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Fetsund: Reimagining the Norwegian Village

Fetsund: Reimaginar la aldea noruega

Fetsund: Reimaginar a aldeia norueguesa

Abstract | Resumen | Resumo

Many towns in Norway are characterized by limited housing diversity and car-dependent residential areas. In contrast, several European cities are developing neighborhoods with dense but low-rise housing, based on participatory processes in which residents are given influence. These processes result in public zoning plans and detailed design codes defining what may be built. But can this be adapted to existing residential areas? This study explores new models for suburban and small-town densification in Norway, challenging negative perceptions of suburban densification. We critique current planning tools for failing to ensure architectural integrity and community coherence, and advocate for design-led regulatory frameworks rooted in historical urbanism and emphasizing variation, sustainability, and co-creation. Our findings show how reimagined densification can create vibrant, affordable, and environmentally sound neighborhoods that counteract sprawl and foster strong communities in both suburban and rural contexts.

Muchas ciudades de Noruega se caracterizan por la escasa diversidad de sus viviendas y unas zonas residenciales supeditadas al automóvil. En cambio, varias ciudades europeas están promoviendo barrios con edificios de viviendas de baja altura y alta densidad gestados en procesos participativos en los que los residentes pueden influir. El resultado de estos procesos son unos planes de urbanismo públicos y unos códigos de edificación detallados que definen qué se puede construir. Pero, ¿se podrían adaptar estos planes a las zonas residenciales existentes? En este estudio se examinan nuevos modelos para la densificación de las áreas suburbanas y pequeñas ciudades en Noruega, y se cuestiona la percepción negativa de la densificación suburbana. Asimismo, se critican las herramientas de planificación actuales por no garantizar la integridad arquitectónica y la coherencia comunitaria, y se aboga por unos marcos normativos sustentados en el diseño, arraigados en el urbanismo histórico y que hagan hincapié en la variación, la sostenibilidad y la cocreación. Las conclusiones muestran cómo una densificación renovada puede crear barrios dinámicos, asequibles y respetuosos con el medio ambiente que contrarresten la expansión urbana y promuevan comunidades sólidas tanto en contextos suburbanos como rurales.

Muitas cidades na Noruega são caracterizadas por uma diversidade habitacional limitada e áreas residenciais dependentes da circulação automóvel. Em contrapartida, várias cidades europeias estão a desenvolver bairros com uma maior densidade habitacional mas de baixa altura, com base em processos participativos nos quais os residentes têm poder de decisão. Esses processos resultam em planos de ordenamento públicos e códigos de projeto detalhados que definem o que pode ser construído. Mas isso pode ser adaptado às áreas residenciais existentes? Este estudo explora novos modelos para a densificação suburbana e de pequenas cidades na Noruega, desafiando as perceções negativas da densificação suburbana. Criticamos as ferramentas de planeamento atuais por não garantirem a integridade arquitetónica e a coerência da comunidade, e defendemos enquadramentos regulamentares orientados para o design, enraizados no urbanismo histórico e que enfatizam a diversidade, a sustentabilidade e a co-criação. As nossas conclusões mostram como a densificação reimaginada pode criar bairros vibrantes, acessíveis e ambientalmente sustentáveis que contrariam a expansão descontrolada e promovem comunidades fortes, tanto em contextos suburbanos como rurais.

Klyngetun

We Norwegians see ourselves as a people who thrive best alone on a small farm high on a mountaintop—or deep in a valley. The documentary series *Der ingen skulle tru at nokon kunne bu* (*Where No One Thought Anyone Could Live*) has run for 23 seasons, portraying the lives of "people who live far from the city but close to the dream of a simpler life, in touch with nature." For a country of 5.5 million inhabitants, it is telling that the 2024 season averaged a million viewers per episode.

This self-image is relatively new in a historical context. In 1821 a land redistribution act was passed by the Norwegian parliament (Randal 1995) to reorganize land ownership, particularly in clustered farm settlements (*klyngetun*), where people would own scattered plots—some were said to own just half of an apple tree. In many cases, people took their houses with them, moving on to more practicable plots elsewhere. Over about a hundred years, most abandoned life in the *klyngetun*—a dense village structure with over 600 years of history, where people shared tools and farm buildings—for the cities and single-family homes on large lots, safely distanced from their neighbors.

How is Land Being Densified Today, in City Districts and Rural Communities?

Areas of detached housing in Norwegian cities are continuously being densified. Usually this happens when single-family homeowners subdivide their plot, allowing a new house to be built—also at a safe distance. Other times, developers buy a house with a large lot, knock the house down, and then build several new units—sometimes even mid-rise apartment buildings—often completely at odds with the character of the neighborhood. In most cases, the new homes are sited in the middle of the plot, and while this does increase the number of housing units, it rarely leads to functional diversity or lively street life.

This is described by the term *eplehagefortetting*, which can be translated as "infill development in single-family garden plots." It has gained a negative connotation, largely because the new buildings are often of different types that clash with the surrounding ones.

Axonometric view of buildings designed according to the building code for Fetsund (Fragment)

While working on a zoning plan for the center of the small town of Elnesvågen in Hustadvika municipality, near Molde on the west coast, we discovered that despite clear national guidelines promoting integrated land use and transport planning, the municipality was selling single-family plots in municipal housing developments located at a driving distance from public services. This was not surprising, but it revealed an opportunity: if municipalities already have a tradition of developing housing themselves, might it also be possible for them to establish developments within walking distance of the town center, creating dense, low-rise neighborhoods with car-free streets and perhaps even small commercial premises—hair salons, carpenters' workshops, or convenience stores—on some of the ground floors?

Site Plan

The Resident-Designed 10-Minute City

Over the past ten years, through various planning and research assignments, we have explored models for densification using small-scale housing along car-free streets. While preparing the book *The New Neighborhood*, in collaboration with Saher Sourouri, spokesperson for Norway's Architectural Uprising (Gersten 2024), an organization that describes itself as "a people's movement against the continued uglification of our cities", we also learned of various small towns and residential areas developed through participatory processes—such as Adam Architecture's master plan for Field Farm in Somerset, England, which resulted in a detailed design code—and neighborhoods partially designed and even built by the residents themselves, such as the vibrant community of Catfiddle Street in North Carolina. These are two very different projects, yet both illustrate how development based on a design code can foster variation. And variation and diversity are key concepts here. For a number of reasons, neighborhoods with convenience stores and carpentry workshops are often dismissed as relics of the past. But perhaps this perception is also shaped by the way we currently build—favoring large commercial units tailored for large, well-capitalized actors.

On looking for alternative development models for today's often car-dependent Norwegian towns, we find few examples. Drøbak, Sogndal, and Lillehammer are some smaller Norwegian towns that have partially escaped the typical postwar model of urban centers with fragmented single-family housing estates at a driving distance. But where these few towns have fared better, it is often due to neighborhoods and buildings preserved from the nineteenth century. An examination of postwar development in rural Norwegian districts reveals few, if any, examples of concentrated or cohesive settlement patterns. This may give the impression that car dependency and spatial fragmentation are inevitable in rural areas—a kind of natural law. And car dependency today appears so deeply entrenched that reversing the trend may seem impossible.

Development in Fetsund from the forest (Fragment)

Development in Fetsund from the forest (Fragment. AI Version)

A climate committee established by the Norwegian government in 2024 to develop a roadmap for achieving carbon neutrality by 2050 found, in its chapter on spatial planning, that altering settlement patterns formed over generations is difficult due to the phenomenon of path dependence (whereby past events constrain current ones). What is clear is that change must be driven by the residents of rural areas themselves. In the absence of contemporary role models, we may look to the past and consider what regulatory mechanisms led historical town centers in places like Lillehammer and Drøbak to develop so differently from modern ones—and why these older environments remain attractive to many Norwegians. At the same time, we need to develop new models in which structure, urban form, and architecture are the primary guiding parameters.

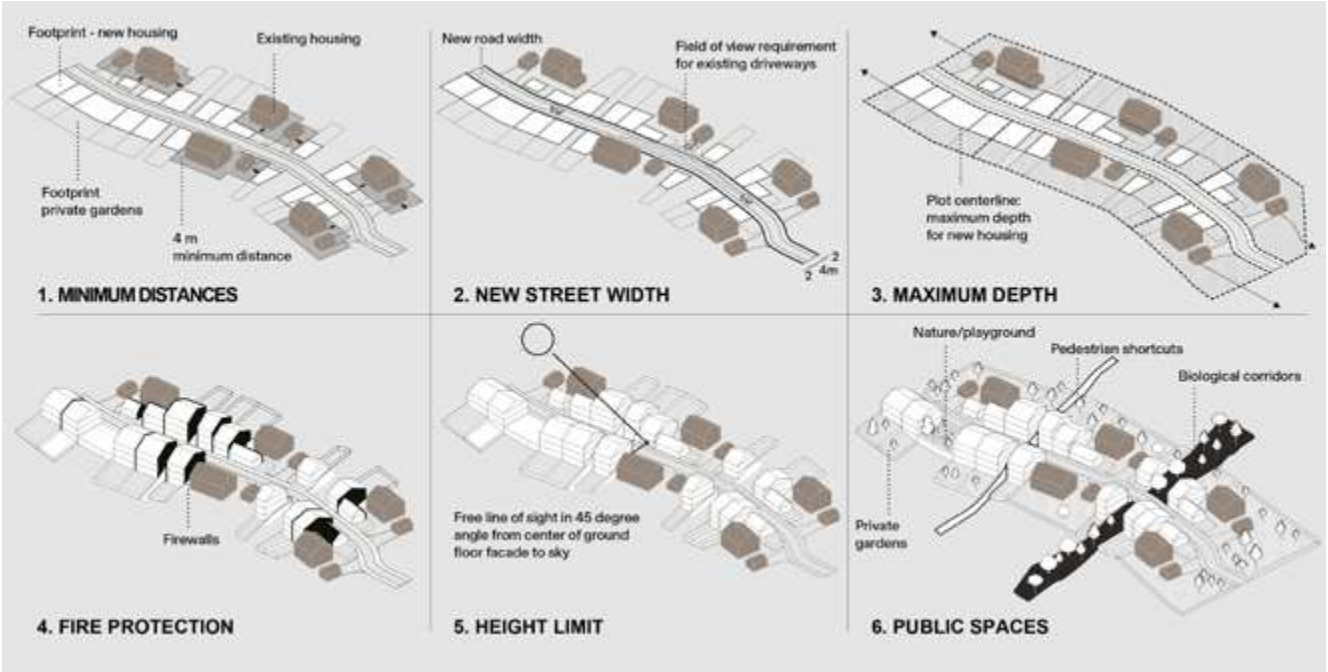
A Word about Strategy

In spring 2024, the architecture firm Fragment with partners including ASAS Arkitektur, At-Site landskapsarkitekter, and NIKU conducted a study for the municipality of Lillestrøm and the small town of Fetsund. The assignment is a "parallel commission," in which two or more consultants explore issues for the municipality, which may then draw freely on the various studies. In Fetsund the task was to look into the possibilities for densification and development, taking into account flood risk and other considerations. In addition, there was a clear requirement for traditional architecture.

Using mapping exercises accounting for flood risk, biodiversity, and farmland, we identified areas to be recommended for development and drew up design guidelines for small-scale densification on single-family plots. We focused on a hillside above the current town and called the proposal *Øvrebyen* (Uptown), envisaging development with small traditional houses and apartment buildings of up to five stories.

In rural Norway, construction costs are often higher than a home's potential sale price, which makes it difficult for many to secure a mortgage, as banks rely on the property's future value as collateral. It is not uncommon for people to build all or part of a home themselves. So could we make this easier for them? And could we also create a model for a compact neighborhood with small houses along a street, allowing for various development models and offering an alternative to detached houses and apartment buildings?

A design code for Fetsund based on the Planning and Building Act and technical building regulations (Fragment)



Development in Fetsund looking uphill (Fragment)

Development in Fetsund looking uphill at dusk (Fragment)

A Design Guide for Small Houses on Car-Free Streets

In the Fetsund assignment, the key strategy for establishing structured and dense small-house neighborhoods has been to create narrow, car-free, one-way streets—often based on existing roads—with new buildings along them, facing the street. This involves a simple, comprehensible strategy and format, with as much of the plot as possible being reserved for backyards and attractive, quiet rear sides. Spacious backyards are familiar from cities like London, where row houses, even in dense urban areas such as Hackney, often have gardens at least as large as those of many detached homes in Norwegian developments. Although this strategy may seem simple, it is in fact contrary to most contemporary urban planning in Norway, which spreads buildings as evenly as possible, on the assumption that distance between houses is always an advantage. But we want to return to the compact town.

In Fetsund we started with the existing single-family plots in our area and developed a set of rules based on the Planning and Building Act and current technical regulations. This led to the identification of potential infill plots along and adjacent to existing streets or on new streets provided for the new development. Parking is located within walking distance in small garage facilities, which can have charging stations for electric cars and bikes and could be converted into housing or to

other functions in the future. In addition, the strategy includes paths, bio-corridors for greenery with insects and other wildlife, playgrounds, and pocket parks.

A zoning plan should also allow homeowners to establish a shop or other business on the ground floor of their buildings. This is something we are familiar with from residential areas in rural Norway, where it is common for a detached house to have a hair salon or plumber's shop at ground level. This is also common in cities known for their diversity and vibrancy such as Tokyo, where there are whole districts of small houses in which the zoning allows homeowners to establish ground-floor businesses.

In the future, we will probably share more, and the apartment buildings along the car-free residential streets we have developed for Fetsund are also suited to co-housing communities, where people may live in relatively small apartments and share facilities with their neighbors, such as guest rooms, a community center, activity rooms, workshops, or a sauna. Many of these shared spaces can be located at ground level along residential streets, helping to bring life to the neighborhood. On the way home from the train station you pass neighbors having dinner or coffee while the children play in an activity room.

A Design Guide for Traditional Contemporary Architecture in Fetsund

The buildings we envisaged in Fetsund were shaped by the existing plots and the rules we drew up. For the facades, we drew inspiration from buildings dating from the late nineteenth century and complemented this with a color palette based on historical color use and local variations, along with considerations concerning materials, building heights, roof shapes, and window placement. Apart from a cornice between the first two floors and windows with mullions, there is little that is particularly anachronistic, resource intensive, or complicated. For this too, there is historical precedent. The classic Grünerløkka district in Oslo was developed from the late 1800s to the early 1900s with facade details imported ready-made from factories in the Netherlands and Germany, because this was required by the local regulations. On such simple premises, dense urban and street spaces can quickly be created with a richness reminiscent of towns like Drøbak, Lillehammer, or Bergen, or indeed Grünerløkka.

Development in Fetsund looking downhill (Fragment)

The rules aim to strike a balance between freedom and a clear framework that respects both the neighborhood and the surrounding nature. We believe in creating a structure and a community-driven design guide, and allowing the built environment to grow in accordance with these guidelines.

Planning for the Porous Rural Town

In 1962, in *Supports: An Alternative to Mass Housing*, N. John Habraken introduced the concept of the "open building", in which a floor plan can be freely designed and redesigned independently of the structural system and vertical infrastructure. He later applied this thinking to urban planning, proposing that zoning plans could serve as open frameworks into which buildings are inserted. As we develop a system for incremental growth in Fetsund, we are building on Habraken's ideas. We believe that an "open building in a porous urban plan", to borrow Richard Sennett's phrase, is not just a way cities were once designed but also the way they can and should be designed today.

Timber-frame houses began to be assembled with screws at the start of the twentieth century. Before that, they were built using logs or joined timber frames that could easily be taken apart if the house had to be moved. Many neighborhoods in Norway's cities—such as Oslo, Bergen, or Stavanger—consist of houses relocated from the countryside. Most people also had carpentry skills, so extensions and additions were common and typically built by homeowners themselves. An architect was rarely hired for such work, so a knowledge of building traditions and styles was necessary in order to design something acceptable to the community. And people managed to squeeze in houses wherever there was space. When the Rodeløkka district was established as a dense Oslo suburb in the late nineteenth century, almost all of its inhabitants came from the neighboring county of Akershus, and many brought their dismantled houses with them.

If combined with strong participatory processes for co-creating a design code rooted in adapted traditional architecture, we believe this approach to urban development is robust and relevant to many contexts.

Havrå clustered farm settlement (*klyngetun*) on Osterøy, outside Bergen, Norway (Store Norske Leksikon)

Catfiddle Street, Charleston, developed and built by residents according to a design code they drew up themselves (*Det nye nabolaget*, Urban Ergonomics)

What Might Such a Participatory Process Look Like?

There are various ways to facilitate this type of development. The most flexible model, while still ensuring that a district has structure and infrastructure, may be a version of what we see in parts of Homeruskwartier in Almere (the Netherlands). The zoning plan for this area is heavily influenced by Habraken's ideas about separating infrastructure from the buildings within it. The city develops an area plan defining plots and their sizes, the street network, and some social infrastructure. Utility infrastructure is laid in the ground, allowing those building homes to easily connect to it. Plots are sold mostly at a fixed price, and people either self-build, hire an architect, or call upon a prefab supplier.

In Homeruskwartier this strategy has resulted in a patchwork of styles, and the look of the district might deter others from adopting a similar approach. But if the process had begun with community involvement and the creation of a binding design guide—perhaps one that allowed for variation, as a balance between freedom and coherence is key—the outcome could have resembled our project for Fetsund.

This is about creating spatial diversity in new residential areas—densification models that respect the existing built fabric. A strategy supported by a rule-based framework for practical participatory processes, resulting in tangible outcomes.

Most of the newly built urban areas with traditional architecture that we studied for our book *Det Nye Nabolaget* were developed in this way from the very beginning of the zoning phase. We believe in an

approach that begins with a plot structure, preferably connected to the existing town or else designed as an independent neighborhood with streets and squares. This should be followed by a rule set that ensures buildings comply with technical regulations and the Planning and Building Act, along with a resident-led design guide that both respects local building tradition and enables variation.

Recreating a Design Language for Norwegian Towns

Our work for Fetsund demonstrated how it is possible to create a dense, low-rise small town on existing single-family plots. The same strategy can be applied in neighborhoods and urban areas seeking higher density and diversity in functions and types. It is crucial that the participatory process used to establish the rules be grounded in the local community and include all those who care about the place. Equally important is that this scale should allow for a wide range of developers—from families and co-builders to smaller professional developers. The strategy must also comply with the Planning and Building Act, technical regulations, and both national and local sustainability goals. A new traditional architecture should aim for the highest standards of sustainability—and of quality of life for residents.

We believe it is essential to build a culture in which people have a greater sense of ownership in urban development, where they understand the possibilities and where densification models put them in control. In Norway's cities, urban development is dominated by large property developers, who have to prioritize profit so as to be able to afford new land purchases. But developers do not necessarily have the competence to shape attractive towns. A glance at how Norway's rural towns developed from the 1960s onward—when the car was allowed to set the terms and traditional building culture was abandoned in favor of cheaper systems, concrete and aluminum—shows the result: places young people tend to want to leave, often due to the architecture.

Sprawl Repair Manual by Galina Tachieva looked at the vast parking lots of American suburbs and small towns and showed how siting new buildings in these asphalted voids could help create vibrant streets, squares, parks, and other public amenities. We have often used this book to illustrate our arguments, because it applies to many Norwegian towns as well.

Field farm by Adam Architecture (*Det nye nabolaget*, Adam Architecture)

Aerial view of Fetsund (Fragment)

What we lack is a design language for the future of small towns in Norway—walkable, diverse rural towns, ideally within reach of the capital or other cities by train. Today it is not only the lack of job opportunities that drives young people away from rural areas—it is also the lack of urban quality. Municipalities and landowners often develop plots in isolation, and what gets built tends to repeat the formulas of the past 60 years, particularly since the end of car rationing in 1960, when the functionally divided town truly took hold.

Landowners' Interests

Suburban and rural development in Norway is also shaped by strong landowners' interests. Farmers often engage in local politics so as to influence planning affecting their land. In cities, smaller property developers tend to dominate, specializing in buying large plots with single-family homes and rezoning them for densification. In Norway, anyone may propose a zoning plan.

This means that landowners often initiate zoning plans themselves, resulting in piecemeal, project-by-project development that municipalities struggle to supervise. Even cities find it difficult to maintain the quality of new housing areas as compared to older neighborhoods.

We believe it is time for a new planning regime that prioritizes small-town densification and thoughtful design. This may counter the trend toward fragmented, car-dependent environments by means of offering modern village-style living: space-efficient homes with private gardens, nature access, and shared amenities, all within walking or cycling distance of town centers. Such developments could make rural centers more appealing, reduce pressure on urban housing markets, and enable faster, more affordable construction with lower regulatory risk. With time, *eplehagefortetting* could come to represent beautiful, inclusive neighborhoods—places people want, and can afford, to live in. We believe the strategy for densifying single-family home plots in Fetsund is a flexible and attractive model for development.

House moved from Forøya in 1965. Houses were moved with government support from islands with few inhabitants to more populated places. (*Hus på vei*, J. Engvig)

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Biographies | Biografías | Biografias

Arild Eriksen

Arild Eriksen (b. 1973) is an architect and author. He founded the architecture firm Fragment in 2018 in order to engage in resident-driven housing and urban development. In 2022 he published the book *The New Neighborhood* for the Oslo Architecture Triennale together with Saher Sourouri, spokesperson of Norway's Architecture Rebellion. The book was broadly about how to create cities and places with resident participation and design codes..

Kristoffer Røgeberg

Kristoffer Røgeberg (b. 1989) is a Norwegian architect and employee at Fragment. He was responsible for the building development strategy for Fetsund and in 2025 he has been working on the creation of an architectural handbook for Tønsberg, Norway's oldest town.