough money with which to buy land” (Goode 1965, p. 34). Marriage also had to wait until the family was ready to relinquish control of land or property or until the youths themselves “had accumulated sufficient money to afford the marriage” (Seccombe 1993, p. 141).

\textsuperscript{797} Strathern 1982a, p. 88.

\textsuperscript{798} Goode 1964, pp. 32, 58-59.

\textsuperscript{799} Strathern 1981, p. xxx.

\textsuperscript{800} Seccombe 1993, p. 138.

\textsuperscript{801} Strathern wrote villages such as Elmdon, where most residents claimed to have been related, would effectively have cut the villagers off from outsiders (Strathern 1982a, p. 75).
longing to several family networks. In contrast to other reconstructed kin networks from Svartvik there were more connections between individuals within the Tolf kinship networks.

Albert Tolf had been married twice and both his fathers-in-law, Jonas Sehlin and Anders Sjöström, were present at the mill in 1879. Both had been in the area for more than a decade before the mill had been constructed. Through the marriage with the Sjöström sisters, brothers Albert and Wilhelm also became brothers-in-law. The third brother, Frans Tolf also married twice, the first time with Anna Sofia Engström in 1873. There are no records of her father, but her presence was recorded in Svartvik from 1860 and her brother Nils Olof Engström was present in the 1879 list.

The Engström family constituted another small unit within the larger kinship network, from which three sisters married three sawmill workers. Frans’ sister-in-law Maria Kristina married Johan Regnander in 1870 who was present from 1868; a second sister-in-law, Amanda Engström married Johan Eliasson Vestman, who was present from 1860. Johan Vestman, in turn, had his brother Jonas Forslund and brother-in-law Anders Nilsson present in 1879. Brothers Vestman/Forslund were present from 1860 and Anders Nilsson had arrived in Svartvik in 1872.

The marriages forged by this family are also interesting from the aspect that all parties had been present in the area prior to the construction of the mill. Most of the workers had a presence in the area from at least 1860 so there was a strong local anchoring to the area. Another interesting aspect of partner selection was that marriage does not appear to have been entered with any random in-migrant without social standing within the community. It is perhaps possible to talk about allegiances in some cases, as a majority of the marriages occurred between members of families labelled as long-time residents of the area. The only exception was the second wife of Frans Tolf.\footnote{Frans Tolf remarried in 1884 with Katarina Johanna Wållberg. She was newly arrived and did not have any previous connection to the area.} Prior to the construction of the mill, the pool of potential partners to choose from would have been smaller than it was afterwards, and this may account for the local anchoring. Despite a rapid population growth during the 1870s, partner selection appears to have continued in a similar manner even after the mill had been built.
Figure 8:1 The Tolf family’s reconstructed kinship networks. Present and future kin connections as they appeared through linking the 1879 lists to the church registers


Indiko – digitised church records, Demographic Data Base, Umeå University.

*Jonas Selin died of nerve fever.
Per Jansson supposedly left Svartvik in 1882, but two of his children were born at Svartvik in 1882 and 1884. This is, however, not entirely surprising, Norberg found similar tendencies in Alnö parish where the local population showed clear hesitation in marrying in-migrants. Norberg and Rolén also detected a parallel pattern in Tuna, a low frequency of marriages between locals and in-migrants or between the agricultural and sawmill populations. The pattern for the Tolf family, as well as the Uppling/Hägglund families, also displays similarities with Ostergren’s findings from Rättvik parish in Dalarna, which showed that marriages between households outside the established kinship networks appeared “to have been an unattractive option for the young adults in the large ‘core’ sells.”

The extensions of the Tolf family’s kinship network mean that there were nine individuals who could be linked to the four male members of the Tolf family, all working at Svartvik simultaneously in 1879. The presence of these individuals prior to the construction of the mill would suggest that there was a high probability of them knowing one another prior to being employed at the mill. That all but one had been employed at the mill since it began production would thus indicate that the sawmill company promoted a local recruitment strategy. What is remarkable with the extended kin network of the Tolf family is that almost none of them left Svartvik within the scope of the study. A few can be found to have moved out, but only to return a short time thereafter.

- The Hägglund family

The reconstructed, extended kinship networks that linked the Hägglund, Uppling, Englund and Lundvall families displayed a larger willingness to marry in-migrants, at least in comparison to the Tolf network. The results showed that long-time settled men primarily married women of long-time settled families, but were in the event of remarriages, more likely to choose a newly arrived woman. The daughters and sisters of the Hägglund family were, however, initially more prone to choose a newly arrived man for a husband, than a man from a long-time settled family. Also, only one of the marriages included in the Hägglund network occurred with a new in-migrant after the mill had been built; Anders Svedin married Maria, the daughter of Lars Jenssen and granddaughter of Olof Petter Hägglund in 1878.

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803 Norberg 1980, p. 82.
804 Norberg & Rolén 1979, p. 134.
Figure 8:2 The Hägglund/Uppling/Englund/Lundvall families’ reconstructed kinship networks. Present and future kin connections as they appeared through linking the 1879 lists to the church registers.


Indiko – digitised church records, Demographic Data Base, Umeå University.

Olof Petter Hägglund
b.1816
Svartvik 1873-1893

Son Jonas Hägglund
b.1846
Svartvik 1873-(1901)

Son’s brother-in-law f. 1875
Nils Martin Berglund
b.1853
Svartvik 1873-(1901)

Son-in-law f. 1864
Lars Jenessen
b.1841
Svartvik 1873-(1901)

Son-in-law f. 1870
Anders Uppling
b.1848
Svartvik 1873-(1901)

Son-in-law’s brother f. 1870
Per Uppling
b.1846
Svartvik 1873-1893

Son-in-law’s father f. 1876
Johan Lundvall
b.1854
Svartvik 1873-(1901)

Son-in-law’s father f. 1876
Carl Erik Lundvall
b.1859
Svartvik 1873-(1901)

Son-in-law’s brother f. 1876
Carl Lundvall
b.1859
Svartvik 1873-(1901)

Son-in-law’s brother f. 1876
Lars Lundvall
b.1863
Svartvik 1873-(1901)

Grandson-in-law f. 1887
Anders Svedin
b.1850
Svartvik 1878-(1901)

Grandson-in-law f. 1887
Carl Erik Lundvall
b.1859
Svartvik 1873-(1901)

Grandson-in-law’s father
f. 1887
Erik Larsson Englund
b.1825
Svartvik 1873-1889

Grandson-in-law’s brother f. 1887
Lars Erik Larsson Englund
b.1858
Svartvik 1879-1882

Grandson-in-law’s brother f. 1887
Erik Larsson Englund
b.1825
Svartvik 1873-1889

Son-in-law’s brother f. 1870
Anders Uppling
b.1848
Svartvik 1873-(1901)

Son-of-in-law’s father
f. 1876
Carl Erik Lundvall
b.1859
Svartvik 1873-(1901)

Son-in-law’s brother f. 1876
Lars Lundvall
b.1863
Svartvik 1873-(1901)
The Hägglund family had held an official presence in Svartvik, at least from 1861 and was firmly rooted in the area by 1879. Olof Petter Hägglund had a total of seven children, six daughters and one son who still remained after 1901. Jonas Hägglund married Erika Berglund, sister to worker Nils Martin Berglund in 1867, belonging to another long-time settled family in Svartvik. After being widowed, he remarried in 1885 to a newly arrived woman, Katarina Olsdotter. Jonas’ sister Anna married Lars Jenssen in 1864, who had come to the area the previous year. Another Hägglund sister, Ida married worker Johan Erik Lundvall in 1876. He belonged to another long-time settled Svartvik family.

Anders Uppling was present in the area at least from 1860 and ten years later he married Clara Hägglund. To this marriage, Clara brought her illegitimate daughter Hermina, who in turn married into another of the core families in Svartvik, the Englands in 1887. Her husband Per Englund was even born in Svartvik in 1862 and his father Erik Larsson Englund was present in the area from 1860. Anders Uppling had nine children, three of whom died at a young age and one left Svartvik. The remaining five children all had a continued presence after 1901.

The family units within the network display a strong tendency of marrying within the specific core group and the members who remained in the community appear to have been deeply rooted in Svartvik. They had been there for more than a decade before the sawmill was constructed and almost all of the younger network members had all been born in Svartvik. Many of them would also prove to become extremely loyal to the community and the owner and continued to work at the mill for several decades. The majority of the men included in the network in Figure 8:2 had a continued presence after 1901.

8:4 Recruitment to the industries

The organisational base for agricultural work had mainly been structured through kinship lines, mainly because kin normally lived close by. It may therefore be

806 Daughter Olivia married Lars Gustaf Englund in 1866 (no known relation to above mentioned Per Olof Englund); the couple left in 1867. Daughter Carolina married Anders Zetterberg in 1871 and they left in 1876. Ida, who married Johan Lundvall, stayed until 1900 before she departed Svartvik without her husband who had a continued presence after 1901. The youngest daughter Margaretha married worker Johan Bergström in 1874 and left just shortly thereafter.

assumed that if workers came from the local area, they would already have had existing networks of kin present when taking up employment at the mills. It may also be assumed that the majority of the more recently arrived workers would not have had kin nearby, had they not migrated in kin groups. It is, however, challenging to assess how important kin would have been in relation to recruitment, especially because it only can be targeted among the registered population on site. Within these populations, recruitment between father and son, brothers or brothers-in-law appear to have been most common. Kin recruitment over longer distances, however, offers several problems; mainly because it applied more often to seasonal labour and therefore went unregistered. Even if it applied to permanently employed workers, no kin connection would show in the sources, especially not if they had migrated alone as primary migrants.

Different recruitment strategies would have determined the make up of the sawmills’ respective workforces as it meant that certain sawmills had large groups of workers from one specific place. This created specific patterns and clusters of workers in the Sundsvall district as many sawmills had large groups of workers from provinces such as Värmland and Ångermanland and from the neighbouring country Finland.808 This was also the case in the Sundsvall district as the study of the workers’ geographical background in chapter five showed.

While some industries recruited locally other industries concentrated on other areas of the country, advertised for workers in newspapers or even sent out agents to search the countryside for suitable workers. Recruitment to the industries could therefore, according to Berglund, be viewed as geographical or social, restricted to specific areas and occurring within kinship networks or close social networks of friends and neighbours.809 Employers often encouraged their most trusted seasonal workers to recruit others from their home parishes. By offering certain benefits to a select group, they attempted to make them return year after year. This was, according to Cornell, not an uncommon practice among sawmill companies.810 Thord Bylund, for example, commented on the presence of kinship and wrote that with regard to the mill in Matfors, it was highly noticeable how much kinship influenced recruitment.811

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809 Berglund 1982, p. 244.
811 Bylund 1979, pp. 355-356.
Kin recruitment

Recruitment through family and kinship networks appears to have been a habitual practise that occurred continuously throughout industrialisation, to different degrees:

[They recruited new workers [...] initiated the young and the new immigrants into industrial discipline and the work process, taught them how to manipulate machinery, and provide protection inside the factory. At the same time, they socialised new workers to collective working-class behaviour, teaching them how to resist speed-ups in production through the setting of quotas on piece work and through the slowdown of machinery. These findings about the role of kin refuted those who argued that migration to industrial centres eroded kinship networks.812

It may therefore be assumed that most early industries would have focused mainly on a local recruitment pattern when it came to unskilled labourers. This should consequently also have led to a higher degree of employed kin, whereas later industries that required a larger workforce more or less would have hired anyone. This would therefore suggest that the later workforces with workers with more dispersed geographical backgrounds would not have had the opportunity to employ kin simultaneously.

However, the industries differed from each other and had different recruitment strategies. Earlier industries, such as Matfors had according to Ostergren's study, a higher degree of local workers than what this study has confirmed for Svartvik. Still, in comparison to the other three mills included in this investigation, Svartvik had the highest number of kin-connected workers.813

Ostergren indicated that it was common that the villages nearest to the industries benefited the most from the employment opportunities that were offered within the early industries. In 1846, the majority of the workers at Matfors sawmill came from nearby villages in the parish and workers within specific trades and mill tasks seem to have been recruited from the same villages and households.814

813 It has to be noted that these may not be the best sawmills to compare between because they had the same owners and therefore most likely would have utilised similar recruitment strategies. Studying recruitment strategies at Svartvik would, however, provide a better understanding of the strategies utilised at Svartvik.
814 Ostergren 1990, p. 58. Using the village of Vivsta as an example Ostergren tries to explain this kind of recruitment. This village supplied workers to the tasks of yard work and floating. In 1846 the village had seven households and twenty economically active men; seven men from each of the households could be found working at the mill in Matfors. By 1860 the village had increased to eleven households. The number of men affiliated with the mill also had gone from seven to ten, “but nine of the ten came from the same households that sent men to work at Matfors back in 1846.” Some of
Employment was seasonal, but usually occurred over a time period of five to ten years. “Then the responsibility typically passed on to another younger member of the household, presumably because it served a certain age-related function in the household economy.” In 1846 most participant households had at least one man employed in seasonal work at Matfors. By 1860 that number had increased to two, usually consisting of two different generations. The older worker having been employed for a good ten or more years and the younger worker was just starting. “While, for the most part, the function of working at Matfors seems to have been passed on within households, there were exceptions to the rule and these workers with a high degree of persistence show up in the older age cohorts of the 1860 age distribution.”815 The result indicated that the tie of kinship and proximity that typically permeated village life in a traditional society was often of paramount importance.816 What Ostergren could conclude with his study was that even though more workers employed at the mill in 1860 were born outside of the parish of Tuna than in 1846, kin recruitment as such had increased.817

The reliance on local workers was, however, cut short when the industries grew because the demand for labour no longer could be sustained by local recruitment only. Also, larger wealthier villages in the local parishes were less inclined to send workers to the mills.818 more or less forcing the industries to search beyond the local area for labour. Johansson found that while Stocka sawmill in Hälsingland got the majority of its temporary workers from agricultural villages that were located geographically close to the mill, they had continuous problems throughout the 19th century to contract these workers for longer periods of time.819 The result from the workers geographic background in chapter five indicates to similar problems within the Sundsvall district. This is perhaps why Berglund-Lake wrote that local recruitment in the Sundsvall district was less frequent than in any other industrial district in northern Sweden.820

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815 Ostergren 1990, pp. 60-61.
816 Ibid. p. 55. Strathern also claimed that proximity was important for kin to maintain their ties. Involvement in each other’s lives required geographically close areas. “Kinship and proximity thus provide a background frame of reference for feelings of solidarity which in turn become converted into generalised feelings about the village and villagers. Yet kinship ties activated and appealed to as such tend to assume and exclusive character: a matter of specific things for specific people closely related” (Strathern 1981, p. 125).
817 Ostergren 1990, p. 60.
818 Ibid. p. 57.
820 Berglund-Lake 2001, p. 29.
Kin recruitment between sawmills
- The Wivägg and Bångfeldt families

Ostergren wrote in the end of his Matfors study that it would be interesting to learn what had happened to the workers employed at Matfors after the mill closed in 1878. Previous research has indicated that groups of migrants left Tuna and relocated to Svartvik to continue their employment for the Dickson family.\(^{821}\) The 1879 list from Svartvik had 78 workers recorded who were church registered in Tuna with Matfors as the official place of residence. Eight of those workers came from the Bångfeldt and Wivägg families.

These two families officially moved from Matfors to Svartvik in October 1879, but because they could be found in the lists, it can be established that they were present in Svartvik at least from May 1879. The connection between the two families came about through the marriage of Carl Bångfeldt and Kristina Sofia Wivägg in 1866, a niece of PG Wivägg.\(^{822}\) The Bångfeldts’ and the Wiväggs’ would also have been connected in a social network after having lived in the Matfors area and having worked at the sawmill prior to relocating to Svartvik. Oskar and Adolf Wivägg were also the same age as Erik Petter and Carl Johan Bångfeldt, which would imply that they had attended school and confirmation together.

On arrival to Svartvik, these two families already had a limited and restricted kinship network in place. Their social network would, however, have been larger, taking into account the other workers from Matfors. The marriages that the Bångfeldts entered after having arrived in Svartvik reflect their status as newcomers in the area. Only Erik Bångfeldt’s son Carl and daughter Anna married into families with previous connections to the area, the Moberg and Sjöberg families, respectively. The Mobergs in particular should have had a high standing in the community because Erik Moberg had one of the most respected occupations within the sawmill as a sågställare. Four of Bångfeldt’s five daughters married other sawmill workers, although none of them with a worker from the 1879 employee group.

What is interesting about the individuals included in the Bångfeldt/Wivägg network is that they do not appear to have had the same level of long-time settlement as the other networks had, especially not among the younger generations. Perhaps the difference lay in the fact that they were in-migrating workers without prior connection to the area and that they therefore may not have felt the same loyalty towards the mill or the community. Erik Petter Bångfeldt appeared to have

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821 Ostergren 1990, p. 74. See also Lindberg 1983.
822 Initially believing these two having been siblings, it would appear that PG Wivägg was the paternal uncle of Sofia Kristina Wivägg, who also seems to have been born in Alfta parish, and not Mora. Despite relying on a probable sibling relationship in the study of kinship, this alteration of kin relationship does not effect the overall results (Svenska Smedsläkter 11, Föreningen för smedsläktsforskning, 2000).
stayed only briefly at Svartvik. Even though church registers from Svartvik show that he remained there until 1882, registers from the town of Sundsvall proper show that he arrived there in 1881 and stayed for almost a year.\textsuperscript{823} Erik left for Timrå, married and returned to Sundsvall in 1887 where he remained. There are also several inconsistencies concerning Carl Johan Bångfeldt. According to the Svartvik registers, he did not leave until 1894, but the registers from the town of Sundsvall show that he arrived at the same time as his brother and that he also left for Timrå on the exact same day in September of 1882. Carl did, however, return to Svartvik in 1884.

Oskar Wivägg left Svartvik in 1883 and moved to Alnö, where he lived for at least one of his two years of residency at Nacka sawmill. He left Alnö in 1885 and moved to Hässjö parish, but returned to Alnö in 1896 with his family.\textsuperscript{824} His brother also arrived in Alnö in 1883 where he first resided at Eriksdal sawmill and later joined his brother at Nacka sawmill. In 1884 he returned to Svartvik. In 1887 he once again followed his brother to Hässjö and remained there for a year. Both brothers thus continued as sawmill workers after leaving Svartvik.

Carl Bångfeldt and Kristina Wivägg moved to Johannedal sawmill in Skön in 1884 and moved back to Tuna in 1891. Johan Sjöberg who married Amanda Henrietta Bångfeldt in 1880 left for Alnö in 1882 and then moved to Tuna in 1888 and settled in Matfors. In 1896 they returned to Skön parish.

Johannes Stenberg was not officially registered at Svartvik in 1879; he did not acquire a registration until 1881. He remained settled up to 1892 or 1893 when he relocated to Timrå. It is unknown what happened to the brothers Alfred and Nikolaus Moberg after 1894 and 1882, respectively.

\textsuperscript{823} It is worth remembering that the Svartvik registers are reconstructions and it is not surprising that they would contain inconsistencies.

\textsuperscript{824} Oskar Wivägg can be found in a photo from Gustafsberg sawmill 1910-1915 (Sågverksfolket. Alnöbygd i utveckling, Sundsvall 2001, p. 242). In an outline over Gustafsberg’s sawmill community from 1928-1930, the cottage where he lived with his mother is pointed out (Sågverksfolket 1995, p. 179).
Figure 8.3 The Bångfeldt and Wivägg families reconstructed kinship networks. Present and future kin connections as they appeared through linking the 1879 lists to the church registers.


Indiko – digitised church records, Demographic Data Base, Umeå University.

*Per Bångfeldt died of old age in 1892.

**Eric Bångfeldt’s daughter Anna married Enoch Bergman (b 1866) in 1890. Her stepfather-in-law, Johannes Stenberg officially spent time in Svartvik between 1871-1873. He officially moved back to Svartvik with his wife in 1881 and was officially joined by his stepson Enoch in 1885.

***Carl married into an established family in Svartvik, the Mobergs. His wife, Hulda Moberg was the daughter and niece to two sawmill workers who had lived in Svartvik since before the mill was built. Both her father and one of her uncles worked at the mill in 1879.
Kinship between sawmill communities

Hareven noted that kin recruitment occurred more often during labour shortages and was less successful in times of labour surplus. She indicated that kin recruitment therefore was not necessarily tied to one industry, but could also mean that kin may have facilitated help in finding employment at industries in the vicinity.\(^825\)

Industrial recruitment and work would also cut straight through kinship lines in a totally different way, because kin could be found working at different mills.\(^826\)

Among the employed workforce of 1879, only one kinship connection could be detected and verified between two of the four sawmills included in the study.\(^827\)

Gabriel Årfström was employed at Svartvik alongside his father-in-law and future son-in-law in 1879, having been so since the sawmill began production. Meanwhile, his two brothers were both employed at Kubikenborg.

Gabriel Årfström was born in Bjuråker in the province of Hälsingland in 1840. He and his family arrived and settled in Svartvik in 1850. In 1860, the entire Årfström family relocated to Skön parish, even Gabriel, despite the fact that his betrothed had given birth to a baby girl just a few months earlier. Gabriel would, however, return to Svartvik the following year and the two were married. This is also where he would remain, according to the church registers. Two of his brothers, Nils and Erik Årfström remained in Skön for a time, then moved to Skönsmon in 1863 and then relocated to Kubikenborg in 1875 with their families.

There may have been several types of recruitment strategies in place for these individuals. Gabriel and his father-in-law both fall under the category of local recruitment during the early stage of an industry. Both men were residing in Svartvik and had been for several years prior to the construction of the mill. The future son-in-law was born in Småland and would appear to have been in the area prior to

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\(^{825}\) Hareven 1990, p. 224.

\(^{826}\) Cohen suggested, in relation to fishermen in Whalsay in the Shetland Islands, that the development of the work and the fishing crews have over time cut through kinship lines as well as nuclear families. Kinship and neighbours would, however, have provided the base for close social association, even with the frequency to which they were invoked differed between different families (Cohen 1982, pp. 23, 38).

\(^{827}\) Strathern wrote that kinship ties beyond the local residential area were in fact highly personal and were not usually included into any larger social network of the community. “While within the village kin ties contribute to a sense of solidarity, the village boundary can thus cut across personal networks” (Strathern 1981, pp. 161, 233). She suggested that while the family unit was public, kin was more private because it dealt with a wider group of people from different social and geographical distances. Kin connections, as opposed to family ties, were more complex and usually more widespread, indicating that due to their complexity they would only mean something to the individuals concerned. Kin connections appear to have contributed “to some kind of structure, though thus may be viewed negatively as well as positively. Relationships traced between residents of different villages, however, do not seem to be concretised in the same way. They remain the personal networks of individuals.” (Ibid. p. 157). Kin connections in Elmdon did not appear to have facilitated intra-village solidarity or relations.
to his official migration that occurred three years later. His employment may well have been the result of either advertising, recruiting agents, or seasonal or migratory work related migration. Gabriel’s brothers offer another recruitment strategy. Considering that they both moved together may indicate that it was work related, perhaps an example of both family migration and kin recruitment. The sawmill at Skönsmon may have been a possible place of employment for the two men, even though neither of them were so specifically registered. Skönsmon was also close to the shipyards that were located in the town of Sundsvall. Considering that Nils all through the 1860s was also registered as a sailor and during the early 1870s as a crofter while his brother Erik was marked as a worker, may link them both to different occupations. In 1879, however, both were employed at Kubikenborg and the simultaneous move from Skönsmon suggests that it was intentional and may possibly be linked to the increasing demand for labourers within the sawmill industry that occurred during the 1870s.

Figure 8.4 The Ärfström family reconstructed kinship network across two communities. Present and future kin connections as they appeared through linking the 1879 lists to the church registers


828 Worth keeping in mind is that Goode claimed that some siblings shared strong emotional bonds with each other, which usually resulted in the inclusion of each others’ families into a joint family circle after marriage (Goode 1965, p. 10).
8:5 Conclusions

Kin and family would have been important aspects of community construction in the sawmill communities in the Sundsvall district; even though the results have shown that the presence of kin differed between sawmill communities. Linked to population development, the presence of family and kin would have been influenced by when the mills were built and from where the workers were recruited. As suggested in chapter seven, kin and family would not only have dictated demands on social and residential improvements, but should also have influenced recruitment.

Family and kin are suggested to have made up a large part of the different core populations; this was especially evident among the population in Svartvik. The study showed that only a small majority of the identified kin-connected workers were related through birth. This means that marriages within the sawmill communities was equally responsible for creating kinship networks. Marriage is also believed to have functioned as an indicator of community construction and contributed to more stable population cores. It had the function of preserving and consolidating family lineages and networks, as well as adding to them, allowing community structures to be formed.829

Kinship in migrant communities would have been even more important than in comparison to other communities because it created a sense of belonging and identity. This would stress the importance of belonging to established families with existing kinships; whom one knew may not have held the same importance as to whom one was connected to and called kin.

The presence of kinship networks in Svartvik sawmill community would suggest that kinship ties were an important aspect among the registered, resident core population in this particular community, perhaps more so than in the other three communities. The result suggests that this may have been a pattern found in industrial communities with long-time settled populations. This enabled the population to cultivate their networks to a greater extent than communities lacking settled populations prior to the construction of the mills. The level of loyalty and degree of long-time settlement in this community would have enabled the members of the core population to continue to add to their networks. Network construction would therefore appear to have had a constant and continuous presence at Svartvik. The longitudinal data from the church registers also confirm that Svartvik had a core of workers who stayed in the area considerably longer than workers at the other mills.830 The result implies that Bott and Goode were

830 Norberg 1978, p. 269.
correct in that if families had been settled in areas for longer periods, they usually
developed strong, close-knit networks.831

Svartvik did not only have several large kin networks consisting of many family
units linked to each other, there were also smaller single family units of two or
three generations of workers employed simultaneously. The presence of these work-
ers would suggest that kin did not only move together, but that they also worked
together if they had the possibility. Svartvik was also the only mill at which teena-
ged workers could be found.

If there were any casualties of industrialisation, it would have been the wider
kinship networks and extended family because these could only be found at Svart-
vik. It could therefore be argued that migration, rather than disrupting networks
and family units, strengthened them and opened up for new functions and con-
structions.832 The smaller family units would thus have become more important
during industrialisation because distance to wider kinship groups would have lost
some of its importance, as suggested by the results from Klampenborg, Kubiken-
borg and Heffners.

The differences between Svartvik and the other three sawmill communities
were highly noticeable. It was not that they did not result in community construc-
tion or resident populations, but smaller population cores, higher population tur-
ners lead to less stable populations. These were climates that would have had a
negative impact on creating and maintaining family and kinship networks, just
as the results showed. Kinship and family, marriage and the creation of networks
would have facilitated in stabilising the population and made them less mobile be-
cause ties to the community would have made migrants settle for longer periods.

831 Goode 1964, p. 32.
Chapter 9
THE ESTABLISHMENT AND DEMOGRAPHIC DEVELOPMENT OF SAWMILL COMMUNITIES IN A 19TH CENTURY SWEDISH RURAL DISTRICT

Alter stated that the power of community in early industrialised cities easily has been underestimated, and this may also be true during early industrialisation in Sweden. The aim of this dissertation has been to study the establishment and demographic development of the sawmill communities that emerged in the Sundsvall district between 1850-1890. The intention was to highlight the importance of the sawmill communities and their inhabitants more than what earlier studies have done by discussing community construction, not just from a demographic aspect, but also from geographical, social and symbolic perspectives. The inhabitants that settled at the mill sites were the foundation of the sawmill communities and it is argued that the communities and their populations played important roles in the development of the Swedish sawmill industry.

9:1 The construction of community
The sawmill communities differed from surrounding agricultural villages because they had emerged in specific locations that, to all intense and purpose, was geographically separate. Only a few sawmills were built in close vicinity to established, agricultural villages. This created a geographical distance between these two environments. It was reinforced by that the settlements around the mill sites could be described as occupational communities, having evolved from a single industry. Although, while populations connected to such areas would have been more traditionally close-knit, as suggested by Crow and Allan, this would not have applied to the sawmill communities, at least not in the beginning of their development.

Population development

Population development was mainly influenced by four aspects; the sawmill owners, time, geography and population proximity. The owners strategized when the sawmills were built, in what areas, how large they would be and who should be hired. The structure and outline of the sawmill communities were therefore the result of the mill sites’ local geography, the need of the inhabitants and, more particularly, of how much money the sawmill owners were willing to spend.835 This suggests that the owners would have been the most imperative aspect regarding both industrial development and community construction.

Population development was greatly affected by the sawmills year of establishment and could be described as a time-linked phenomenon. The year 1868 is perhaps the most important year as it functions as a divider in the construction of sawmills. Mills built prior to 1868 had among the slowest population developments, but the most stable. These communities would, as a consequence have among the largest populations by 1890. Sawmills constructed after 1868 displayed much more rapid growths during the first production years and the communities established during favourable economic climates were as a result quickly populated. Despite this, they generally had smaller cores and did not become as large as sawmills established prior to 1868, at least not without other influencing aspects.

The geographic importance of the sawmill communities appeared to be two-fold. Firstly, the specific location, particularly the parish, appears to have influenced population development in different ways. There were a great differences in sizes between the sawmills built in Alnö parish and the mills located on the mainland. However, these differences were closely connected to the late construction of most mills in the parish. While the sawmill communities in Alnö were not only considerable smaller, the owners also exhibited an unwillingness to invest in community construction. Reasons behind the owner’s decisions were most likely linked to economic strategies. Norberg wrote that the sawmill owners in Alnö only built a few barracks and that many of the locally registered workers never left their village environments.836 More local workers would have reduced the sawmill owners social responsibilities, and as a consequence also impeded community construction as accommodations at the mill sites would not have been necessary.

836 Norberg 1983, p. 161. Norberg 1980, p. 82. Alnö had had more than twice as many mills as any other parish and were the most densely spaced sawmill parish in the entire district. The communities’ possibilities to grow and expand would therefore have been limited in terms of space.
Johansson also wrote in connection to Stocka sawmill that it would have been unlikely for workers living close to the mills to even be offered residency. 837

Secondly, geographic location appears to have been important in connection to proximity to other established settlements. Proximity to agricultural villages had, as in the case of Alnö, an apparent negative effect on development and community construction at the mill sites. The majority of the sawmills in the district had been built in areas lacking pre-settled populations on site and some had been constructed in sparsely populated sites with 20 registered inhabitants or less. The populations in sparsely populated areas appear to have been more stable and few showed tendencies of becoming excessively large. They displayed less rapid growths than many sawmills located in unpopulated sites. Such small populations was usually linked to work related activities predating the sawmills, but these activities do not appear to have had any disconcerting effect on population developments after the mills had been constructed, at least not among the registered inhabitants. A minority of sawmills were also constructed close to agricultural villages or in already established industrial communities. Even though the first had a negative effect on population growth, the latter displayed more excessive growths. Already industrialised communities had usually been established long before 1868 and would, therefore, become among the largest in the district.

Migration

Eriksson and Rogers saw industrialisation as the beginning of a new type of migration. They described it as a process of population transference from rural areas far from industries to rural areas close to industries. 838 This was a process that continued throughout the latter half of the 19th century. The settlements around the sawmills could therefore be described as migrant communities because the majority of the inhabitants lacked a local origin. In the beginning, most areas would have been characterised by a great anonymity and many would have kept this characteristic throughout the studied period due to high population turnovers.

Migration to the sawmills was to a great extent male, and the highest proportions were consistent with construction years and the prosperous period during the early 1870s. Female in-migration was continuously lower than male in-migrations, but remained stable from the 1870s. Female out-migrations, however, showed slightly higher proportions than male out-migrations indicating that men may have been less inclined to migrate if employment opportunities existed. The

837 Johansson 1988, pp. 78-79.
study showed that out-migrations remained fairly low, especially in comparison to in-migrations. What is interesting is that while the sawmills built prior to 1868 showed small, but fluctuating number of in- and out-migrations prior to 1870, almost all communities in the district displayed similar patterns of migration after 1868.

Male and female migrants displayed a high frequency of internal parish migration, but as industrialisation progressed, internal parish migration continuously decreased. A decreased out-migration would have stabilised the populations and would have resulted in increased stability within the registered cores. That official local mobility also decreased further implies a stabilisation process among the inhabitants, both within the parishes and within the sawmill communities.

Studies of the parishes internal migratory patterns also revealed that the official migration between agricultural villages and sawmill areas were more infrequent than expected. These results have implied that there may have existed a migratory hesitation between industrial and agricultural areas, but if this implied a barrier as suggested in earlier studies is difficult to say. Ostergren, Rondahl, Cornell and Norberg and Rolén had all showed in their studies that locals were unwilling to officially relocate to sawmill communities.839

However, there is no reason to suppose that migratory hesitations only would have been connected to migration between agricultural villages and sawmill areas. For example, the study showed that migration between sawmill areas were just as infrequent as agricultural-industrial migration. Olsson's statement, that migration between different sawmills occurred frequently can therefore not be supported by the results of this study.840 What can be concluded is that a migratory hesitation appears to have existed, at least in connection to official migratory patterns, and it was more prominent for migrants going towards and between sawmill areas than it was for migrants leaving sawmill areas.

The migrant’s geographical origin may have explained the low frequency of migrations from agricultural to sawmill areas, but the study showed that the majority of the sawmill populations were not born within the Sundsvall district. Only slightly more than one in ten in-migrations was conducted by men born within the district; more locally born men actually left sawmill areas than migrated to them. The corresponding numbers for female in-migrations showed that one in five was conducted by a woman originating from within the district. Berglund-Lake’s claim that the Sundsvall district employed the fewest local sawmill workers

840 Olsson 1949, p. 85.
than any other sawmill area in northern Sweden appear not only to have applied to workers, but the entire sawmill populations.\textsuperscript{841}

\textit{Residency}

When the first sawmills were established, the first settlements that followed were very small and more reminiscent of camps than of proper communities. Initially, there do not seem to have existed any greater ambitions among sawmill owners to build accommodations for their workers, or for the workers to abandon their local communities. This is reflected in both population development and migration. There would come a point though when building residential houses for workers would have become a necessity and a requirement for efficient production.

This study has highlighted residency as important, despite showing that residency and official church registration were not necessarily related. The 1879 lists, which included both parts of the \textit{de facto} and the \textit{de jure} populations, revealed that all workers, registration notwithstanding, resided on site. This even applied to those owning property in other parishes in the district.

Housing became a way for the owners to regulate employment of desirable and undesirable workers. They usually favoured the mills full-time workers and did their best to reduce the number of temporary workers, especially unmarried workers as they were regarded as least reliable.\textsuperscript{842} Berglund-Lake suggested that this would have led many seasonal and temporary workers to register in the parishes in the hope that it would help them to secure more work.\textsuperscript{843} This may account for the high proportion of local registrations among workers lacking local origin that were found in the study.

Residency would also have been important in relation to time spent within the communities; the number of years settled would have helped to regulate an individuals’ status, usually in combination with employment and wages. The study showed that time settled differed between the sawmill communities. Residents in Svartvik, for example, showed a higher propensity of remaining for a longer time than workers at Klampenborg, Kubikenborg and Heffners. These results suggest that the core population in Svartvik should have been more stable. Although, Svartvik differed from the other communities in respect to both a pre-settled po-

\textsuperscript{841} Berglund-Lake 2001, p. 29.
\textsuperscript{842} Berglund-Lake 2001, p. 30. Rondahl 1972, p. 115. Married workers were preferable to hire because they had families to support, as well as seasonal workers who returned each year. Even though the residential areas commonly were socially divided, permanently employed and married workers usually had better accommodations than unmarried and temporary workers, their standards of living would not have differentiated too much (Gustafsson 1965, pp. 158, 190-191. Paulsson 1981, pp. 183, 220).
\textsuperscript{843} Berglund-Lake 2001, p. 34.
population and time spent, which would account for both larger and more stable cores.

*Demographic structures*

The demographic structure of the sawmill populations have usually been viewed as male dominated. A male dominance was, however, not a description that applied to the registered inhabitants in the sawmill communities in the Sundsvall district. Registered males aged 15 and older seldom made up more than one-third of the populations. In fact, it was children aged 0-14 who was the dominant group, constituting almost half of the registered core.

These results are especially interesting in relation to the estimated total number of workers employed at the sawmills. The low proportions of adult males would suggest that the groups of temporary, unofficial workers may have been larger than what previously have been estimated. Considering that many of them brought their families with them would suggest that the temporary inhabitants could have been almost as large as the resident populations. This would mean that the sawmill communities should have been considerably larger than what the official statistics can show.

The proportion of registered men remained on a similar level throughout the second half of the century and did not show any considerable differences between the individual sawmill communities. Women who constituted the smallest demographic group experienced decreasing proportions after 1870, while the proportion of children increased. The longitudinal study on number of children born within the communities clearly displayed that their presence rose annually. Tedebrand claimed that the industries stimulated family growth and that the high proportion of married women in the sawmill communities would have led to high birth rates during the end of the century.844

Studies of the 1879 lists revealed that few workers actually had many children present in their households. The results from Svartvik and Kubikenborg showed that the majority of the workers had one or two children present in their households in 1879. This is consistent with the results that showed that children within the sawmill communities reached their lowest proportions during the mid 1870s. The mean age of the 1879 workers also indicated that they would not have been married long enough to have fathered many children. Compared to Fjellström’s cross-section study of Stocka sawmill, this study indicate that families were small.

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844 Tedebrand 1977, pp. 261, 257.
during early industrialisation. It would also suggest that there were noticeable differences in family sizes between different sawmill communities.

The longitudinal study and the 1879 lists both showed that a clear majority of the men and women residing within the sawmill communities were married. Tedebrand and Cornell both stated that the proportions of married couples would have been high during early industrialisation and made up the core of the workforce. That the core populations would have comprised of married couples stresses the role of family within the sawmill communities. Tedebrand also claimed that the majority of the workers at the loading docks and sawmill during the last decade of the century, would have been dominated by unmarried workers, still living with their parents. This connects the strong presence of families with children during early industrialisation to long-time settlement and a second generation of sawmill workers. The results would therefore clearly characterise the registered sawmill populations as family dominated.

Family and kinship
That the sawmill communities would have been family dominated highlights the question of family and the presence of kinship networks. Studies of the 1879 lists showed that there were differences between sawmill communities relating to kinship. The results implies that these differences most likely would have emanated from different recruitment strategies and population proximity. Svartvik appears to have practiced kin recruitment to a larger extent than Klampenborg, Kubikenzborg and Heffners. Svartvik even employed up to three different generations of the same families simultaneously, but this have to be viewed in connection to the areas pre-settled population and long-time settlement that naturally would have facilitated kinship networking. It had enabled settled families to connect to each other through marriage prior to the construction of the sawmill, unlike mills built in unpopulated sites and create a stable core.

Despite that migration caused many workers loose their daily interaction with kin and family after arrival to the sawmill communities; it was highly compensated by other kinds of relationships. Marriage offered social status through association and would have been favoured by any worker wanting to establish himself within an already established population core. Slightly less than half of the relationships among the kin-connected workers had been created as a result of marriages.

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847 Tedebrand 1977, p. 269.
The kin connections between the workers in the 1879 lists included different kinds of kinship networks, smaller networks consisting of the closest family unit as well as larger, more complex networks that included extended kin. A small majority of all relationships were biological and that meant that most kin-connected workers were employed simultaneously as a member from their closest family. If recruitment occurred along kinship lines, workers would have brought parts of their kinship networks with them to their new environment. This implies that the networks in the sawmill communities partly would have been built on already existing relationships and networks from the workers’ pasts. Bringing the family with would have created a sense of security in the new place of residency.  

9:2 Creating a sense of community

Defining the sawmill communities as occupational communities and as established in specific geographic locations, separate from the agricultural villages, did not only create an actual geographical distance, but also included a symbolic component. Moving to a sawmill community, albeit for a short period, would have conveyed a symbolic break with the agricultural past. It incorporated the migrants in different social spheres which would have been tied to the different environments they spent time within and the people they shared these environments with. While some introduced their neighbours and kin to each others did, or could, not. The social communities that arose within the sawmill communities were therefore as diverse as the sawmill concept itself, if not even more so. Even though neighbours and co-workers may not always gotten along with each other, the social environments and structures would have been essential tools of community construction in forming the existing populations in a desirable direction and fostering a second generation of potential sawmill workers.

The social environment

This study has implied that the sawmill communities had a very important social function for the populations. The sharing of everyday life with other people would have, just as Skarin Frykman wrote, forged a sense of belonging, which would have been expressed in the local identity. Previous research has indicated that the sawmill communities were embedded in a rather strict hierarchy that influen-

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848 Norberg 1980, p. 80.
851 Skarin Frykman 1990, p. 223.
ced and guided social relations and status between residents.\textsuperscript{852} Creating a sense of community was not easy due to the populations’ diversity and the social structures within the hierarchy, even though a stable core usually strengthened this notion. As a result, socialising and belonging among the workers became horizontal rather than vertical, usually as a consequence of the involvement of the sawmill owners which divided the workers according to type of employment, wages and residency. This consolidated the workers into different groups, it meant that full-time workers socialised with other full-time workers and that the seasonal and temporary workers kept to themselves.\textsuperscript{853}

Differences between and within the registered core and the in-migrants would also have had different individual prerequisites and nuances determining the level of belonging and with whom to socialise. Strathern claimed that villagers easily could, and most likely would, raise barriers against outsiders of any kind, thus confirming a notion of division within populations and between villagers and non-villagers.\textsuperscript{854} Kinship ties, for example, that tied residents into networks could also, very easily, have been experienced as additional boundaries by outsiders and non-kin.\textsuperscript{855} This clearly suggests that the sawmill workers’ horizontal socialising lead to boundaries not only between different populations and settlements, but also within the sawmill communities.

Migrants would not easily have been regarded as a part of the community and becoming an accepted member would not only have required an official registration. Newcomers would have been required to “add his bit,” implying not only an utilisation of social structures but an active involvement in the building and maintenance of these structures.\textsuperscript{856} Brändström, Sundin and Tedebrand suggested in a comparison between the towns of Sundsvall and Linköping that five years would have been time enough for in-migrants have become and feel accepted into local society.\textsuperscript{857} Due to the differences relating to the core populations, it is likely that becoming an accepted member of the core at Svartvik may have been more difficult and taken a longer time than within communities lacking pre-settled populations and stable cores.

The popular movements would however challenge and positively influence the sawmill communities social environments.\textsuperscript{858} Previous research has shown that membership in the religious, temperance and workers’ movements became a way

\begin{thebibliography}{9}
\bibitem{854} Strathern 1981, p. 71.
\bibitem{855} Ibid. p. 4.
\bibitem{856} Strathern 1981, p. 47.
\bibitem{857} Brändström, Sundin & Tedebrand 2000, p. 427.
\bibitem{858} Bäckström 1999, p. 34. Horgby 1993, p. 48.
\end{thebibliography}
for individuals from different backgrounds to interact and meet on more equal terms. For inhabitants lacking kin or close social relations, social organisations infused their members with a sense of solidarity and belonging which may have lead to a quicker acceptance by newer residents among the established cores. This enabled the workers to create means of belonging within the communities that were based on other aspects than employment and residency; something that included both the individual and the collective.  

The importance of residency

This study suggests that the sawmill communities geographical boundaries made residency a key factor in claiming belonging, especially because belonging could not be defined by criteria’s such as birth. A real sawmill worker was, as Berglund-Lake wrote, settled. 860 Residency would also have contributed to formalising the geographical boundaries between the mill sites and the surrounding agricultural villages, or a barrier as expressed in earlier research. It held geography and the sawmills’ structural organisation together and linked the sawmill communities socially and symbolically.

The 1879 lists showed that there was nothing to indicate that residency would have been more important to the permanently settled population than to the temporarily settled inhabitants. Unregistered and temporary workers displayed similar patterns of living at the mill sites as the registered and permanently settled populations. This tie into Strathern’s argument that in-migrants were either strangers or outsiders and all of the above aspects would have influenced how they would have been greeted, assimilated and incorporated into community life. 861

It could be presumed that residency, registration status and time settled would have contributed to creating a sense of belonging and inclusion. It was usually the people in the closest surrounding areas that became the frame of reference and as borders to other neighbourhoods were forged, this would have helped the notion of community to grow. Identification within the own group was not possible unless there were other groups with distinctive features one could compare with. Berglund-Lake claimed that much of the less than accepted behaviour among seasonal and migrant workers was used by the core populations as a way to enhance differentiation among the different kinds of workers. 862

861 Strathern 1981, pp. 3-5. 7.
862 Berglund-Lake 2001, p. 128. An interesting aspect of this is that seasonal and migratory workers did not have the same social pressure or reason to conform to social norms,
Previous research also showed that type of residency contributed to an individual’s social status due to residential differences of the inhabitants. This enforced differences within the communities, which to a great extent rested on a notion of ‘the other;’ those who lived outside and ‘the other’ that resided within the communities. This would also have been reinforced by the management selecting the workers who were given accommodations. It is likely that this would have created a sense of entitlement among the residents, which would have added to the formation of the communities, especially the core populations. To see oneself as a real sawmill worker residing within the sawmill community was to assume a social position and show a continued support of the creation of the “other” who was not a part of the community. Thus, employment at a sawmill implied residency which mean that residency would have been synonymous with being a sawmill worker.

The importance of family and kinship
Many sawmill populations would have adopted more traditional characteristics by the end of the 19th century, connected to time settled, kinship networks and local anchoring. This would have created communities where everyone knew each other. Because of continued high population turnovers, there would consistently have been a notion of anonymity, at least in connection to the temporary inhabitants. The traditional characteristics would have applied to the registered core which would have been more close-knit than the temporary inhabitants.

The results of the study displayed different patterns of kinship within the different sawmill communities. On one hand, there was Svartvik, with a strong presence of kin, and on the other hand, there were Klampenborg, Kubikenborg and Heffners which had fewer kin present with smaller and, probably, less stable population cores. Communities such as Svartvik would, to no surprise, have had structures similar to those found within traditional, agricultural villages. Kinship networks would have transformed into local social networks through marriages and births and the families local attachment. They would also, to an extent, have dictated with whom to socialise and played an important function in community relationships. Local community and family would therefore have been intertwined; holding people together and providing their lives with meaning.

which would have enabled them to become temporary members of the communities. According to Berglund-Lake, the reasons for this lay in motivation, which was to make money.

863 Ibid. p. 34.
864 Ibid. p. 128.
The different results also raise the question of how industrialisation affected the role and view of kin within industrialised areas. Industrialisation may have strengthened the family units without extended kin present, although, Bott suggested that smaller close-knit networks were frequent in industrialised communities with stable populations.\textsuperscript{866} It could also have weakened family units in communities that had a higher density of extended kin interacting on a daily basis; in such settings kinship would more easily have been taken for granted. Smaller networks of kin suggest more close-knit groups, that would have shared stronger attachments to each other than members within larger networks. Even though Svartvik had a higher degree of kin-connected workers present, which would have had a positive influence on community stability; it could also suggest that the ties within the smaller family units at Klampenborg, Kubikenborg and Heffners may have been stronger.

Bott discussed this duality and wrote that loose-knit networks were more common in areas with a high migration frequency.\textsuperscript{867} She suggested that while the seasonal character of an industry could have weakened family and kinship, it could also have strengthened the family unit if no kin lived close by. There appear to have been a strong connection between stable cores and kinship networks, but it is possible that a large presence of kin may have weakened the position of the family units, especially within the own networks.\textsuperscript{868} However, it is assumed that the smaller family units would have retained their importance during industrialisation, and that ties to extended kinship groups would have played important roles, especially in relation to migration and recruitment as suggested by Grenovetter, Janssens and Hareven.\textsuperscript{869}

\textit{The sawmill communities in the Sundsvall district}

The sawmill industry was one of the most important and profit making industries in Sweden during the second half of the 19th century.\textsuperscript{870} Industrial development led to a new type of industry that, due to the abolishment of previous state regulations and new technology, for the first time was allowed to expand on its own terms. This created a completely new situation. Employment opportunities induced large

\textsuperscript{866} Bott 1971, pp. 99, 104.
\textsuperscript{867} Ibid. p. 104.
\textsuperscript{868} Ibid. p. 75.
scale migration and this would eventually lead to permanent population settle-
ments and community construction around the sawmill industries.

The sawmill communities could not only be viewed as geographical, social and
symbolic, but could also be described as transitional communities in a time of
social change. This process included both the notion of sawmill settlements as a
construct of earlier forms of industrial communities and of a new time incorpora-
ting old patriarchal values and traditions as well as new ideas. At the same time,
they were also a construct of the sawmill owners, the populations residing within
its boundaries and those who viewed it from the outside.
SOURCES AND BIBLIOGRAPHY

UNPRINTED SOURCES

Demographic Data Base (DDB) Umeå University
Data output 1 - Migration in parishes Skön, Alnö, Selånger, Njurunda and Tuna
1850-1890
Data output 2 - Annual basic statistics for parishes Skön, Alnö, Selånger, Njurunda and Tuna and individual sawmill areas 1850-1890
Indiko – kyrkböcker på nätet (digital church registers)
Tabellverket på nätet, 1749-1859
Alnö, Husförhörslängd 1874-1884, AI:9 A
Skön, Husförhörslängd 1873-1882, AI:8 B
Skön, Husförhörslängd 1883-1893, AI:9A
Folkmängd 1810-1990

Forskningsarkivet (Research Archive) Umeå University
Anno 1890. Folkräkningen på nätet
Letter from Reverend Arvid Ullmark to County Governor Curry Treffenberg.
August 6th 1879.
Summariska folkmängdsredogörelser (population statistics), Svartvik 1865-1890

SVAR – Svensk arkivinformation
Folkräkningen 1880, 1890 and 1900

Västernorrlands landsarkiv (Regional State Archive), Härnösand
Lists from Klampenborg, Kubikenborg, Svartvik and Heffners sawmills. Väster-
PRINTED SOURCES


Lindberg, Pär, Matfors sågs nedläggning och de påföljande befolkningsstrukturella förändringarna (1875-1895), Kulturgeografiska proseminariet, Umeå universitet 1983.

Föreningarsarkivet, Sundsvall

Medelpads blåbandsförbunds årsbok för 1907-08, Sundsvall 1908.

INTERNET SOURCES

Demographic Data Base, Umeå University
http://www.ddb.umu.se/ddb-english/?languageId=1

BIBLIOGRAPHY

Alm Stenflo, Gun, *Demographic description of the Skellefteå and the Sundsvall regions during the 19th century*, Umeå 1994.


Carlgren, Wilhelm, *De norrländska skogsindustrierna intill 1800-talets mitt*, Uppsala 1926.


Laslett, Peter, "Family, kinship and collectivity as systems of support in pre-industrial Europe; a consideration of the 'nuclear-hardship' hypothesis, *Continuity and Change*, 3:2 1988.


Olsson, Lars, Då barn var lönsamma. Om arbetsdelning, barnarbete och teknologiska förändringar i några svenska industrier under 1800- och början av 1900-talet, Stockholm 1980.


Söderlund, Ernst, *Svensk trävaruexport under hundra år*, Uppsala 1951.


Wik, Harald, Norra Sveriges sågverksindustri från 1800-talets mitt fram till 1937, Uppsala 1950.

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LIST OF PARISHES IN THE SUNDSVALL DISTRICT

Alnö
Attmar
Galtström
Hässjö
Indal
Ljustorp
Tynderö
Lagfors
Lögdö
Selånger
Skön
Skönsmon
Sundsvall town parish
Svartvik
Sättna
Timrå
Tuna
IDENTIFIED KINSHIP RELATIONSHIPS

Simple
Father
Son
Brother
Uncle (maternal)
Uncle (paternal)
Nephew (sister’s son)
Grandfather (paternal)
Grandson (paternal)

Complex
Father-in-law
Son-in-law
Stepfather
Stepson
Brother-in-law
Stepfather-in-law
Stepson-in-law
Grandson-in-law

Extended
Brother’s foster father
Foster son’s brother
Foster son’s brother-in-law
Brother’s brother-in-law
Sister’s brother-in-law
Sister’s father-in-law
Daughter-in-law’s father
Son-in-law’s father
Husband to niece (brother’s daughter)
Husband to niece (sister’s daughter)
Son’s brother-in-law
Wife’s grandfather
Wife’s uncle (maternal)
Wife’s uncle (paternal)
Wife’s brother-in-law
<table>
<thead>
<tr>
<th>Swedish Word</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bjällkgrop</td>
<td>Manual sawing station.</td>
</tr>
<tr>
<td>Bruk</td>
<td>Foundry estate</td>
</tr>
<tr>
<td>Bruksgata</td>
<td>Main road usually going through the foundry estates.</td>
</tr>
<tr>
<td>Försvarslös</td>
<td>Individual without employment or church registration in the place of residency. Liable to be arrested and sent back to his home parish if caught.</td>
</tr>
<tr>
<td>Folkets hus</td>
<td>Public meeting houses.</td>
</tr>
<tr>
<td>Hemortsrätt</td>
<td>Law dictating the responsibility a parish had for its residents if the person could not care for him/her self.</td>
</tr>
<tr>
<td>Herrgård</td>
<td>Mansion <em>(corpus de logis)</em></td>
</tr>
<tr>
<td>Husbehovssåg</td>
<td>Sawmill producing for a household need.</td>
</tr>
<tr>
<td>Hus på ofri grund</td>
<td>Name of house built on land not belonging to the house owner.</td>
</tr>
<tr>
<td>Laga försvar</td>
<td>Law justifying arresting individuals classified as <em>försvarslös</em>.</td>
</tr>
<tr>
<td>Landshövdings-</td>
<td>County Governor's five year report</td>
</tr>
<tr>
<td>ämbetets femårs-</td>
<td></td>
</tr>
<tr>
<td>berättelser</td>
<td></td>
</tr>
<tr>
<td>Mantalslängder</td>
<td>Registration list for the country’s taxable population.</td>
</tr>
<tr>
<td>Norrland</td>
<td>Geographical name for the northern parts of Sweden.</td>
</tr>
<tr>
<td></td>
<td>Includes provinces Gästrikland, Hälsingland, Medelpad, Ångermanland, Västerbotten and Norrbotten, Härjedalen, Jämtland and Lappland.</td>
</tr>
<tr>
<td>Obestämd ort</td>
<td>Unknown place of residency</td>
</tr>
<tr>
<td>Roteindelning</td>
<td>Parish division. One <em>rote</em> included a number of residents obligated to care for the support of a local soldier.</td>
</tr>
<tr>
<td>Salusåg</td>
<td>Export and commercial sawmill.</td>
</tr>
</tbody>
</table>
Sapmi
Geographic area in northern Sweden, the home of the Sami, an indigenous people.

Skifte
Distribution of land. Enclosure.

Statistiska Centralbyrån, SCB
State bureau founded 1858 which incorporated Tabellverket.

Sågfilare
Responsible for the maintaining and sharpening of the saw blades and tools.

Sågställare
Oversaw and managed work in the saw houses. The primary responsibility was to enable the most of each log that passed through the saw frames.

Tabellverket
Statistical state bureau founded 1749.

Utjord
Land for gracing, located outside village boundary.
Reports from the Demographic Data Base, 
Umeå University


