Ethnicity, Class and Regional Building Styles: The Foundation of Immigrant Architecture

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Despite scholarly consensus on the factors of emigration, settlement patterns, and transnational communication of Norwegian-American immigrants, there is still much debate over the degree to which Norwegian material culture is represented in immigrant-built houses. While previous studies investigated the presence of Norwegian traditions in first-generation or "pioneer" homes, many were limited to examining log-building techniques between Norway and America. This led to the conclusion that immigrant-built houses were quickly assimilated. These studies rarely addressed how conditions prior to emigration, such as socio-economic class and regional building customs, impacted the cultural influences reflected in Norwegian-American homes. Moreover, few intensive transnational studies have been done on Norwegian-American houses. The work of scholars Reidar Bakken and Marion Nelson was foundational to the field. While their previous studies called for more to be done, few have been conducted in the last thirty years.

To address these gaps in research, I conducted a transnational comparative case study project to investigate the architectural parallels between nineteenth-century dwellings in Norway and immigrant-built dwellings in the United States. The Norwegian-American dwellings of the Vik and Traaen families, located near Riceford village in Spring Grove Township, Houston County, Minnesota, serve as primary case studies. Gunder Traaen emigrated from Numedal Valley in 1853, and Endre Vik emigrated from Vald-

res in the 1870s. They later became connected through Endre's marriage to Gunder Traaen's daughter, Kjersti, in 1882. This project follows the through-line of their immigration to the United States and the eventual building of their second-generation homes, which bear a striking resemblance. Both families have an ancestral connection to Eastern Norway, historically associated with the so-called Akershus house typology, which became the starting point of my transnational analysis.

This project was supported by a Fulbright U. S. Student Fellowship grant, enabling me to conduct field surveys and archival research in Norway over eight months. Affiliations with the Norwegian Emigrant Museum and the Oslo School of Architecture and Design supported this work at key times. The project was composed of three phases: first, to establish a baseline of research on class and regional building styles in Norway; second, architectural field studies on relevant case study houses; and third, an analysis of how these elements may have been reflected in immigrant-built houses.

This essay outlines relevant findings from this project regarding the degree to which Norwegian influences could be identified in second-generation homes. I will provide evidence of their relationship to Norwegian building customs based on regional origin, socioeconomic background, and period of emigration. The first section will introduce the Vik and Traaen case study dwellings in Minnesota, followed by a review of existing literature, which led to this study's structure and research focus. The field research phase will then be discussed, highlighting common characteristics of crofters and freeholder dwellings specific to each valley and relating them to buildings connected to the case study families. These characteristics will then be comparatively analyzed against Minnesota's Vik and Traaen houses. The conclusion will summarize my findings as well as counterarguments. Unless otherwise noted, all translations are my own.

The Vik and Traaen Families and Dwellings in Minnesota

As previously mentioned, the Vik and Traaen houses display a spe-

cific three-room floor plan, known as the Akershus plan, coined by Norwegian theologian and sociologist Eilert Sundt. The primary marker of this typology was the front door location roughly in the center of the front wall, which allowed direct entry into the house's main living space.[1] In Norwegian, this room was called a *stue*, meaning "living room." It encompassed more than what we consider a living room today–a multi-purpose room for daily activities and cooking and extra sleeping areas in the corner of the room. It was the largest of the three rooms, which took up about two-thirds of the house's footprint. The remaining space comprised two smaller rooms, often a bedroom and a storage room. These two rooms were side-by-side with doors that led into the living room and were divided by a non-loadbearing partition wall. In earlier construction, this was often a thin wood plank wall.

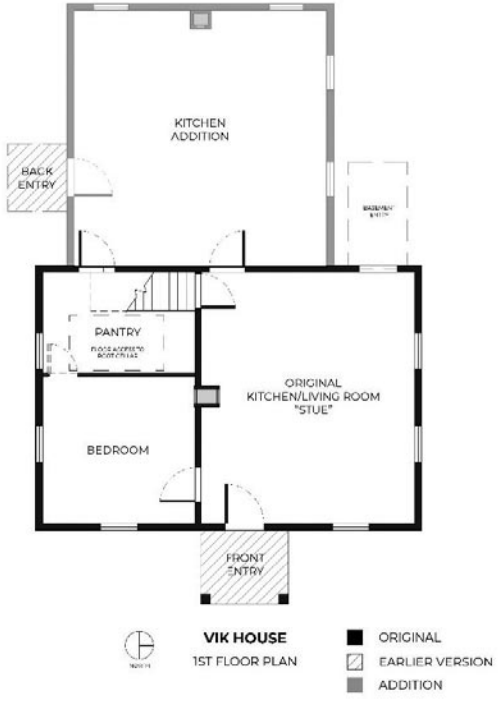

Figure 1. Floor plan drawing of Vik house showing the original three-room Akershus layout (black lines) and the kitchen addition added later (gray lines). Diagonal hatch lines indicate an earlier version of the house that has since been removed. Drawing by Miranda Moen, 2024.

The Vik house is a wooden balloon frame dwelling. It is two stories high, with a T-shaped addition at the rear of the house. The front door opens directly into the living room and is flanked by windows. This is the entry to the original three-room layout. The house follows the Akershus typology closely, with the largest room being originally a combined kitchen and living room. Later, it became solely the living room with the addition becoming a kitchen. During field studies, a bed was found in the corner of the living room, which aligns with historical Norwegian traditions. Of the two smaller chamber rooms, one served as a bedroom, while the other was a pantry with floor access to the cellar below. Originally, the addition was only one story tall. A second story above the kitchen was later added, around the 1930s, as an extra bedroom and living space for the eldest son.

The chimney in the original three-room portion of the house is positioned on the main structural wall and protrudes through the apex of the roof. This location was important for sharing heat between the combined living room and bedroom. As a result, this wall divided the house into a one-third to two-thirds ratio. The pantry was left unheated. The second story of the original house and the addition hosted bedrooms. There was no bathroom in the house. The family used an outhouse in the backyard, likely accessed through the back door. On the gable ends of the house, two windows per story are stacked above each other. One small window in the shape of a Gothic arch is located on the south-facing gable end of the attic. Three windows on the second story replicate the front façade openings on the first floor, with a window positioned directly above the front door. As seen in the photograph of the Vik House (figure 2), a portico shades the front entry door that opens directly into the living room. On the back addition, a small unconditioned vestibule protected the doorway into the kitchen.

The original date of construction for the house is hard to pin down due to a lack of documentation. The 1878 plat map for Spring Grove Township shows two residences located on Gunder Traaen's first-acquired property in Sections 7 and 8.[2,3] It indicates one dwelling at the present-day location of the Vik house, in the far south-

Figure 2. Vik house in the early 1900s near Riceford village, Spring Grove Township, Houston County, Minnesota, showing a two-story Akershus floor-plan house. Standing left to right: Endre Vik, Kjersti Traaen, and their two children, Anna Randina and Gustav. Photo courtesy of Miranda Moen.

west corner of the E ½ of NE ¼ of Section 7, and one at the present-day location of the Traaen house, about a quarter mile north. Gunder received the land patent for this acreage in 1857, meaning both dwellings belonged to him. However, the 1871 and 1874 plat maps show only one dwelling, the location of which differs from both later residences. The earlier residence is located along the northeast quarter boundary line separating Sections 7 and 8, about a quarter mile east of the existing Traaen and Vik houses. As a result, it is reasonable to assume that within four years, one house was built, and one was likely moved to another location.

In support of this hypothesis, a recently identified photograph labeled "Endre Vik's place" shows the family standing in front of

a single-story house with a small addition, likely a summer kitchen. The house is different from the present-day Vik house. Family lore corroborates the existence of an earlier house, which was said to have been located southwest of the current dwelling. At the time of field documentation, no evidence of the earlier house was found. However, the fact remains that the 1878 plat map indicates the existence of two residences, one of which is the current Vik house location. The plat date is before the wedding of Endre Vik and Kjersti Traaen in 1882 and their purchase of westerly adjacent farmland in 1885. Therefore, an earlier dwelling belonging to Gunder Traaen may have been moved to this location when they were building the second-generation brick house.

The Traaen house features a three-room Akershus plan and, from the exterior, appears to be built of brick construction. Except for noticeable material differences, most features are identical to the Vik house, including two stories high with a "T"-shaped addition

Figure 3. Traaen house near Riceford village, Spring Grove Township, Houston County, Minnesota. Photo courtesy of Miranda Moen, 2021.

at the rear. The addition also hosts the kitchen on the first floor and bedrooms on the second. Window and door locations are the same as well. While a larger veranda now stretches along the front façade, initially, it was a portico like the one seen on the Vik house.

As mentioned, Gunder Guulsen Traaen emigrated from Rollag in Numedal Valley in 1853. First landing in Rock County, Wisconsin, he and his wife, Anne, made their way to Spring Grove in 1854 and began purchasing land to build a house and establish a farm.[4] There is a gap in the records between their arrival in 1854 and 1869. Some information can be gleaned from the land records held by the Bureau of Land Management's Government Land Office and available census records.

Starting with the earliest available census record, Gunder Traaen and his family are listed in the 1860 census for Spring Grove Township. In October 1855, Gunder filed an official cash entry at the Brownsville Land Office in the Root River Land District for the land described as E ½ of the NE ¼ of Section 7. In December, he filed one for the adjacent property at W ½ of the NW ¼ of Section 8 in Township 101, Range 7 West. "Cash entry" meant the land was within the public domain and paid for with cash by the applicant.[5] In April of 1857, Gunder Traaen was issued a land patent for this land, totaling 160 acres.[6] The patent is the legal document that conveys the title of the land to the applicant after having satisfied all requirements for gaining the title.[7] Considering this information, it is reasonable to assume that Gunder Traaen took about two years to complete the requirements, at which point the land patent certificate was granted.[8] He continued to buy land in Section 7 with transactions for 40 acres in 1858 and a deed for 40 acres from the previous owner, Thomas Fellows.[9]

Critical to this project, a ledger later identified as having been written by Gunder Traaen became a key resource in researching the Traaen house. The ledger primarily describes farm production, dates to 1869, and is written in Dano-Norwegian.[10] Of utmost importance to this project, it includes a house-building entry from 1875. This entry is titled *Fortegnelse over Matrialier til Husbygning: Samt Leiet Arbeide til Sammen*, which roughly translates to

"List of Materials for House Building as well as Hired Labor together."[11] It provides a detailed account of who he paid to work on a house, where he went to buy construction materials, and their associated costs and quantities (figure 15). Another house-building entry is dated 1876 and includes work on the house until 1877.[12]

The initial 1875 entry also vaguely describes a house being built but does not name the location. As a result, research was conducted to confirm the entry described the brick Traaen house and its inclusion in this project. One early point of confusion was the mention of wood frame construction in the ledger, whereas the exterior of the Traaen house shows brick. In an entry from January 1875, Gunder Traaen paid for 14,162 linear feet of lumber (boards) from La Crosse. The typical board foot requirement for wood-frame houses ranges from 12,000 to 16,000 board feet, which puts the Traaen house within the range for a wood-construction house.[13] Secondly, the brick walls of the Traaen house reflect running bond brick courses. This indicates the brick wall is only a veneer, single wythe brick wall. If the house were built of solid brick instead, the walls would be at least two wythes thick. Header bricks would be installed to tie the two together, resulting in what is known as the Common or American Bond pattern. A row of header bricks (short-end view) would be seen in this configuration every five or six courses. Likewise, entries in the ledger dating to the autumn of 1876 indicate Gunder bought 10,835 bricks from his neighbor, Timan Gulbrandsen. This further confirms that the Traaen house has a wood frame with a brick veneer exterior wall.

Overall, the Vik and Traaen case study houses reflect two-story Akershus house typologies and appear almost identical despite apparent differences in exterior materiality. From here, I will transition to outlining previous studies of Norwegian-American houses conducted by earlier scholars and existing literature that framed my research project and the characteristics I chose to analyze transnationally.

Gaps in Research (Previous Studies)

The field analysis of the Vik and Traaen houses in Spring Grove Township revealed commonalities in floor plan, function, overall

massing and form, and the location of windows and doors. These elements became the initial focus of my study. To understand the degree to which these elements represented cultural influences, I conducted a literature review of previous studies that examined Norwegian-American houses and other material cultures. As previously mentioned, most studies examined first-generation log-construction houses, and fewer still included a comparison of transnational case studies. The work of Reidar Bakken and Marion Nelson was important to this project and the overall field of material culture. Both conducted studies that debated the degree to which Norwegian influences appeared in Norwegian-American pioneer houses, which was the foundation of this project.

Two of Bakken's articles serve as important precedents to this study. The first article, "Two Museum Houses: A Microanalysis of Cultural Adaptation in the Upper Midwest in the Late Nineteenth Century," was published in 1989. In the article, Reidar Bakken outlines a transnational comparative study of two Norwegian-American dwellings that were moved to the Norwegian Emigrant Museum in Hamar, Norway, from the Upper Midwest. He attempts to analyze the transnational parallels between the homes of the Gunderson and Borderud families in the United States and their farm origins in the municipalities of Krødsherad in the former Buskerud County and Grue in the Solør region, respectively. This investigation sought to shed light on Norwegian folk culture and its development after being brought to America. As a comparative study of dwellings, it was novel in its endeavor and served as an important precedent in this project.

About a decade after the publication of this article, the original conclusions about the owner and builder of the Norwegian-American Borderud house were called into question. An extensive investigation was then performed by museum staff to investigate these claims. The former director of the Norwegian Emigrant Museum, Knut Djupedal, wrote about this investigation in a manuscript within the museum's collections. He ascertained that while we do not know who built the house, available evidence indicates that its first owner was pastor Johannes Hellestvedt, the first Nor-

wegian Lutheran pastor in that part of Dakota territory.[14] This was contrary to Bakken's original position that the house was built by its namesake, Peter Borderud from Solør. This finding undermined the potential connections that Bakken proposed between the class and regional origin of the immigrants and the resulting architecture in the United States. Consequently, the potential transnational conclusions Bakken proposed were no longer sufficiently reliable.

However, the structure of Bakken's study as a transnational case study analysis tracing two immigrant families is still relevant and an important precedent for this project. It offered a direct transnational comparison between Norwegian and Norwegian-American dwellings tracing the immigration of specific families. The outcome of his study proposed that aspects such as class and regional building styles should be explored in future research and expressed its importance in drawing more specific conclusions. Consequently, this transnational case study project was structured to analyze the Norwegian and Norwegian-American dwellings of each case study family before and after migration.

John O. Holzhueter's work covered in "Aslak Lie and the Challenge of the Artifact," is highly relevant to this project as well. He writes about how Aslak Lie, originally from South Aurdal in Valdres, combined Norwegian and American building techniques when he built his dwelling in 1848-49 in Springdale, Dane County, Wisconsin. Holzhueter traced Aslak Lie's journey from crofter to freeholder in Norway and then his immigration to America, anchored by a thorough examination of material culture. While Holzhueter's research into Lie's Valdres home does not mention a specific floor plan typology, it does describe the same characteristics of the one-story, three-room houses I observed from the early nineteenth century in nearby Vestre Slidre in Valdres. Furthermore, his analysis of Lie's house in Wisconsin describes both Norwegian and American characteristics, which is an important precedent to my research project. Lastly, Holzhueter emphasized cross-disciplinary research and demonstrated how the study of buildings and artifacts, especially in a transnational study, can shed light on immigration, assimilation, and settlement patterns.[15] His work remains a rare

example of a transnational study that has analyzed material culture before and after immigration.

Lastly, Terje Mikael Hasle Joranger's article, "Building America: Building Patterns Among Norwegian Americans in the Upper Middle West," provides an ample overview of Norwegian-American material culture as it is known to date.[16] Furthermore, he includes Holzhueter's work on Aslak Olsen Lie and introduces Anders Ellingsen Kvaale, an immigrant from the landowning class in the Sogn district of Western Norway. He draws on previous scholar's work that examined the socioeconomic and regional variations observed in their immigrant homes as well as the degree to which they retained Norwegian elements.[17] Joranger points out that there is a lack of relevant source material from which more in-depth research can be done. He emphasized the need for more studies on the transfer of Norwegian building traditions in various settlements. My Fulbright research project sought to contribute more transnational studies to this field of research and advocate for the preservation of immigrant-built buildings as important knowledge-bearing artifacts.

Generation as a Factor in Selecting Transnational Case Study Houses: The Log House in Norway and America

Equally important, Reidar Bakken's article also introduces the concept of the "Pioneer Form" and "Folk Form" as it relates to both the generation of the Norwegian-American house constructed and its owners. Bakken refers to a first-generation log house as the "Pioneer Form," usually one-room log houses originally intended for temporary use.[18] He concluded that they rarely exhibited cultural influences since they were often built hastily to allow homesteaders enough time to cultivate farmland to prove their claim within the five years stipulated by the 1862 Homestead Act.[19,20] As a result, Bakken proposed that comparatively analyzing log houses between Norway and nineteenth-century America is problematic. He points to C. A. Weslager's book, *The Log Cabin in America,* published in 1969, which extensively researched the international influences of log construction techniques observed in America and

offered Weslager's conclusion that it is "impossible to designate a log house [in America] in national terms."[21]

The work of Marion Nelson is vital to include here regarding the analysis of first-generation log houses. Nelson was a former University of Minnesota professor in Scandinavian Studies and Art History, an expert on Norwegian-American decorative folk and fine art, and the former director of the Vesterheim Norwegian-American Museum in Decorah, Iowa. His early speculations on Norwegian-American buildings were published in "Folk Art Among the Norwegians in America," an article published in 1976 as part of a conference proceeding hosted by the University of Minnesota-Duluth. Based on his observations and expertise, the paper offers critical insight into Norwegian-American folk art. While most of his article examines household objects and furniture, he observes the general characteristics of log houses built by Norwegians in America. Nelson describes the following:

> The most frequently encountered houses are one and one-half stories high, the corners are dovetailed, the joints between logs are open and irregular, the walls both inside and out are whitewashed, there is no fireplace, the roofs are shingled and often of moderately high pitch, the windows are double hung, and one window is often placed immediately beside the door.[22]

This description aligns with the Gunderson house in Bakken's study. Nelson states that "none of these characteristics fit the type of domestic buildings we generally know from the folk museums of Norway or from most of the standard literature on Norwegian rural architecture."[23] This is important for two reasons. First, the work of Nelson, Bakken, and C. A. Weslager suggests that first-generation log buildings are not a sound transnational comparison due to the expediency with which they were built and the widely distributed use of log construction among various immigrant groups in the United States. In "Two Museum Houses," Bakken

suggests more research on the so-called "second-generation" house or the "Folk Form" of immigrant-built houses. According to Bakken, these were houses built after the initial pioneer house and were more permanent in the builder's original intention. In his words, "It is here that one can best detect cultural impulses and choices because they did not come into being as a result of an immediate need."[24] Accordingly, he speculated that studying second-generation houses may prove more beneficial to cross-cultural analysis.

Class as a Factor in Selecting Transnational Case Study Houses

Secondly, Nelson pointed out that the most investigated rural buildings in Norway predate the general period of mass emigration from Norway to America and that these buildings "generally belonged to a land-owning peasantry."[25] The key element here is ownership, which was previously reserved for groups like freeholding farmers and civil servants who paid taxes on the land they owned. After men received universal suffrage in 1898, crofters could vote to support legislation that eventually enabled them to buy and own the lands they previously rented. Norwegian outdoor air museums host many upper- and middle-class dwellings from a bygone era. Few have more than one dwelling representing the more common, lower socioeconomic class dwellings across the country. This finding aligns with the field research I conducted during the course of this project.

Most buildings observed in both local and national open-air folk museums represented freeholder dwellings dating to before the mid-nineteenth century. While these buildings are incredibly important to preserve, they do not represent the types of buildings that most immigrants would have lived in before coming to the United States. This is due to the period in which they were built and the socioeconomic class that would have owned them. Therefore, previous transnational studies likely analyzed higher-class representations of Norwegian dwellings from earlier periods. Compared to the relatively stripped-down houses commonly seen in Norwegian settlements, it is understandable why previous scholars

would conclude that immigrants quickly assimilated to American building customs.

Immigrants belonged to various socio-economic groups, the characteristics of which reflected the unique community where they grew up. The gaps I identified in Norwegian material culture studies prompted me to analyze the socioeconomic conditions of nineteenth-century Norwegian peasant society. This prompted me to carefully select buildings in Norway based on their geographic region, socioeconomic context, and time period. Previous studies by Nelson and Bakken suggest that studying different classes of Norwegian architecture may shed more light on transnational influence. Secondly, Bakken calls for further research into second-generation buildings, which he speculates may be the key holder of cultural traditions. This project analyzes second-generation frame and brick veneer houses in Minnesota against nineteenth-century Norwegian log-construction houses of the same class background as the case study families.

Lastly, a word about the term *class* and its meaning in this article. The class-ruled society, or *klassesamfunn*[26] in Norwegian society, is tied to the industrial revolution in the nineteenth century. Class solidarity replaced power relations between superior and subordinate groups that existed in the estate society. Before this change, Norway was primarily an estate society, or *standssamfunn*.[27] The estate society was marked by different social groups separated by rank and position in society. According to historian Jan Eivind Myhre, Norwegian society was divided in parallel estates or columns which included the estate of officials, merchants, craftsmen, and the peasantry. Social ties existed between superiors and subordinates within each estate. Relevant to this article, both freeholders and crofters were part of the Norwegian peasant society.

The divisions within the peasant estate were classified according to the ownership of land. Freeholders belonged to the upper echelons of the peasant estate based on their degree of landed wealth and, consequently, status in the peasant society. On the other hand, crofters, or *husmenn*, servants, and day laborers belonged to the lower strata of the peasant estate.[28] Despite having a

larger socioeconomic separation between the class of civil servants and the peasantry, differences in financial stability and living conditions were observed within the peasantry as well and are the primary subject of this article.

Distinctions in socioeconomic and living conditions between social groups were due to the vertical organization of the estate society where the social structure was fixed. This meant there was little movement from the middle and lower classes to the upper class due to status being tied to birth, occupation, and their associated positions in society. While the meaning of the term *class* differs in Norwegian estate society and the class society familiar to Americans, it is still relevant as a short-hand for describing socioeconomic variations. The use of *class* in this article is meant to describe the socioeconomic variations between different social groups and their associated living conditions. Regardless of whether the socioeconomic contexts stem from the estate society or class society, there were clear social, political, and economic divisions between them. This ultimately impacted the motivations for Norwegian immigration to America.

Selecting Regional Building Styles for Transnational Analysis: The Akershus Typology

In his article entitled "Acculturation in Buildings and Farmsteads in Coon Valley, Wisconsin, from 1850-1930," Reidar Bakken identified the use of the Akershus typology in Coon Valley, Wisconsin. This town is located in the state's southwestern corner, approximately 50 miles from Spring Grove. Here Bakken describes the Norwegian-American Struxness house and its similarities to the Norwegian Akershus house typology.[29] An examination of fifty-three log houses was carried out by a professor with the University of Wisconsin, William Tishler, for Norskedalen in 1984. The Struxness house contained the same basic three-room floor plan and façade arrangement typical of the Akershus typology. This provides an excellent example of how a log construction house can still contain cultural indicators, such as its floor plan, even if the joinery found on the exterior is culturally ambiguous.

The Akershus three-room house has been commonly used in Norway since the Middle Ages. It was primarily found in Eastern Norway, roughly corresponding with the former Akershus diocese boundaries, where it received its name.[30] This plan developed from the earlier *årestue* or "hearth house" typology. This typology was described as a three-room house where the living room had an open hearth on the floor and a vent through the roof above for smoke. In the sixteenth century, the hearth in the living room was replaced by a fireplace with an enclosed chimney to exhaust smoke through the roof. It had two side rooms or "chamber rooms." The entrance would lead into one of these chambers, which provided a buffer between the main living quarters and access to outdoor conditions. It closed off from the rest of the house to keep warm air inside and cold air out. In the Akershus typology, "the entrance was moved from the hall to the middle of the building, so you could enter the living room directly…thus one became two [rooms], or one long if the partition was removed…[and] as a rule, a *sval* was built in front of the door" (my translation).[31] Often a *vindfang* or *sval*, essentially an unconditioned vestibule to block the wind, was placed at the entry of the house. Diverting the entrance to the main living space allowed them to utilize both chambers for specified functions.

Eilert Sundt's book, *Om Bygnings-skikken på Landet i Norge* (which roughly translates to *On the Building Customs of the Norwegian Countryside*), outlines the history of various regional building plans and forms. In his work, Sundt found that regional typologies typically differed in the location of the main entry door and the function of the rooms. Like the Akershus house, regional variants also followed historical diocese boundary lines. In turn, the boundaries of localized traditions followed the mountain peaks that historically separated the valleys. This could account for the slight stylistic variations between houses in the Valdres and Numedal valleys despite being within the Akershus diocese boundaries. The Valdres Valley is located in the former Oppland County (now part of Innlandet County), and Numedal Valley is in Buskerud County.

Other examples of the Akershus typology in Bakken's article "Acculturation in Buildings and Farmsteads in Coon Valley, Wis-

consin, from 1850-1930" include the Bakke house near Viroqua and the Terry Rudie house in Coon Valley, Wisconsin. Referring to the Terry Rudie house, he explains, "Seen from the outside, the house seems to be entirely American in style, concerning both the decorative trim and the perpendicular juxta-positioning of the two halves."[32] The latter comment refers to the floor plan being "comprised of two three-room dwellings" that resemble an Akershus typology.[33] The seemingly widespread nature of this typology in the project area highlighted its importance as a potential regional building custom transferred to the United States. In addition, focusing on broader architectural characteristics such as overall form and floor plan usage may provide better insight into how Norwegian influences were adapted to the American landscape.

Detailed elements, such as architectural ornamentation and aspects of handicrafts, are more challenging to compare transnationally. Marion Nelson's research pointed out that it would be unreasonable to expect specific stylistic details to be reflected in immigrant-built houses due to the lack of access to various materials and products used in Norway. Nelson wrote that folk art in Norwegian-American communities were either items that were brought to the United States by the immigrant, later inherited or items that were made in the United States "before mass-produced materials became available" and typically "did not last more than 10-20 years in most settlements."[34] He later adds that while "a few immigrants continued to produce materials in the folk traditions of the homeland beyond the period when this was called for by economic need…these were individuals with strong creative drives… [and] were a rare phenomenon among a people who for the most part adapted readily to the industrial age."[35]

After the literature review, I examined the potential Norwegian influences of second-generation houses relating to socioeconomic origin and regional building customs, including the Akershus typology, as potential cultural holdovers. This was informed by the gaps in research in existing literature and previous scholars' calls for more research.

Phase 1: Establishing a Baseline of Research on Class and Regional Building Styles in Norway

To understand the extent to which Norwegian vernacular architecture exhibits variation, I first established a baseline of research on class and regional building customs. This provided critical background and contextual information on the elements of building customs that were examined in later phases. I utilized the methods outlined by Thomas Hubka in *Houses Without Names* to organize the research data by architectural classification; they include 1) architectural style, 2) exterior shape, form, and massing, and 3) floor plan.[36] The latter two methods were the primary methods utilized in this study as they had the most accessible information. I assumed class and regional origin could affect the appearance of seemingly broad characteristics such as floor plan, form, and façade arrangement, making them easier to analyze and compare. As a result, I use more than one classification method to explore a broader scope of influences.

Phase 2: Localized Field Study of Dwellings in Valdres and Numedal

In the second phase of my project, I conducted a localized field study of Vik dwellings in Vestre Slidre, Valdres Valley, and the Traaen dwellings in Rollag, Numedal Valley. The goal of this phase was to identify the farms in Norway that the case study families had used before emigration for use in the third phase–the transnational comparison. Furthermore, I sought to analyze the most common characteristics of nineteenth-century dwellings in each valley to ensure that the comparison analyzed elements generally representative of the region. Since variations appeared tied to the time of construction and the class origin of the user, these aspects were heavily considered in the buildings I included in the analysis; I documented existing site and building conditions through architectural drawings, measurements, and photographs at each site. Historical census data and existing documentation supported this

fieldwork and subsequent research on the buildings. In lieu of buildings belonging to the specific family, local dwellings typical to the period of emigration and class were utilized.

Genealogical research helped identify which socioeconomic class Endre Vik and Gunder Traaen belonged to before emigration. Therefore, I will outline the general characteristics and differentiators between these groups to frame the study. Many Norwegian emigrants, like the Vik family, had belonged to Norway's *husmann* or "crofter" socio-economic class. Their restricted ability to own land prompted them to escape generational poverty through emigration. The Traaen family, on the other hand, were *bønder* or freeholders from Rollag in Numedal Valley, Norway. Both crofters and freeholders belonged to the peasantry and, thus, remained at a lower status compared to higher ranks like the *embetsmenn*, or government officials.[37]

Whereas the Traaen family would have lived on an independently owned and registered farm, or *gård*, the Vik family would have lived on a *husmannsplass* or a crofter's holding.[38] The farm owned the crofter's holding, and the crofter worked and paid rent to the farm owner in the form of labor. The croft was never registered as a separate unit, and buildings on the crofter's holding were under the ownership of the main farm. As a result, crofters could not gain economic benefits from improving the dwellings or the land. Anything the crofter improved ultimately benefitted the farm owner, which inhibited the crofter's motivation to make significant changes or improve the croft beyond immediate repairs and essential buildings. Crofter's dwellings were often tied to the duration of their life unless otherwise stipulated by the farmer who owned it. When the crofters died, their houses were frequently moved to other farms, having to be rebuilt and subsequently changing over time (my translation).[39] While conditions of crofter holdings varied widely across the country, the elements outlined in this article describe those of Eastern Norway.[40]

In the eighteenth and nineteenth centuries, a shift began to take place. According to Norwegian scholar Arne Lie Christensen in his book *Den Norske Byggeskikken*, the population was growing rap-

idly, and crofts developed in large part due to this population growth and the "farm owners' growing need for labor" (my translation).[41] He goes on to say that "especially in the rich agricultural and forestry settlements in Eastern Norway, the tendency was that the farms were not divided up when the population increased, and instead a larger crofters' class was created…There the crofters were agricultural workers, forest workers, and craftsmen and were in a strong dependence on the master" (my translation).[42]

Crofter's holdings usually consisted of a small plot of land where subsistence farming could be carried out by the crofter and their family, as well as a small barn that could house a few animals (my translation).[43] Some crofts were similar to small farms that were kept up and passed down from generation to generation, but there were also holdings with poor conditions and a high turnover of inhabitants (my translation).[44] In contrast, the main farm was a registered unit dependent on human labor. The lower socio-economic classes of farm laborers, such as crofters, would have been the largest contributors. As a result, socioeconomic conditions and the desire to rise in status were often reasons for emigration.

Freeholder Dwelling Characteristics in Rollag in Numedal Valley

Prior to his emigration in 1853, Gunder Traaen lived on the Søre Traaen farm in Rollag, Numedal Valley.[45] Gunder's father, Guul, acquired the farm in 1829. Two years later, Gunder was born in 1831. The Traaen family's status as farm owners in Norway meant they could earn money from selling their farm in Rollag when they emigrated. This is a crucial distinction in nineteenth-century Norwegian peasant society.

The oldest dwelling on the farm is called *Gamlestugu* ("The old house)." It was built in 1693 (pictured in the center of the photograph, figure 6), has a three-room Akershus floor plan, and is one-story tall. The house is considered a *mønsåsstue* (a house type named for its unique roof construction). The roof construction features the *mønsåstaket*, or the "ridge roof…where the rafters are not only carried by the long walls but also by a colossal ridge beam at the top of the room" (my translation).[46] The presence of a *mønsås-*

stue built in the late seventeenth and early eighteenth century on a freeholder's property was a common feature in Rollag. Several aspects of the house are also reminiscent of common eighteenth-century upper-class traditions in Rollag. This includes wooden stave columns at the entrance reflecting local traditions of decorative carving. Dwellings with similar characteristics are preserved in the Rollag *bygdetun* (Rollag open air museum), which verifies their alignment with local freeholder dwellings from the eighteenth century.

Importantly, Arne Lie Christensen points out that eighteenth-century upper-class dwellings influenced the development of the typical crofter dwelling later on:

> In many cases, the crofter's dwellings were miniature versions of the houses on the main farm. The typical croft in the 1800s was a type of house that had previously been common on the landowner farms but was replaced by larger houses with more rooms…In Eastern Norway, it was the Akershus [typology] that became the crofter's house (my translation).[47]

In short, the one versus two-story form became a consistent class indicator in the nineteenth century. This was further demonstrated during fieldwork at Glomdalsmuseet in Elverum, where I analyzed a crofter dwelling representative of Eastern Norway. It shared many characteristics with those seen in *Gamlestugu*. Both have an Akershus floor plan, the primary marker of which is the location of the front entry leading into the living room. Both had an attached storage area also serving as an outhouse (as seen from the front, located on the right end of the house–figures 4 and 5). The chimneys are located on the main structural wall between the living room and the smaller chambers, and both have a portico over the front entrances. The façade is symmetrical and exhibits traditional door locations and flanking windows. Lastly, in addition to a corner fireplace, each also has a stove in the living room, where

the chimney exits at the apex of the roof. The only difference is that the crofter building has one long chamber room adjacent to the living room instead of two. This characteristic, however, still aligns with historical precedent. In reference to the Akershus typology, the Valdres *bygdebok* states that the two small chamber rooms may be combined into one room that runs the depth of the house. The author cites this as a common finding of old, small houses and references it in Skattebustova from Øystre Slidre, built in the 1700s.[48]

Figure 4. Exterior elevation comparison between the croft dwelling at Glomdalsmuseet on the left and the Traaen Gamlestugu on the right. Drawing by Miranda Moen, 2022.

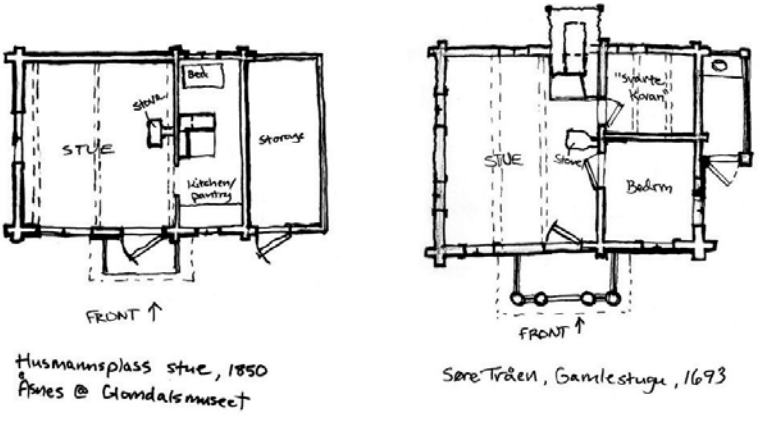

Figure 5. Floor plan comparison between the croft dwelling at Glomdalsmuseet on the left and the Traaen Gamlestugu on the right. Drawing by Miranda Moen, 2022.

Christensen outlines how the Akershus crofter dwelling was adapted to other areas of Norway:

> In Eastern Norway, it was the Akershus type that became the crofter [dwelling]. We find Akershus dwellings over a large area, also in Indre Sogn where the house type has long been incorporated on the farms. In Aust-Agder the crofter dwelling was often a one-room house with a *sval* and one-and-a-half floors, in Sørlandet and the coast of Western Norway a dwelling with a *forstuekjøkken* (front entry kitchen), in Trøndelag and the rest of Central Norway [it was a] three-room house with one and a half or two floors, [and] in northern Norway a one-room house with a *sval* or the Akershus dwelling. All these types of houses had been common on farms in the eighteenth century, but in the nineteenth century became synonymous with crofter dwellings, at least from Trøndelag and further south.[49] But if the types were the same as the farmers had previously had, the croft was usually much smaller. The house expressed the status of the residents, and from a long distance, people could see that this was a crofter's house (my translation).[50]

Three critical pieces of information are gathered from this excerpt: 1) dwellings reserved for the freeholder in the eighteenth century were commonly used by the crofters in the nineteenth century, 2) as time passed, the Akershus typology spread outside the regional diocese boundaries, and 3) the crofter dwelling often imitated the freeholder dwelling on a smaller scale. These aspects are found in the comparative study between the crofter house at Glomdalsmuseet and the Traaen *Gamlestugu*. Both houses are great examples of how the crofter houses reflected characteristics that belonged to older freeholder dwellings. Separated by one hundred

and fifty years, they share the same Akershus floor plan, building form, and façade arrangement. Class indicators specific to the crofter dwelling at Glomdalsmuseet are generally reflected in the small size of the house, lower quality materials including smaller diameter logs, protruding log ends, and less uniformity overall. Its form as a one-story house in the nineteenth century also indicates its lower-class stature.

Returning to Søre Traaen, a new dwelling was constructed beginning in 1835 when Gunder was four (seen on the right side of the photograph in figure 6).[51] The house was painted white and adorned with decorative Swiss-style trim details. It was originally one-and-a-half stories tall but was later renovated to two full stories. This also involved raising the roof, a common practice in Norway. According to Ina Backer in *Bygd og by i Norge: Buskerud*, vertical additions provided an easy way to circulate heat "almost for free through the joists and from the chimney" (my translation).[52] Historical records of the Traaen farm indicate that the renovation to two building stories likely occurred in 1930.[53]

This house has roots in the Akershus typology but features a newer, expanded floor plan called the *midtkammersplan* (middle chamber plan). Finn Ditlevsen in *Vest Oppland and Valdres* attributes the arrival of this development to upper-class Danish and German civil servants who came to Norway, and "the better-off [Norwegian] peasantry also followed suit, both in layout and details."[54] One of the two smaller chamber rooms associated with the Akershus form was transitioned into an entry vestibule in this configuration. Another *stue* could then be built on the end of the house, creating a symmetrical plan. One of the small chamber rooms became an entry vestibule as it was now in the center or "middle chamber" of the house. This plan became known as the "middle chamber house." Similarly, if the two small chamber rooms were instead one long room, it would be called the *midtgangsplan* or "middle aisle plan." Due to the economic prosperity of Numedal Valley in the nineteenth century, it was common for freeholder dwellings to expand the house to reflect this form, which Backer attributes to influences from the upper classes above the peasantry.[55]

Figure 6. Gamlestugu (center) and the newer Swiss-style farmhouse (right) at the Søre Traaen farm in Rollag, Numedal Valley. Photo from the late nineteenth century. Photo courtesy of Miranda Moen.

Figure 7. The Swiss-style farmhouse built in 1835 at the Søre Traaen farm in Rollag, Numedal Valley. Photo courtesy of Miranda Moen, 2022.

A localized survey of freeholders' houses in Numedal Valley (Rollag and Veggli) was chosen due to their relationship to the Traaen case study family. These dwellings included the neighboring Traaen nordre farm, several Risteigen farms, Gladheim søre, Gladheimkåset, and Høyseth nedre.[56] Like Søre Traaen, many of these farms had two dwellings: a *gamlestugu* (old house) and a *våningshus* (farmhouse) constructed around the mid-nineteenth century. The latter commonly consisted of a one-and-a-half-story "middle chamber plan" house with low-sloping roofs. From the exterior, stylistic elements commonly exhibited the Swiss or Empire styles. Renovations to two-story forms began around the late nineteenth to early twentieth century. Interestingly, the Gladheimkåset dwelling, built in 1915, appears to be a two-story Akershus house.

Both Gamlestugu and the white Swiss-style farmhouse at the Søre Traaen farm align with socioeconomic and regional characteristics commonly found in Rollag. The stylistic details of both houses correspond to their period of construction. The newer Traaen dwelling shows how houses were adapted to modern needs by first expanding to a "middle chamber plan" and later adding a second story. Both became hallmarks of freeholder dwellings of the nineteenth century. Gunder Traaen emigrated in 1853, about 20 years after the newer Traaen farmhouse was built. Therefore, it is reasonable to assume that he was familiar with the Akershus plan and the more modern and popular building customs, such as the "middle chamber plan."

Croft Dwelling Characteristics in Vestre Slidre in Valdres Valley

Turning to the field analysis in Valdres Valley, I examined both croft and freeholder dwellings in Vestre Slidre. As crofters, the Vik family would have been familiar with both, living at one and working under the main farm. I started the field study analysis by focusing on crofter dwellings and class differences among the houses in Vestre Slidre. Through genealogical research, I found that Endre Vik was born at Viksbergo croft in 1855.[57] This croft was under the ownership of the Øvre Vik and Nedre Vik farms until about 1880, when it was changed to solely Nedre Vik farm.[58, 59] Aligning with

the common practices of other emigrants, Endre likely took his surname because the main farm was called Vik, despite not owning the farm. Endre emigrated in 1877. According to his obituary, he first went to Decorah, Iowa, for a few days and then traveled to his uncle, Tollef Anderson's, in Newburg in Fillmore County.[60] Newburg was just west of Riceford, where he would later live in the vicinity.

It is clear that Endre had some family in the area before his arrival, and other sources confirm several of Endre's siblings also immigrated to the area later on. Conversely, his brother Arne, who remained in Norway, and his parents, Arne Nilsen and Ragnhild Endresdatter, moved to a croft under the Kvåle nedre farm called Smedplassen.[61] Research into the Smedplassen and Viksbergo crofts was conducted to identify characteristics that could shed light on the typical croft characteristics in Vestre Slidre.

Field research revealed that there is no longer a dwelling standing onsite at either location. This is not an uncommon finding as most buildings relating to crofts either disintegrated over time, were moved to other places without a record to trace them, or were torn down. The crofter system in Norway largely ended at the end of the twentieth century; therefore, the farming system no longer needed the buildings for the same reason.

Figure 8. A photograph of the Smedplassen croft under the Kvåle nedre farm in Vestre Slidre, Valdres, Norway taken in the late nineteenth or early twentieth century. Endre Vik's parents, Arne Nilsen and Ragnhild Endresdatter sit in the foreground. Photo courtesy of Miranda Moen.

Returning to Viksbergo, the outline of a small foundation was visible, but it was unclear whether it was the foundation of an outbuilding or a dwelling. The same conditions existed at Smedplassen, except a verifiable photograph of the croft helped differentiate the building footprints as the locations of a barn and blacksmith's shop. The photo (figure 8) shows the barn (left) and blacksmith building (right) in the background, as well as Endre's parents, Arne and Ragnhild, sitting in the foreground.

Smedplassen is one of the few crofts that were photographed and whose photograph was retained in a digital, searchable database. An almost identical picture was found on the DigitaltMuseum.no website, which links to the Valdres Folkemuseum collections. The second photo shows Ragnhild standing in the foreground and both buildings in the background. It is dated circa 1910, and the caption reads as follows:

> The place was cultivated by the blacksmith Arne Nilsen Jome around 1890. Here he lived until the beginning of the twentieth century. Then he moved to Haugen under Kvissel. The croft is also called Ådneplassen (my translation).[62]

This photograph reflects lower socioeconomic characteristics in the small building sizes, unpainted and unclad log walls, and the wooden, sawn-board roofs, which were less insulative than sod roofs. It is believed that the two buildings in the photograph are a barn and a blacksmith's shop, so no dwelling is represented. Furthermore, the caption reveals that Endre's father was known as Arne Nilsen Jome (also written as "Ådne Nilsen Johme"). The Jome farm owned the first croft he worked under. Documentation like this is somewhat rare and incredibly valuable in tracing crofter lineage. It also highlights the differences in surnames used by family members. In the nineteenth century, it was common for crofters that the surname acted more like an address than a fixed last name.

To examine common class-related characteristics of crofts, I studied the Øvre Fristad dwelling, built around 1750 and now pre-

served at the Valdres Folkemuseum. The house was originally from Vestre Slidre and served to establish a baseline of characteristics representative of Valdres crofts from the nineteenth century. The dwelling is a one-story log construction house with a three-room Akershus plan. The two smaller rooms are a *sengekleve* (bedroom) and a *vasskleve* (functions like a pantry and utility or storage room).[63] The wall dividing these two rooms is of wood plank construction, typical of the Akershus typology. The corner fireplace in the living room is located on the shared wall of the bedroom. Lastly, the exterior is unpainted and does not have cladding over the log construction walls. Besides the one-story form and log construction, all of these characteristics are reflected in the Vik house in Minnesota.

While Øvre Fristad does not have a *sval* at the front entrance, other dwellings with the older one-story form can be found. In *Gamal byggjeskikk i Vestre Slidre*, Ragnhild Dietrichson points to the one-story *stogo* dwellings at Øvre Magistad and Landsrud, which have typical *svaler.* [64] Secondly, she references "Gamlestogo

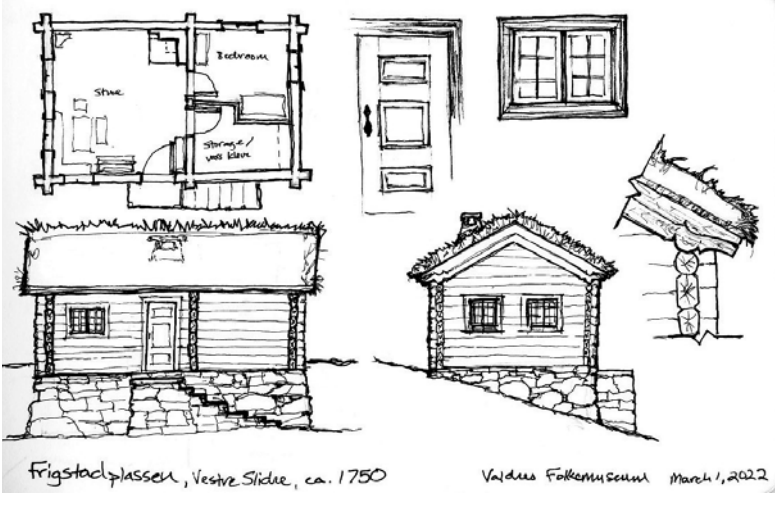

Figure 9. Drawing of Øvre Fristadplassen crofter dwelling at the Valdres Folkemuseum. Drawing by Miranda Moen, 2022.

in Raa" which has one long chamber room instead of two rooms.[65] This is a feature of the crofter's dwelling at Glomdalsmuseet as well. In summary, these characteristics represent the common traditions among the crofter class in Vestre Slidre.

Researching crofter dwellings proved difficult across various regions in Norway. Throughout this phase of work, there was a lack of data, drawings, and photographs of crofter dwellings represented in archives. Furthermore, most outdoor-air folk museums in Norway contained only one example of a croft, which hardly provides solid evidence of common characteristics in that region. Some local parish records give a few descriptions of crofts but are rarely accompanied by photographs. The most helpful information came from local historical societies and the annual *årbok* or "yearbook" publications they sponsor. In summary, the lack of data and representation of crofts created a barrier in research to understand the regional characteristics of this building class.

Haugen –From Croft to Registered Farm

Returning to the field study in Vestre Slidre, I identified one dwelling at the Haugen farm connected to Endre Vik's family that remained intact. The discovery of an existing house on a former croft was significant for this study. Historically, many were dismantled and moved after the crofter's contract with the main farm ended or was left to deteriorate. The former croft dwelling at Haugen likely survived because the place eventually became a registered farm–a *småbruk* or "small-holding" farm. Today, two houses are on the property, the eldest being the former crofter house (figure 10). In this project, I refer to the house as the Haugen dwelling since it is located on the Haugen farm registered as gnr. 13 bnr. 2 (farm #13 subdivision # 2, also written as 13/2). The present-day farm stems from the combination of two former crofts next to one another. The first was Mørke,[66] which was a croft that made part of the Nørdre Kvissel farm (North Kvissel farm) until 1861, when it was separated and became an independent farm.[67, 68] The second croft was called Haugen and was under the Oppigarden Kvissel (the Upper Kvissel farm) until 1857, when it became a freehold.[69] In 1894,

Arne Arnesen from the Smedplassen croft under Kvåle bought the property.[70] This was Endre Vik's younger brother. He later went by the name Haugen. Their parents, Arne Nilsen and Ragnhild Endresdatter, left Smedplassen at the turn of the century and moved to Haugen as well. In 1908, he bought the neighboring farm, Mørke, and the two farms merged.

The dwelling at Haugen is believed to have been built in the early to mid-nineteenth century. From the exterior, it is apparent several modifications were made over time. Based on its peculiar second-floor construction, it is likely that the house was originally one-story tall. Its floor plan reflects a variation of the Akershus typology documented in Valdres. One chamber room, in this case, the *vasskleve*, is extended to be flush with the front of the *svalgang,* an intermediate vestibule shielding the front door from cold air.[71] This vestibule was also used for storage and contained the staircase if the house had two stories. This is reflected in the Haugen house as well. Instead of the living room, the corner fireplace is in the *vasskleve*. This room was likely used as a kitchen. A stove was in the living room on the other side of the wall, sharing the chimney. Dietrichson's work supports the common finding of this variation in Vestre Slidre, referencing a one-story crofter's dwelling called Trilla."[72]

The addition of the second story gave the house a similar form to the upper-class Akershus house. In plan view, the locations of the windows and doors indicate an attempt at symmetry. This is obscured on the front façade due to the *svalgang* and is perhaps most immediately noticed on the side of the building facing outward toward the valley. This would have been the view most seen by the public as well. Likely due to financial reasons, only about one-third of the second story was built of log construction. It was likely used as a workshop and sleeping area and was located directly above the kitchen (*vasskleve*) and the adjacent chamber below. The chimney passed through this room, providing passive heating, and exited the roof at the apex of the gable. The other half of the second story was built in a lighter, less insulated construction. It was used for cold storage and was built of posts and beams

with horizontal wood planks as cladding. The stairwell from the *svalgang* below was accessed through this room.

The protruding log ends at the corner joints on the first floor, which indicates its older, less refined construction. As the house transitioned over time from a one-story to a two-story house, renovations were made that required the time and investment that came with ownership. The log portion of the second floor exhibits corner joints that meet cleanly and tightly at the corners. This is in stark contrast to its original construction. Likewise, the second floor has a large Swiss-style window on the gable side facing the hill, whereas the first-floor windows and doors reflect the earlier Empire style. The house's various renovations tell a story of change and adaptation from croft to independent farm. Clearly, the owners sought to emulate upper-class farms as they transitioned to farm owners themselves.

Figure 10. The old house at the Haugen farm (13/2), formerly a croft under the Oppigarden Kvissel farm (13/1) in Vestre Slidre, Valdres, Norway. Photo *courtesy of Miranda Moen, 2022.*

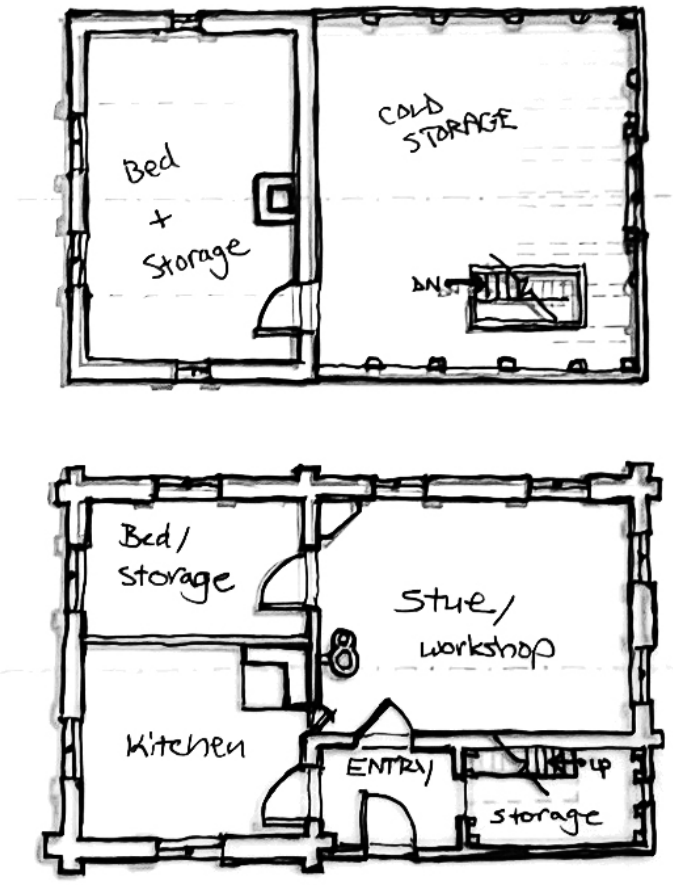

Figure 11. Floor plan drawing of the Haugen (13/2) house in Vestre Slidre, Valdres, Norway. Drawing by Miranda Moen, 2022.

Freeholder Dwelling Characteristics in Vestre Slidre in Valdres Valley

As for freeholder dwellings in Vestre Slidre, I chose to examine the Vik and Kvissel houses (figures 12 and 13). As previously mentioned, Endre Vik and his family worked as crofters for the Vik (Øvre and Nedre or "Upper and "Lower") farms. The Niegarden Kvissel (the lower Kvissel farm) is located near Haugen (13/2),

which Endre's brother Arne Arnesen Smedplassen would eventually own.[73] The houses have almost identical appearances and share the Akershus floor plan, two-story, rectangular building form, and façade organization. As mentioned, these were common features among nineteenth-century freeholder dwellings in Vestre Slidre. Stylistically, both have a stripped-down appearance compared to the Swiss style popular in Numedal Valley. According to Ragnhild Dietrichson in *Gamal byggjeskikk i Vestre Slidre*, the architecture in Valdres in the mid-nineteenth century was heavily represented by the Empire style. She writes, "…[this style] seeks the simple in contrast to earlier periods," and in Norway, "it had a great impact on wooden architecture [resulting in] simple house forms with simple and restrained carpentry details" (my translation).[74] While the Vik house in Minnesota does not display explicit Empire-style characteristics, but it does exhibit simple details and min-

Figure 12. Houses at the Øvre Vik farm (54/1, on the left) and Nedre Vik (55/1, on the right) in Vestre Slidre, Valdres, Norway. Photo courtesy of the Valdres Folkemuseum, photographed by Jens Embretsen Robøle circa 1900. (ID: VFF VS-16.20).

imal ornamentation. Whether this results from frugality or an intentional stylistic decision is hard to say, but it is clear both houses share similarities in broader strokes.

Compared to Numedal, I found aesthetic and architectural style variations to be the largest differences between freeholder dwellings in each valley. In Rollag, the presence of the Swiss style showed up earlier than in Vestre Slidre. Houses with low-sloping rooflines and extra ornamentation were commonly found in early to mid-nineteenth-century dwellings. Likewise, the middle-chamber plan was more heavily represented there. Ina Backer writes in *Buskerud* that there was an economic boom in the eighteenth century, especially in forested areas such as Numedal (my translation).[75] In *Vest Oppland and Valdres*, Finn Ditlevsen writes that the "characteristic features of an area's building customs are connected with the style or fashion common just at the time the area was in economic upswing and development" (translated).[76] This would have allowed farmers more financial access in Rollag to build more spacious homes and ornate building styles. Ditlevsen

Figure 13. The farmhouse at the Niegarden Kvissel farm (13/3) in Vestre Slidre, Valdres, Norway. Photo courtesy of the Valdres Folkemuseum, date unknown. (ID: VFF VS-52.35).

adds, "in Valdres and the more isolated rural communities, there are fewer precedents and the Akershus plan lasted longer" (my translation).[77] Despite these differences, the Akershus typology is still common among freeholder dwellings from each valley. Both valleys are characterized by single-story and two-story versions, with the time period determining whether either was built. The primary differences lie in the exterior expression and application of architectural styles.

Phase 3: Comparative Case Study Analysis

The Vik and Traaen families' second-generation homes depict several characteristics that are typical of nineteenth-century freeholder houses in Norway. First, both reflect the two-story Akershus form, historically linked to the Valdres and Numedal valleys. In this configuration, the chimney is located on the shared wall between the living room and the bedroom, allowing efficient heating. In both the Traaen and Vik houses, a stove was used instead of a corner fireplace, but this aligns with Norwegian precedent. The stove in the living room was as centrally located as possible, exiting at the apex of the roof. The second chamber room functioned as a pantry and storage room. The dividing wall between the two chamber rooms was a thin wooden plank wall instead of a structural frame, observed in numerous crofter and freeholder dwellings in Norway and is a key element of the Akershus typology. Since the Traaen house is still being used as a residence, the original wall dividing the rooms was partially removed and rebuilt during the bathroom installation. Therefore, we cannot verify this condition at the Traaen house, but it was likely of similar construction.

Other elements in the Norwegian-American houses align with the case study dwellings in Norway but are difficult to pin down as cultural indicators. This includes the presence of a gable window in the attic of both houses, as well as the stone foundation and secondary access door at the rear of the house. The gable window has been seen in every freeholder house examined as part of the Vestre Slidre and Rollag field studies, which suggests a connection. Like-

wise, several Norwegian examples show access to the cellar below through a hatch on the pantry/storage room floor.

C/ontrary to the widespread use of the "middle chamber plan" in Rollag at the time of Gunder Traaen's emigration, his second-generation house reflected the earlier three-room Akershus typology. However, a "T"-shaped addition was built later, which shared

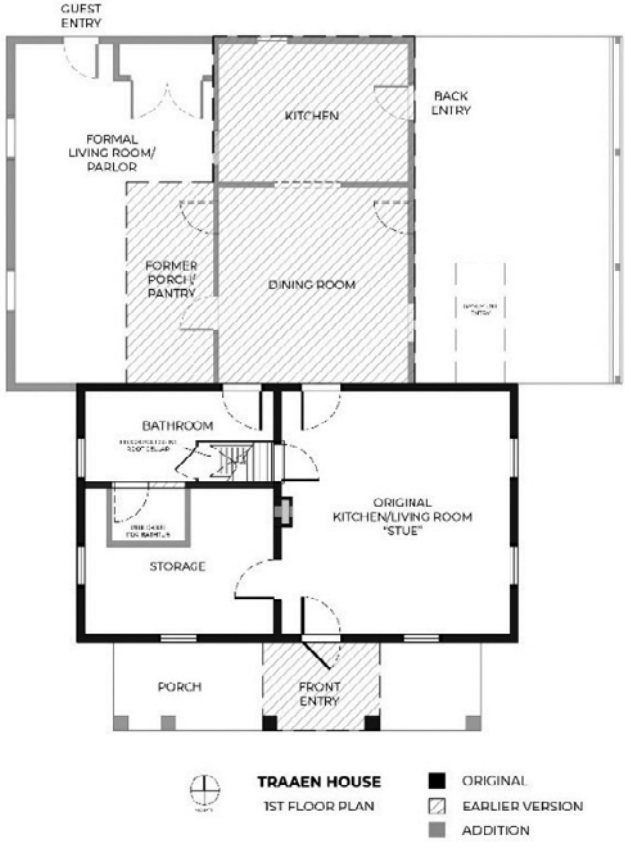

Figure 14. Floor plan drawing of the Traaen house in Minnesota showing the original three-room Akershus plan (black lines) and the additions added later (gray lines). Diagonal hatch lines indicate an earlier version of the house that has since been altered. The addition originally reflected the "T"-shape. Drawing by Miranda Moen, 2024.

the same functions as the "middle chamber plan" extension. Starting with the Akershus plan, the first-floor footprint was extended to add another s*tue* or living room. This was typically a *finstue,* or a "fine living room," for special events and holidays. Another room could be added by bisecting the *finstue* to create a "daily room." Instead, Gunder Traaen and Endre Vik built "T"-shaped house additions. In Gunder's house, the addition served as a parlor, or fine living room, and a dining room and kitchen. Secondly, while the "T"-shaped addition is commonly found among American farmhouse typologies, it is not solely an American tradition. For example, in his work, Eilert Sundt depicts a Norwegian one-story Akershus house that has a "T"-shaped addition.[78] As a result, the function of the "T"-shaped addition on the Vik and Traaen houses aligns with historical and cultural precedents.

The freeholder dwellings at the Kvissel and Vik farms in Vestre Slidre share a striking resemblance to the Vik house in the United States. All three reflect the same three-room Akershus floor plan, two-story, rectangular building form, symmetrical façade with a three-bay arrangement of windows. As a result, Endre Vik sought to construct a house that emulated the freeholder class, similar to his brother, Arne Arnesen, at the Haugen farm. In addition, the finer details of the Norwegian-American house portray a working-class background with minimal architectural details, both on the interior and exterior. Further information pertaining to style and socio-economic status will be examined later. In contrast to the Traaen house, it did not adopt the "fine living room" function of the addition. In Norway, distinctions between crofter and freeholder houses were reflected in the overall size of the house, the quality of materials and construction tightness, and the number of building stories. In the United States, a parallel appeared with Endre Vik building a house that emulated the broader characteristics of upper-class houses but reflected lower-class choices in the cladding material, economical construction, and minimal ornamentation.

American Construction, Norwegian Tradesmen

Despite similarities to Norwegian freeholder dwellings, the sec-

ond-generation houses also contain American characteristics. The balloon-frame construction system is an American invention that dates to Chicago in the 1830s. While it is most apparent in the Vik house, the balloon frame serves as the primary structural system under the brick veneer at the Traaen house. According to author Fred Peterson in *Homes in the Heartland,* the balloon frame was "economical and efficient to build, convenient and flexible in use, and in time proved to be strong and durable against the wear and tear of large families and the elements."[79] The adoption of this construction method in rural areas, however, took place gradually. Richard Perrin in *Historic Wisconsin Buildings: A Survey in Pioneer Architecture, 1835-1870,* remarks that the practice of "felling…trees, hewing, and curing of timber, and joining them into a heavy frame, remained standard practice for most rural buildings until about 1870."[80] This was largely because mill-made lumber and woodwork were less financially and physically accessible to rural farmers and builders until this time. Beyond this general context, Gunder Traaen's ledger lends an important insight into the construction of his second-generation house and the overall construction industry in the Spring Grove area.

Besides important information about where and what he bought to construct his house, the ledger details the people he hired to perform the work and stores where materials were purchased. This information made it possible to research the cultural backgrounds of the various carpenters, masons, and other tradespeople who worked on the house. For this work, I utilized land patents, the earliest available plat maps from the mid to late 1800s, and various historical records of general stores and tradesmen in Houston and Fillmore counties to identify the names and places listed in the ledger account records.

I could identify most of the tradespeople listed in the ledger through extensive genealogical and translation work. Beginning with the first entry dating to January 1875, Gunder Traaen paid Ole Kose and Peder Pladsen to drive 800 feet and 500 feet of lumber boards from Brownsville. This was the nearest marketplace, and Brownsville had a great advantage because it was situated along

the Mississippi River with ample access to lumber and sawmills. While I could not find Ole Kose in historical records, probably due to a changed spelling of his last name, I could find Peder Pladsen. The latter was born in Houston County, Minnesota, but his parents were from Nes in Hallingdal, making him a second-generation Norwegian American.

In June, Gulbrand Myrah was paid for "*kalk*," or lime, and Timan Gulbrandsen was paid for a few barrels of cement. Both are necessary for masonry work. Gulbrand Myrah (also written Gilbert Myhra) was born in Hadeland, Norway, and worked as a blacksmith and carpenter. He and his wife immigrated to the United States in 1854. Historical records show that in addition to being a farmer, he built all the buildings on the farm himself, did his own blacksmith work, and built the first schoolhouse in Spring Grove Township. Timan Gulbrandsen (also written Teman Gilbertsen) was from Nes in Hallingdal and immigrated to Rock Prairie, Wisconsin with his family. Just like Gunder Traaen, he came to Spring Grove in 1854, meaning they may have known each other before this time. In July, Lars Peders was paid to conduct masonry work on the basement. He is listed as "murrer"[sic!] or mason in Norwegian.[81] The same month, Gunder bought shingles from John Tarr, a lumber merchant born in England, at the Larsen and Aslesen general store in Brownsville.[82,83]

In July, Gunder went to Cluss and Hoegh, a hardware store in Brownsville, for doors, glass, and nails.[84] Charles Hoegh was born in northern Norway near the Kaafjord copper mines in Finnmark County. He was educated in Norway and had four years of working experience in a general store in the north of Norway until 1866 when he immigrated to America.[85] John Cluss was of German descent. The carpenter listed the most in the ledger was a man named "Nils Store," as Gunder wrote. This was "Nils N. Storre," born in Skogn, Levanger, Nord-Trøndelag, Norway in May 1848. He was a carpenter by trade and immigrated to the United States in 1870. Shortly after, he came to Spring Grove, where he remained until 1877.[86]

Other tradesmen listed included "Elling Maler," the name that Elling A. Flaskerud went by professionally. According to O. S.

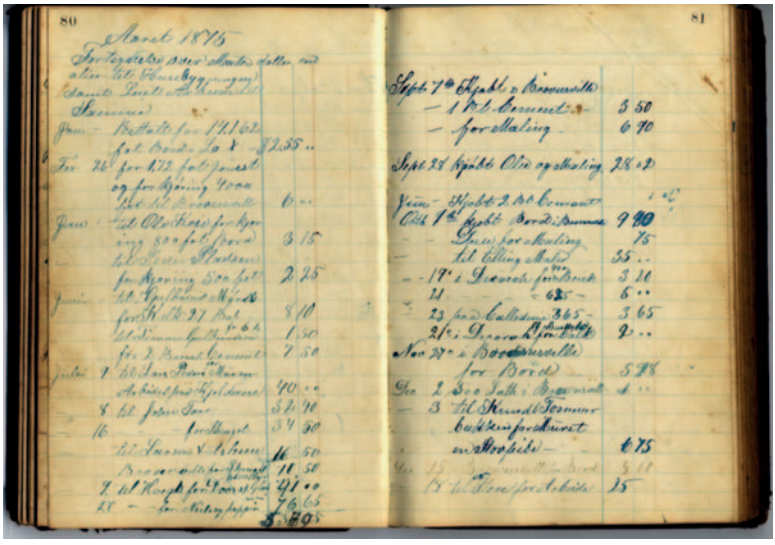

Figure 15. Gunder Traaen's ledger entry from 1875 describing housebuilding materials and the local tradesmen he paid to work on his home. Photo courtesy of Miranda Moen.

Johnson in *Nybyggerhistorie fra Spring Grove og omegn*: *Minnesota* or *A Pioneer History of Spring Grove and the vicinity: Minnesota*, Elling was a skilled painter by trade, which aligns with his nickname. He was born on the Flaskerud farm in Soknedalen, Ringerike.[87] In October 1875, he was paid for painting work. Lastly, a Knudt Tømmerbakken was paid in December 1875 for plastering the chimney (my translation). His origin is difficult to locate, but it is safe to say that his surname points to Norwegian descent. Another Tømmerbakken in Spring Grove is listed as being from Hadeland, likely a relation.[88]

The list of tradespeople in Gunder Traaen's ledger verifies that he primarily used Norwegian Americans to construct and finish his second-generation house. Whether intentionally or not, the tradesmen's origins are mainly from Eastern Norway, within the Akershus diocese boundaries, where the Akershus typology was the predominant house form. These findings strengthen the hypothesis

that the Traaen house in Spring Grove Township contains cultural influences from Norway. Furthermore, in *History of Norwegian Settlements*, Hjalmar Holand states that the inhabitants in Spring Grove and nearby Wilmington Townships are mostly from Hallingdal, Sigdal, Valdres, Ringerike, and Hadeland.[89] As a result, the regional backgrounds tied to the tradesmen in the ledger represent the area's population.

Architectural Style as a Classification

As previously mentioned, this project primarily examined houses by floor plan and exterior shape, form, and massing, which includes the façade organization. Although I did not delve deeply into comparing architectural styles in a transnational sense, the subject of house styles has been touched on throughout this paper. In this project, architectural style is often reflected in the exterior, applied expression of a building. However, they are also tied to form and floor plan. Moreover, various styles may differ in each valley depending on the period of analysis and socioeconomic conditions. As a result, it is impossible to separate them from my analysis completely.

Various researchers in Norway and the United States provide snippets of information about architectural style in vernacular buildings. In his analysis of early Wisconsin architecture, Richard Perrin writes that many early nineteenth-century buildings were "variations of the so-called Federal style…generically related to the post-Colonial and Greek Revival, the Federal style was characterized by lack of ornament and extreme simplicity, amounting almost to severity."[90] He goes on to say that "as was the case with every American architectural period, the Federal style also had European counterparts." This description is similar to Dietrichson's description of the Empire style, which was heavily represented in Valdres and seen in many of the dwellings examined in Vestre Slidre.

The Vik and Traaen houses in Minnesota generally align with these descriptions, exhibiting relatively stripped-down exterior appearances. On the interior, the Vik house shows less ornamentation through its use of relatively simple trim moldings, doors, and simple wood plank walls. In contrast, the Traaen house contains more

stylistic details. This is especially apparent in the living room with paneled wainscoting and unique door and window trim profiles. The wainscoting design is simple yet uniform, appearing similar to the *fyllingspanelt brystning* (roughly translating to "infill panel wainscoting") reminiscent of the nineteenth-century Empire style depicted in *Gamle Trehus: Historikk, reparasjon, vedlikehold*, the quintessential reference book on wooden architecture in Norway.[91] At window locations, the wainscoting height aligns with the windowsills, and the panels correspond to the window opening size. According to *Gamle Trehus* this design was common in Norway in the eighteenth and nineteenth centuries.[92] While the exterior is relatively simple, he took time to create a modern living room that reflected upper-class ideals. Likewise, the ledger indicates his financial access to hire craftsmen and painters. Based on these observations, the Traaen house likely contains more intentional stylistic elements than the Vik house.

The transnational connection between carpentry details and interior design styles was outside this project's scope. Nevertheless, future research on this topic would be fruitful, especially regarding class and regional origin in Norway. Marion Nelson notes that early immigrants would have had to build their own furniture and that many pieces from that period reflect "neo-classicism which dominated upper-class furniture in the late eighteenth and early nineteenth centuries," referred to as "peasant empire style."[93] Comparing the impacts of the time period, the generation of the Norwegian immigrant associated, and their access to stock products versus custom-built furniture would shed more light on their potential transnational relationships. Perrin and Nelson's work suggests simple architectural characteristics were common among the early immigrants. Holzhueter's work provides one example of an exceptional craftsman who made the choice to include both American and Norwegian characteristics in his Wisconsin house. The degree to which this was a common occurrence among craftsmen remains to be seen. Especially since most houses are analyzed solely by exterior expression, it is not surprising that potential cultural indicators contained within could be overlooked in past studies.

Throughout this project, I found it apparent that in the rural areas of the Upper Midwest, varying decorative styles available to immigrants depended upon what was locally available at lumberyards or local craftsmen. Similarly, in her analysis of the architectural styles observed in Vestre Slidre, Dietrichson reminds us that buildings "often have features from several different periods" and that "many styles came later to Valdres than elsewhere in the country" (my translation).[94] She cautions against relying on architectural style as a method of categorization. This also pertains to how and when the style was present in the home country before emigration. Accordingly, I advise transnational architectural studies to first analyze broader characteristics, such as floor plan, exterior shape, form, and massing, before investigating stylistic qualities.

Fred Peterson adds an interesting observation to the connection between Norwegian-American homes in Minnesota and folk practices in Victorian-era Norway. In *Homes in the Heartland,* he describes common building customs in mid-nineteenth-century Norway and immigrant-built farmhouses in Minnesota. He analyzes the Ness and Holtan families, Norwegian Americans who emigrated from Norway as young adults.

> Although each structure can be characterized as an American Victorian home, each also exhibits ethnic qualities translated from Norway to the New World. A family resemblance exists between the Ness and Holtan farmhouses and manors in rural Norway. From the 1780s to the 1870s, neoclassical styles dominated Norwegian architectural taste and practice. Public and residential buildings exhibited a three-bay division with emphasis placed upon the central section to strengthen the balance and symmetry of the classical designs. This tendency toward symmetry and balance in the façade of a house was also evident in folk building in Norway.[95]

He adds that the Swiss style became popular in the mid to late nineteenth century across Norway, and was reflected primarily in the larger, estate farms in the countryside.[96] I have found this true

in my studies, but the localized field studies in Valdres and Numedal reveal subtle differences in the period they were observed in each valley. According to Peterson, both farmhouses they built reflected "the formal symmetry of the neoclassical architecture of Norway and specifically the picturesque qualities of the manors built in the Swiss style." He came to the same conclusion that it makes sense the young Norwegian immigrants remembered the larger estates of Norway and desired to emulate them in their American houses. The styles in Norway that immigrants had admired do not necessarily dictate the style found in their American house. Among other reasons, stylistic details were primarily informed by locally available products and what local craftsmen built.

Counterarguments and Future Research:
Pattern Books and other European Architectural Counterparts

To understand other potential influences on the Vik and Traaen houses in Minnesota, I studied various building types that could resemble the Norwegian Akershus typology. These included the English Georgian, hall-and-parlor form, and related "I"-house and central-passage house forms. The plans associated with these houses were typically employed in architectural pattern books, which have a long history in the United States, beginning in the 1790s alongside the onset of the architectural profession.[97] Given the construction dates of the case study houses, the most relevant pattern books are those dating from the 1870s to 1900. Most of the mid-1800s to the mid-1900s featured large, complex plans, mainly asymmetrical, with an enormous amount of ornamentation and detail. This contrasts sharply with the modest three-room plan in Minnesota's Vik and Traaen houses.

The pattern books of the 1850s included more modest-scale buildings. The most relevant designs were often referred to as "cottage houses" or "cheap dwellings" by the authors. A few three-room houses were featured in these books, but most included more elaborate "Georgian" or "I"-house plans, common in late eighteenth-century America. According to Dell Upton, in *Pattern Books and Professionalism: Aspects of the Transformation of Domestic*

Architecture in America, 1800-1860, "while the Georgian plan and its derivatives were the most widely employed vernacular forms, others even more firmly rooted in tradition were offered in pattern books. The two-room hall-and-parlor house with central or end chimneys was widely used for small houses."[98] In *Folk Housing in Middle Virginia: A Structural Analysis of Historic Artifacts,* Henry Glassie points out that the hall-and-parlor form was common in Britain in the sixteenth and seventeenth centuries. He reports that this house type dates back to "a Cornish longhouse as early as the thirteenth century."[99] Most of the resources I reviewed attribute the hall-and-parlor house to earlier "hall house" typologies found in England, Wales, Ireland, and Scotland in the Middle Ages. In plan, this typology appears strikingly similar to the "hearth house," or *årestue*, commonly found in Norway in the same period.

In colonial America, variations in the hall-and-parlor form were observed based on location and climate. Northern colony traditions often reflected a two-story form with a central chimney, while southern examples were one-story tall with gable-end chimneys (the latter depicted in figure 16).[100] These adaptations are documented to have taken place as early as the seventeenth century. Elements such as the quantity and location of fireplaces in colonial hall-and-parlor houses seemed to change freely instead of the rather fixed location

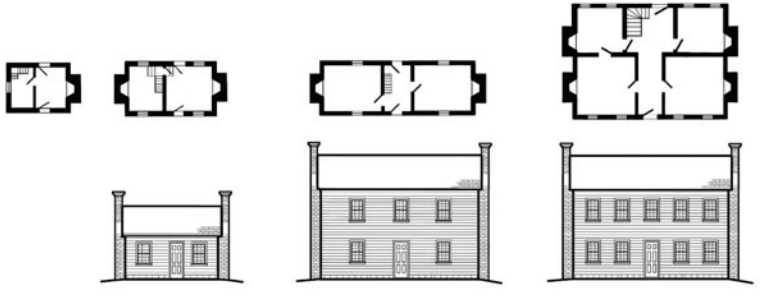

Figure 16. Floor plan and elevation drawings of the Hall-and-Parlor house (left) and "I"-house typologies (middle and right). Drawings by Miranda Moen, 2024.

in the Norwegian Akershus typology. However, there are some similarities with the smaller, two room Akershus form such as the crofter dwelling at Glomdalsmuseet. The hall-and-parlor form is traditionally two rooms wide and one deep (figure 16). Both feature an entry door that opens directly into the largest room and the wall dividing the two rooms creates a one-third to two-third ratio of the building's footprint. In the hall-and-parlor form, the larger room is called the "hall," and the smaller room is the "parlor."

The aforementioned "I"-house is derived from the hall-and-parlor house plan. There are many variations of the "I"-house form, but the principal features include "side-facing gables, one room deep, a minimum of two rooms wide, and two full stories high."[101] In plan, a common "I"-house variation resembles the central-passage house form where a central passageway is situated between the hall and parlor rooms. This plan results in a three-bay façade organization when viewed from the exterior. Without considering the floor plan, the three-bay façade organization, two-story form, and side-facing gables appear almost identical to the Norwegian-American case study homes. As a result, the main differentiator between the English derivatives and the Norwegian-American form is the three-room Akershus plan.

Interestingly, the central passage "I"-house plan shares similarities with the Norwegian "middle chamber plan" and "middle aisle plan." that was analyzed in this study. Given the evidence that upper-class European architectural trends influenced wealthier freeholder homes across Norway, it is reasonable that these plans share common roots. Finn Ditlevsen and Ina Backer both corroborate this in their examinations of freeholding dwellings in Valdres and Buskerud. Another differentiator between English colonial and Norwegian-American Akershus houses is the latter's slightly asymmetrical placement of openings on the façade. This is due to the off-center location of the wall that separates the living room from the two smaller chamber rooms. This inhibits the symmetrical placing of the windows and doors along the three-bay façade. In contrast, the interior organization of the three-room central passage plan and other English derivatives tend to maintain this symmetry.

It is unlikely that Vik and Traaen houses in Minnesota were influenced by architectural pattern books of their era. Most pattern books featured large, elaborate designs that were highly influenced by English trends. The English hall-and-parlor form, which is perhaps the most relevant in this study, is documented to have started evolving in the seventeenth and eighteenth centuries of colonial America. This evolution gave rise to larger Georgian and other classically-inspired colonial home designs commonly used in the mid-nineteenth century. These house designs were outsized and complex in comparison with the typical second-generation Norwegian-American homes observed in this study.

Secondly, despite the presence and known influence of architectural pattern books in the United States, Upton's research in *Pattern Books and Professionalism* suggests a discrepancy between the designs the pattern books espoused and those built by local contractors. His research found that builders were likely to strip down the examples of the pattern book houses, resulting in the core of the building being represented. A critical case study in this book shows how builders took the root of the design "A Laborer's Cottage" from A. J. Downing's *The Architecture of Country Houses* from 1852 and built a stripped-down version.[102] In short, if a pattern book inspired the building, builders often changed elements of plans during construction. This calls into question the direct comparison of built dwellings to pattern book examples.

As previously demonstrated by the similarities between certain English and Norwegian house forms, similarities can be observed in other European examples. Norway has a long history of upper-class officials and civil servants from Denmark and Germany. Past scholars, such as Ina Backer, Finn Ditlevsen, Gunnar Jahn, and others, have written about the international influence and the probable origins of Norwegian house typologies. Most suggest influences came into Norway from the coasts through trade and the influx of upper-class officials in the sixteenth and seventeenth centuries. Instead of being influenced by pattern books, the Norwegian-American farmhouse is more likely to show similarities with other immigrant groups of European descent.

Fred Peterson writes about a relevant typology in *Building Community, Keeping the Faith: German Catholic Vernacular Architecture in a Rural Minnesota Parish.* He points to the German-American house belonging to the Zenzen family, who emigrated from Germany in 1868. According to Peterson, their balloon-frame dwelling is linked to the Niedersachsen "Pfostenwohnhaus" from northwestern Germany, which dates back to the twelfth century. He describes the house as "a folk design dating to the early-medieval period that included a multipurpose room and two subordinate spaces for sleeping and storage."[103] Similar German-American houses in his book, such as the Imdieke farmhouse, whose plan has similarities with earlier Norwegian dwellings, consisted of a one-and-a-half story dwelling with two rooms (one-room deep) with a one-third to two-thirds ratio and entry leading directly into the largest room. The larger Illies farmhouse has a three-room floor plan almost identical to the Norwegian Akershus typology. Therefore, it is reasonable that the German Pfostenwohnhaus and the Norwegian Akershus could share a common ancestor. Moreover, these house types and the English hall-and-parlor house could stem from a common peasant class dwelling in medieval Europe. This question ultimately becomes about the categorical boundaries of cultural architecture and the period in which it's observed. Overall, the Akershus typology has a long and well-documented history in Norway, and given the evidence in this study, it is reasonable to claim it as a Norwegian cultural influence in Norwegian-American houses.

Conclusion

At the outset of this project, I sought to investigate potential Norwegian influences reflected in second-generation houses. This prompted me to examine how class and regional building customs impacted the appearance of Norwegian traditions in immigrant-built houses, reflecting a hybrid American architecture. I chose to first analyze the Akershus typology due to the numerous examples I observed in the Spring Grove area and similar findings in past material culture studies. Most notably, the work of William Tishler,

Marion Nelson, and Reidar Bakken identified the Akershus typology in houses around the tristate area of northeast Iowa, southeast Minnesota, and southwest Wisconsin. In Spring Grove Township, I suggest that the common use of the Akershus house is a factor of the widespread use of the typology in Norway across many generations and contractor familiarity with the type before emigration.

I found that identifying the period of emigration and understanding the associated architectural details in Norway is essential for a sound transnational analysis. The overall floor plan, exterior shape, form, and massing of Minnesota's Vik and Traaen houses reflect higher-status ideals commonly observed in nineteenth-century Norway. Their occurrence alongside American customs, such as construction type and locally available materials and products, has obscured their appearance as cultural indicators. Importantly, both Vik and Traaen dwellings display freeholder dwelling characteristics common to Valdres and Numedal despite only the Traaen family coming from that socioeconomic group. As a result, Endre Vik likely built a house to emulate upper-class houses he did not have access to in Norway. This was demonstrated in the photograph of Endre Vik and his family standing in front of his house (figure 2). As photographs were uncommon then, they were likely intended to be sent back to his family in Norway, providing evidence of his success in America.

Despite the similarities seen in the Vik and Traaen houses, Gunder Traaen made architectural decisions to indicate a higher-class status. The first is seen in materiality, demonstrated by his decision to clad his house in brick and the decorative paneling on the inside. The second was the addition to the house, consisting of the formal parlor, dining room, and kitchen, the function of which parallels the upper-class "middle chamber plan" that was popular in Rollag at that time. In contrast, the Vik house was made solely of balloon-frame construction with wood siding as cladding, which is closely associated with economy. The reasoning behind the houses' similarity could indicate using the same tradespeople or the close-knit construction network in the Spring Grove area. Most likely, it is influenced by their family connection and the shared

familiarity with the Akershus house among the Norwegian-American tradespeople.

The degree to which the findings in this study persist in other immigrant houses is a subject for further exploration. The rapid disappearance of the second-generation Norwegian-American house puts this research at risk, making documentation of these houses of the utmost importance for preservation. Furthermore, key elements outside this project's scope would be essential in future research. First, not all second-generation Norwegian-American houses exhibit the Akershus floor plan. Therefore, what caused some immigrants to employ this typology and others to use American plans informed by pattern books or "catalog homes" remains unknown. Likewise, are there other regional typologies used in immigrant homes besides the Akershus form? Secondly, the makeup of a town's ethnic concentration may reveal crucial insight into the resulting architecture. Spring Grove has a majority Norwegian background, but if more ethnicities and cultures are represented, would it be less likely for immigrant-built dwellings to reflect a specific culture? Thirdly, research into the cultural influences of house interiors may shed light on the immigrant's attitude towards assimilation or their emulation of higher-status stylistic details in Norway. Therefore, further research into the interior stylistic details of both Norwegian-American and homes in Norway, especially regionally, could be fruitful.

In conclusion, Norwegian influences found in Norwegian-American houses vary in representation due to many factors, resulting in a hybrid portrayal of cultural heritage. Following the immigration path of one family from Norway to Minnesota and tracing the transnational relationship between their homes pre- and post-emigration aids in finding elements of cultural heritage within them. Historical conditions that affected these structures, such as ethnicity, socio-economic background, class, and regional building styles, allow us to better understand the elements that shaped immigrant-built architecture. In this work, it is essential to remember that the transference of material culture does not show up as a "copy-paste" in another country; instead, it reflects a hybrid archi-

tecture that requires specific knowledge to identify the origins of its cultural influences.

Glossary

Norwegian:

Bonde or *selveier*: farm owner, refers to someone who operates a freehold or *gård*. It was part of nineteenth-century Norwegian peasant society—*bønder* for plural usage. They may also be referred to as freeholders.

Bygdebok: a farm and genealogical history book published by many municipalities in Norway.[104]

Embetsmann: refers to an upper-class civil servant or government official. They were higher than the Norwegian peasantry (*bønder* and *husmenn*) in socioeconomic status and social grouping.

Finstue: a formal living room used for special events and holidays.

Forstuekjøkken translates literally to "entrance hall kitchen." The entry hall was a common component of three-room houses in Norway; in this case, it also served as the kitchen.

Gamlestugu: translates literally to "old house," but refers to the elder dwelling on the farm. In Numedal, *gamlestugu* is used, while *gamlestogo* is used in northern Valdres.

Gård: an independently registered farm.

Gårdsnummer/Bruksnummer (Gnr./Bnr.): The *gårdsnummer* (farm number) and *bruksnummer* (farm unit number) refer to a classification system in Norway's official real estate register. All properties listed in the public register are thus taxable. A farm number refers to an original farm. With subsequent subdivisions from the original farm, the subdivided units receive individual numbers from 1 and upwards for subsequent subdivisions. These subdivided units receive rising farm unit numbers (*bruksnummer*) while the farm number from which the units were subdivided remains unchanged.[105]

Husmann: crofter, suggests someone who does farm labor on land owned by another, typically the *bonde*, usually a freeholder (*selveier)* in Norwegian peasant society. Historically, it could also

refer to a married couple who worked and lived on a *husmannsplass*.

Husmannsplass: a "crofter's holding" or where the crofter's dwelling and small farm were situated. It was typically located on the outskirts of a farm owner's land. Variations existed within this group between geographical regions and historical periods.

Klassesamfunn: class society. The categorization of people into social groups by economic status, organized horizontally, where social ties are managed between those of equal status.

Kleve: translates to a small room or chamber. This word is locally used in Valdres. It could have various prefixes, such as *sengekleve*, which indicates a bedroom, or *vass-kleve*, which suggests a pantry or utility and storage room. The same word is *kove* in Numedal.

Midtgangsplan: the "middle aisle plan."

Midtkammersplan: the "middle chamber plan."

Murer: mason or bricklayer.

Mønsåstaket: a "ridge roof."

Mønsåsstue: a house typology named after the giant ridge beam carrying the roof.

Småbruk: a "small holding" farm.

Standssamfunn: estate society. The categorization of people by social stratum via their positions of rank and power. This structure was vertically organized, meaning "social ties of duty, loyalty, and responsibility ran between superior and subordinate."

Stue: translates to "living room," but it refers more to a heated multi-use room and, in some cases, to the dwelling as a whole. Other word variations include *stogo*, *stugu*, and *stove*, which could also refer to the older, smaller houses on the farm.

Sval: an unheated vestibule attached to the outside of the dwelling that shields the entrance from cold air. The plural form is *svaler*.

Svalgang: functions the same as the *sval* but extends the entire length of the wall.

Vindfang: windbreak, a small passage room immediately inside the entry to block cold air or wind from entering the dwelling.

Årbok: translates to "yearbook" but references the annual historical

society book publication that documents and disseminates the area's local history.

Årestue: translates to "hearth house," where a hearth was located in the middle of the floor; this predated the Akershus typology.

English:

Brick veneer: a brick veneer wall comprises overlapping stretcher bricks (laid horizontally, with the long edge exposed).[106]

Cash Entry: land within the public domain and paid for with cash by the applicant.

Patent: the legal document that conveys the title of the land to the applicant after having satisfied all requirements for gaining the title.

Wythe: a continuous vertical section of a masonry wall that is one brick unit thick.[107]

Notes

[1] Knut Hermundstad, ed. "Den akershusiske stova," [The Akershus dwelling] in *Valdres bygdebok. 5 no. 2: Næringsvegane.* (Leira: Valdres bygdeboks forlag, 1965), 464.

[2] Ernest J Vick. "An Autobiography of my Life and Ministry" (manuscript, Oct. 2, 1993) typescript. Endre and Kjersti Vik purchased 98 acres of land in Sections 7 and 8 of Spring Grove Township where their home was located.

[3] Geo. E. Warner and C. M. Foote, *Spring Grove Township,* Scale 2 Inches to the Mile, in *Plat Book of Houston County, Minnesota*, Red Wing, Minn: Warner & Foote, 1878. Digitized reproduction, Historic Map Works Rare Historic Maps Collection, accessed March 27, 2024, https://historicmapworks.com/Map/US/478584/Title+Page/Houston+County+1878/Minnesota/.

[4] O. S. Johnson. *Nybyggerhistorie fra Spring Grove og omegn*: *Minnesota*, [A Pioneer History of Spring Grove and the vicinity: Minnesota] (Minneapolis, Minnesota: Forfatterens forlag, Folkebladet trykkeri, 1920), 11, HathiTrust.

[5] Marene Baker, "Cash Entry," *History Hub*, accessed September 3, 2024, https://historyhub.history.gov/land-records/b/land-records-blog/posts/common-terms-used-by-the-general-land-office.

[6] Gunder G. Traaen (Houston, Minnesota), State Volume patent no. 1875; "Land Patent Search," digital images, *General Land Office Records* (https://glorecords.blm.gov/details/patent/default.aspx?accession=MN2310__.240&docClass=STA&sid=m1kqa142.xju : accessed February 25, 2021).

[7] Marene Baker, "Patent," *History Hub,* accessed September 3, 2024, https://historyhub.history.gov/land-records/b/land-records-blog/posts/common-terms-used-by-the-general-land-office.

[8] Houston County, Minnesota, Patent, United States to Gunder G. Traaen. Dated

April 2, 1855, Recorded in Book F: 442, Jan. 16, 1874; Abstract, in possession of private owner. Description: "Grants the E ½ NE ¼ Sec. 7 and the W ½ NW ¼ Sec. 8, Twp. 101 Range 7 West, Containing 160 acres."

[9] Gunder G. Traaen (Houston, Minnesota), State Volume patent no. 3156; "Land Patent Search," digital images, *General Land Office Records* (https://glorecords.blm.gov/details/patent/default.aspx?accession=MN2330__.481&docClass=STA&sid=ll0nlnjz.vtl#patentDetailsTabIndex=0 : accessed February 25, 2021). Land Patent, Certificate No. 3156: NW ¼ of the NE ¼ of Section 7, Township 101, Range 7 West.

[10] "Gunder Traaen Ledger 1869-1920," digital reproduction of original handwritten accounting ledger, https://davidmindel.smugmug.com/Moen-side/Traaen/Traaen-Vik-Ledger.

[11] "Gunder Traaen Ledger," digital reproduction, 80, https://davidmindel.smugmug.com/Moen-side/Traaen/Traaen-Vik-Ledger/i-pV8z7R8/A.

[12] "Gunder Traaen Ledger,» digital reproduction, 82, https://davidmindel.smugmug.com/Moen-side/Traaen/Traaen-Vik-Ledger/i-B6K72BS/A.

[13] Building Media Inc, "CE Center - Lumber by the Numbers," n.d., https://continuingeducation.bnpmedia.com/courses/areditorial/lumber-by-the-numbers/#:~:text=A%20common%20estimate%20is%20that,wood%20materials%2C%20such%20as%20sheathing.

[14] Knut Djupedal. "The Kindred Log Cabin at the Norwegian Emigrant Museum" (unpublished manuscript, August 31, 2023, typescript), 31 and 41.

[15] John O. Holzhueter, "Aslak Lie and the Challenge of the Artifact," in *The Wisconsin Magazine of History* 70, no. 1 (1986): 19, https://www.jstor.org/stable/4636013.

[16] Terje M. H. Joranger, "Building America: Building patterns among Norwegian immigrants in the Upper Middle West," ed. Turid Haye, *Amerikafareren* published in conjunction with Knut Djupedal's 60th anniversary (Undated, independent publisher, 2008) 87-104.

[17] Joranger, "Building America," 96. Joranger references research done by Mark Knipping and Richard Fapso on the Kvaale homestead.

[18] Reidar Bakken, "Two Museum Houses: A Microanalysis of Cultural Adaptation in the Upper Midwest in the Late Nineteenth Century," trans. C. A. Clausen. *Norwegian-American Studies* 32 (1989): 145. Log homes were not the only pioneer-era construction type in the Upper Midwest. Other typologies were utilized based on the available materials in which the immigrants found themselves. Whereas heavily wooded areas allowed for log construction, the vast open prairies lacked timber resources. As a result, many who settled in those areas built dugout homes.

[19] Bakken, "Two Museum Houses," 145.

[20] "The Homestead Act of 1862," National Archives, June 2, 2021, https://www.archives.gov/education/lessons/homestead-act.

[21] Bakken, "Two Museum Houses," 122.

[22] Marion J. Nelson, "Folk Art Among the Norwegians in America," in *Norwegian Influence on the Upper Midwest: Proceedings of an International Conference*, ed.

Harald S. Næss (Duluth, Minnesota: University of Minnesota, Continuing Education and Extension, May 22-24, 1976), 75.

[23] Nelson, "Folk Art," 75.

[24] Bakken, "Two Museum Houses," 145.

[25] Nelson, "Folk Art," 75.

[26] Det Norske Akademis Ordbok (NAOB) "Klassesamfunn," accessed April 6, 2025, https://naob.no/ordbok/klassesamfunn; Jan Eivind Myhre, "Fra stand til klasse," *norgeshistorie.no*, published November 25, 2015, last modified December 20, 2023, accessed April 6, 2025, https://www.norgeshistorie.no/industrialisering-og-demokrati/1501-fra-stand-til-klasse.html.

[27] Det Norske Akademis Ordbok (NAOB) "Standssamfunn," accessed April 6, 2025, https://naob.no/ordbok/standssamfunn; Jan Eivind Myhre, "Fra stand til klasse," Norgeshistorie, published November 25, last modified December 20, 2023, accessed April 6, 2025, https://www. norgeshistorie.no/ industrialisering-og-demokrati/1501-fra-stand-til-klasse.html.

[28] "Inntektsutviklinga i Norge i et historisk perspektiv," *Innlandet fylkesarkiv - IKA Opplandene*, accessed April 6,

2025, https://www.visarkiv.no/artikler-og-kildeomtaler/inntektsutviklinga-i-norge-i-et-historisk-perspektiv/2/.

[29] Reidar Bakken, "Acculturation in Buildings and Farmsteads in Coon Valley, Wisconsin, from 1850–1930," in *Material Culture and People's Art among the Norwegians in America,* ed. Marion John Nelson (Northfield, Minn.: Norwegian-American Historical Association, 1994), 76-77.

[30] Ina Backer, "Byggeskikker" [Building Customs], *Bygd og by i Norge: Buskerud*, ed. Snorre Evensberget (Olso: Gyldendal Norsk Forlag, 1977), 344.

[31] Backer, "Byggeskikker" in *Buskerud*, 344.

[32] Bakken, "Acculturation," 81.

[33] Bakken, "Acculturation," 81.

[34] Nelson, "Folk Art," 71.

[35] Nelson, "Folk Art," 71.

[36] Thomas C. Hubka, *Houses Without Names: Architectural Nomenclature and the Classification of America's Common Houses*, ed. Thomas Carter and Anna V. Andrzejewski (Knoxville: University of Tennessee Press, 2013), 16.

[37] Knut Dørum, Jon Gisle, Signy Irene Vabo, "Embetsmann," in *Store Norske Leksikon*, published January 10, 2023, accessed September 25, 2023. https://snl.no/embetsmann.

[38] See *Gårdsnummer/Bruksnummer* in the glossary for information on the farm registration numbers and system in Norway.

[39] Arne Lie Christensen, *Den norske byggeskikken: Hus og bolig på landsbygda fra middelalder til vår egen tid* [Norwegian building customs: Houses and housing in the countryside from the Middle Ages to our own time] (Olso: Pax, 1995), 246.

[40] In this project, this area includes the former Oppland, Buskerud, Hedmark, and Akershus counties.

[41] Christensen, *Den norske byggeskikken*, 242.

[42] Christensen, *Den norske byggeskikken,* 242.
[43] Christensen, *Den norske byggeskikken,* 242.
[44] Christensen, *Den norske byggeskikken,* 242.
[45] The *gårdsnummer* (farm number) for the Søre Tråen farm is #45, and the *bruksnummer* (farm unit number) is #5, written as 45/5 in the registration for the farm.
[46] Backer, "Byggeskikker" in *Buskerud*, 344.
[47] Christensen, *Den norske byggeskikken*, 244.
[48] Hermundstad, *Valdres bygdebok*, 465.
[49] Christensen, *Den norske byggeskikken,* 242. *Gårder* was written which indicates freeholds.
[50] Christensen, *Den norske byggeskikken,* 244.
[51] Knut Hoff, *Rollag bygdebok: ætt og gard og grend* (Rollag: Rollag Bygdeboknemnd, 1989), 457.
[52] Backer, "Byggeskikker" in *Buskerud*, 345.
[53] Hoff, *Rollag bygdebok,* 457.
[54] Finn Ditlevsen, "Hus og Byggeskikker" [Houses and Building Customs], *Bygd og by i Norge: Vest Oppland og Valdres*, ed. Snorre Evensberget (Olso: Gyldendal Norsk Forlag, 1982), 440.
[55] Backer, "Byggeskikker" in *Buskerud*, 346.
[56] O. T. Bjanes, "Traaen, Søre," in *Norsk gardsbruk: Buskerud fylke* 2, ed. Wilhelm Dietrichson, and Lars Berg (Oslo: Forlaget Norske Gardsbruk, 1948), 1413. Photos referenced for other farms on the following pages:

Traaen nordre farm (45/1), 1413.

Risteigen farms (10/1, 2, 3, 6), 1405.

Gladheim søre (19/1, 7, 9, 10), 1390.

Gladheimkåset (19/6), 1391.

Høyseth nedre (15/1), 1395.

[57] Ancestry.com. *Norway, Church Records, 1812-1938* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2020. From The National Archives of Norway – Arkivverket, *Church Books 1815-1960*; Reference Number: SAH/PREST-136. https://www.ancestry.com/discoveryui-content/view/481367:61757?ssrc=pt&tid= 110621919&pid=390083474814 (accessed March 27, 2024). Viksbergo croft was also referred to as Bergene, Bergo, and Viksberge in various historical texts.
[58] Knut Hermundstad, "Husmannsplassar i Slidre og Lome" in *Årbok for Valdres: Pisil og Passop*, ed. Ivar Aars (Fagernes: Valdres Historielag, 2021), 137.
[59] Farm unit numbers are as follows: *Øvre Vik* (54/1) and *Nedre Vik* (55/1).
[60] "Endre A. Vik," obituary, *Spring Grove Herald (Spring Grove, Minnesota),* 9 May 1946. Print.
[61] *Gårdsnummer/bruksnummer* (farm registration numbers): Kvåle nedre farm (40/13)
[62] Ivar O. Hovi, photographer. "Smedplassen i Vestre Slidre," photograph (Fager-

nes: Valdres Folkemuseum, ca. 1910) VFF VS-1.07. From DigitaltMuseum: https://digitaltmuseum.no/ 021017944023/smedplassen -i-vestre-slidre (accessed September 14, 2023).

[63] Ragnhild Dietrichson, *Gamal byggjeskikk i Vestre Slidre: rapport frå registreringa av hus bygde før 1900.* (Valdres Folkemuseum: Vestre Slidre kommune, 1996), 30.

[64] Dietrichson, *Gamal byggjeskikk*, 31.

[65] Dietrichson, *Gamal byggjeskikk*, 31.

[66] The name "Mørke" refers to a plot of land in shadow from the sun and was likely named such because of this feature.

[67] *Gårdsnummer/bruksnummer* (farm registration numbers):

Mørke (12/4)

Nørdre Kvissel (12/1)

[68] Geir Beitrusten, *Gardar og slekter i Vestre Slidre, ed.*Ivar Aars (Valdres Bygdeboks Forlag, 1979), 113.

[69] Beitrusten, *Gardar og slekter i Vestre Slidre,* 123.

[70] Beitrusten, *Gardar og slekter i Vestre Slidre,* 123.

[71] Hermundstad, *Valdres bygdebok,* 478. Illustration "Stove på Ellingbø, Nedigarden i Vang," shows the same floor plan as the Haugen (13/2) dwelling. https://urn.nb.no/URN:NBN:no-nb_digibok_2016050208023.

[72] Dietrichson, *Gamal byggjeskikk*, 31.

[73] *Gårdsnummer/bruksnummer* (farm registration numbers):

Øvre Vik (54/1)

Nedre Vik (55/1)

Niegarden Kvissel (13/3)

[74] Dietrichson, *Gamal byggjeskikk,* 16.

[75] Backer, "Byggeskikker" in *Buskerud*, 345.

[76] Ditlevsen, "Hus og Byggeskikker" in *Vest Oppland og Valdres,* 413.

[77] Ditlevsen, "Hus og Byggeskikker" in *Vest Oppland og Valdres,* 429.

[78] Eilert Sundt, "Om Bygnings-skikken på Landet i Norge" [On the Building Customs of the Norwegian Countryside] in *Verker I Utvalg 6,* ed. H. O. Christophersen, Nils Christie, and Kaare Petersen (Oslo: Gyldendal Norsk Forlag, 1976) 62, fig. 30.

[79] Fred W. Peterson, *Homes in the Heartland: Balloon Frame Farmhouses of the Upper Midwest, 1850-1920* (Lawrence, Kansas: University Press of Kansas, 1992), 1.

[80] Richard W. E. Perrin, *Historic Wisconsin Buildings: A Survey in Pioneer Architecture 1835-1870.* 2nd edition revised (Milwaukee, Wisconsin: Milwaukee Public Museum, 1981), 61.

[81] Written *murer* in Norwegian. Could also indicate a bricklayer.

[82] "Register of Deaths Houston County 1894," Genealogy Trails History Group (website), accessed September 3, 2023, https://genealogytrails.com/minn/houston/deathregister1894houstoncounty.html. Transcribed by Angie Lietzau from

Houston County, Minnesota Register of Deaths Film #007552367.
[83] "1878 Business Directories and Gazetteer, Brownsville," Genealogy Trails History Group (website), September 9, 2023, http://genealogytrails.com/minn/houston/directories.html.
[84] "1878 Business Directories and Gazetteer, Brownsville."
[85] Charles S. Bryant, "Charles Hoegh," in *History of Houston County*. (Minneapolis: Minnesota Historical Company, 1882), 475, HathiTrust.
[86] No author. *History of Mitchell and Worth Counties, Iowa.* (Springfield, Illinois: Union Publishing Company, 1884), 742.
[87] Johnson, *Nybyggerhistorie,* 69.
[88] Johnson, *Nybyggerhistorie,* 64.
[89] Holand, Hjalmar R. *History of Norwegian Settlements: A translated and expanded version of the 1908 De Norske Settlementers Historie and the 1930 Den Siste Folkevandring Sagastubber fra Nybyggerlivet i America.* Translated by Malcolm Rosholt and Helmer M. Blegen. Edited by Jo Ann B. Winistorfer. (Waukon, Iowa: Astri my Astri Publishing, 2006), 194.
[90] Perrin, *Historic Wisconsin Buildings,* 65.
[91] Drange, Tore, Hans Olaf Aanensen and Jon Brænne, eds., *Gamle Trehus: Historikk, reparasjon, vedlikehold,* 5th ed. (Oslo: Universitetsforlaget, 2000), 209.
[92] Drange, Aanensen, and Brænne, eds., *Gamle Trehus*, 209.
[93] Nelson, "Folk Art," 78.
[94] Dietrichson, *Gamal Byggjeskikk*, 13.
[95] Peterson, *Homes in the* Heartland, 168.
[96] Peterson, *Homes in the* Heartland, 168.
[97] Dell Upton, "Pattern Books and Professionalism: Aspects of the Transformation of Domestic Architecture in America, 1800-1860," in *Winterthur Portfolio* (University of Chicago Press, 1984), 107.
[98] Upton, "Pattern Books," 133.
[99] Henry Glassie, *Folk Housing in Middle Virginia: A Structural Analysis of Historic Artifacts,* (Knoxville: University of Tennessee Press, 1975), 75.
[100] Virginia Savage McAlester, *A Field Guide to American Houses,* (New York: Alfred A. Knopf, 2013), 160. Some examples of the Northern tradition can be found in Massachusetts, while southern traditions can be found in Virginia.
[101] "I-House," *Oklahoma Historical Society*, accessed April 6, 2025, https://www.okhistory.org/publications/enc/entry.php?entry=IH001.
[102] Upton, "Pattern Books," 143.
[103] Fred W. Peterson, *Building Community, Keeping the Faith: German Catholic Vernacular Architecture in a Rural Minnesota Parish* (St. Paul: Minnesota Historical Society Press), 38.
[104] *Det Norske Akademis Ordbok (NAOB)* "Bygdebok," accessed March 25, 2024, https://naob.no/ordbok/bygdebok.
[105] Gunnar Eriksen and Thor Falkanger,"gårdsnummer," *Store norske leksikon*, https://snl.no/gårdsnummer, last modified November 25, 2024, accessed April 7, 2025. A standardized rural land register (*matrikkel*) based on the taxable property

value was established in 1665, although registration of real estate dates back to the Middle Ages.

[106] Francis D. K. Ching, "Masonry Bonding," in *Building Construction Illustrated* (Hoboken, New Jersey: John Wiley & Sons, Inc., 2014) 5.26-5.27.

[107] Ching, "Masonry Bonding," 5.26.