ABSTRACT

The chief goal of cohousing is to create a different mix of public and private spaces and experiences than are commonly available in contemporary Western culture in order to live a richer and less stressful life. An effective gradient of public and private spaces is essential to the success of any cohousing design. Key elements in achieving a successful blend include attention to transitions, spatial variety and paths. Privacy gradients must be developed at all scales including the individual unit, groups of units, common outdoor space, the common house, and even between the community and the outside world. In this study, we will examine three Danish cohousing communities—Jerngarden, Jystrup Savvaerket and Drejerbanken—that exhibit differing urban conditions and form typologies in order to understand how appropriate privacy gradients are achieved.

introduction

One of the main reasons that people are attracted to the idea of cohousing is the promise of greater community interaction. Contemporary lifestyles and habitation patterns have resulted in the isolation of families and individuals by means of physical boundaries and time constraints. In order to reverse this trend, cohousing enthusiasts willingly share resources and actively engage the boundaries between public and private space. By optimizing private space and creating extensive common facilities, people in cohousing communities aim to craft a more meaningful lifestyle.

The challenge of designing a successful cohousing community lies in the sophisticated and appropriate integration of public and private spaces. If there is too little private space, inhabitants cannot find solitude when they need it, and relationships amongst community members becomes strained. Conversely, if there is too little public space, group interaction is hindered and the goal of a rich community life cannot be achieved.

However, simply providing the appropriate amount of public and private space is not enough. Well-conceived transitions between these two realms are essential to affect a vibrant blend of public participation of the whole group, semi-public interaction with neighbors, semi-private contact with family and close friends and private space for oneself.

Danish precedents have served as models for hundreds of cohousing communities in North America. This study focuses on the manifestation of privacy gradients in three Danish cohousing communities: Jerngarden, Jystrup Savvaerket and Drejerbanken. Jerngarden, an urban development on the site of an old junkyard, presents the challenge of not only handling the interaction of public and private within the community, but also addressing the urban street edge on two sides. Jystrup Savvaerket aims to foster a sense of community year-round by organizing circulation along a glass-covered street that cuts through the L-shaped development. The covered sidewalk is narrower than a typical pedestrian street, making it a particular design issue to preserve soft edges. Drejerbanken is a medium-sized development exhibiting a hybrid typology of two minor courtyards facing the public plaza. The buildings are more spread out, allowing for a hierarchy of circulation paths and a greater variety of common outdoor space.
The older neighborhoods in the city of Aarhus were experiencing urban decay. The residents of one such neighborhood took action and began to instigate changes: traffic restrictions, new playgrounds, loans for renovations. One group of residents had been discussing the purchase of a weekend cottage in the country, but came to the conclusion that it would be better to improve their everyday life instead of just their weekends. An opportunity came about when changes to city ordinances forced the closure of an old junkyard (jerngarden) in the middle of the neighborhood. The owner of the junkyard also owned eight small tenement houses that abutted the junkyard. He was willing to sell the lot for very good price.

The group purchased the site, found other housing for the existing tenants, and spent two years rebuilding the site. They had no common goals, other than creating a nicer place to live.

This resulting community blends in well with the surrounding homes. The facades on the front look like any other home in this neighborhood. Each has its own front door, although they are rarely used; entry is through the back yards via the common house. In fact, the exterior photo gives no indication that this is a cohousing community. By sharing the backyards, the residents of this community have created something unique, an oasis, a small park space within their block. This contrasts sharply with the tiny backyards that are prevalent in this part of the city.

This group is still active in the surrounding neighborhood and has many friends in the surrounding community. Neighbors are included in community parties. Jerngarden is considered by some to be the impetus that inspired improvements to the surrounding neighborhood.

This community is much smaller than the typical cohousing community. According to McCamant and Durrett, it functions very well. The smaller number of residents may actually help it to take a more active role with the surrounding neighborhood.

Architect: Finn Nørholm and Ole Pederson
Location: Aarhus, Denmark
Built: 1978
Typology: Courtyard
Model: Private ownership
Units: 8
Residents: Not stated
Common House Size: 2,010 ft²
Unit Sizes: Not stated
jerngarden: site analysis

PATH DIAGRAM
In reaction to the dense urban context of its site, Jerngarden is entered primarily through a main gate on the south street face. Passing by the common house, residents then proceed on public paths to their individual units. Although the units have doors facing the street, they are rarely used.

PUBLIC/PRIVATE SPACE
Jerngarden is unique among the developments considered here in that it must not only address its own community spaces, but also the urban streets on two sides. The units were conceptually reoriented to face the inner courtyard comprised of what would have been private yards in a more typical development. This eliminates the possibility of private outdoor space at the back of the units, but semi-private patios provide a gracious transition between the privacy of the home and the openness of the community courtyard.

Jerngarden rehabilitated old tenement houses typical of the neighborhood.

Semi-private patios create a “soft edge” between individual units and the community courtyard.

SITE PLAN
1. Common House
2. Storage Building
3. Open Space
4. Outdoor Eating Area
5. Typical Neighboring Yard
During the design phase, the group that founded Jystrup Savvaerket decided to maximize common areas and minimize private residences. The architect pushed the initiators very hard to take an active role in the design process. “I told them that they had to take the consequences of what they were doing, that they were pioneers and that if they really believed in their ideals they had to live up to them architecturally.”

The design, particularly the covered street, was aimed at fostering informal social interactions year-round in the harsh northern climate of Denmark.

The site plan is L-shaped with the common house located at the convergence of the two legs. The overall design is inward focused with two-story units lining the outer sides of the common street and one-story units on the inner side. Private decks extend over the street and ground-level patios provide every house with a sunny private outdoor area. This creates a harder edge to the surrounding neighborhood, but provides a more open community within.

McCamant and Durrett looked carefully at the impact of the interior street and the resulting proximity of private and common areas. The residents seem to have no misgivings about the design. They respect each others’ privacy and honor unspoken signs that indicate when privacy is wanted.
jystrup savvaerket: site analysis

PUBLIC/PRIVATE SPACE
One of the professed goals of this project was to minimize private space in favor of extensive public amenities. The covered street creates a hard edge between the public thoroughfare and individual units. However, residents wanted to be able to find informal social opportunities year-round, and this arrangement allows them to do so. Even small gestures like tables and chairs along the street allow for a sense of transition.

Semi-private “backyards” or private decks over the covered street provide outdoor respite. The site can be entered from several points, allowing residents to choose the level of privacy they desire. Flexible common space is scattered throughout, allowing for a variety of public interactions and changing resident needs.

PRIVACY GRADIENT WITHIN THE UNIT
Entrance to the unit is via the public covered street into the common living spaces. A level change between the kitchen/dining area and the living room creates even more subtlety between semi-public and semi-private.

Simple gestures along the covered street create a sense of transition between the public pathway and the private residence.
Drejerbanken was the first Danish cohousing development to mix owner-occupied and rental non-profit-owned residences. The initial group formed to establish a local community where there would be meaningful relationships among residents, and inhabitants would design and manage the community as it grew. Not everyone could afford home ownership so the group approached a local nonprofit housing developer for assistance. The end result is a community of 20 dwellings; half are owner-occupied and half rental.

Government regulations forced the group to divide the land into two parcels, one for the owner-occupied units and one for the rentals. This led to a dual courtyard design where owner-occupied units share one courtyard and rental units share another.

The rental homes were designed first, because they were subject to more government restrictions. Key design objectives were: compact and inexpensive, simple geometry, large kitchens oriented towards the front of the home, living spaces oriented toward the rear of the house and to the private garden also at the rear. Because they were government subsidized, only limited experimentation in design was allowed (e.g., no renewable energy features.) The final design of the rentals was so successful that the homeowners chose to use the same design standards. In effect, the design process used for the rental homes led to the public/private gradient evident in all of the homes in the community.

The common house forms the hub of the community. It is on the primary path from parking to the individual houses and is visible from the front of each.

The community is arranged in two clusters, one for rentals and one for owners. Each cluster has its own courtyard which all houses face. In addition, the common house has a courtyard shared by both clusters. Each house has a semi-public space at its front on the courtyard and a private patio space to the rear.

The community is jointly managed by both renters and owners working together. Generally consensus is used to make decisions, but they do resort to voting at times. The two groups occasionally meet separately to discuss issues that are not of mutual concern. The unique ownership model does not seem to create any unique problems for the community.
drejerbanken: site analysis

PATHS DIAGRAM
Drejerbanken exhibits a hybrid typology that organizes buildings around two minor courtyards separating the homeowners from the renters in this development (as proscribed by the housing authority). These two groups are unified by the common orientation toward the major public plaza. The parking lot is located behind the common house, bringing people past public activities on their way home. Drejerbanken’s relatively rural setting allows individual units to be located unusually far away from public paths. However, sightlines toward the minor courtyards and common house are clear and foster social interaction.

PRIVACY GRADIENT IN TWO ADJACENT UNITS
Individual units are organized around central domestic public spaces with private bedrooms to either side. Again a level change between the kitchen/dining area and the living room creates further definition. The semi-public outdoor space in front of the units acts as a buffer between the private residence and the community courtyard. Each unit also has a semi-private patio at the back.

Crenellation of the private/public edge provides semi-public space that allows residents to meet in smaller groups. One can enjoy the outdoors in an intimate setting, while still maintaining a visual connection to the common courtyard.
design lessons learned

There are several design strategies that can contribute to a healthy balance of public and private space. Chief among these is the creation of “soft edges” that smooth out the boundaries between individual residences and community areas. Soft edges are links or thresholds, and can be as simple as a front porch or an entry garden. In addition to physical transition spaces, soft edges can be achieved by creating sightlines from private to public spaces that allow residents to see what is going on in their community and choose whether or not to participate. Informal signals such as color-coded signs on doors or agreed-upon actions can also communicate residents’ desire for privacy or interaction. As shown by Marcus, when no soft edge exists, as in Hilversum (the first Dutch cohousing development), there are greater complaints about privacy invasion.

Circulation within the community is usually designed to encourage (if not force) as much social interaction as possible. Paths are generally centralized and bring residents from the outside world through public space (often passing the common house), then semi-public space and finally to their own private residences. There are several circulation typologies as described by McCamant and Durrett including pedestrian street, courtyard, hybrid and single building (glass-covered street). The single building model makes the creation of soft edges more difficult, but this can still be accomplished by changes in floor material, entry vestibules and changes in level. It is notable that secondary or semi-public path systems are commonly found only in larger cohousing developments, if at all.

COURTYARD TYPOLOGY: CIRCULATION AND SIGHTLINES

This archetype of cohousing design directs movement along the common house and through a central courtyard to individual residences. Sightlines reinforce this centrality by facing all units toward each other and the common house. Parking is on the edge of the community near the common house, providing an opportunity for residents to check in on common activities on their way home.

STREET TYPOLOGY: CIRCULATION AND SIGHTLINES

The street form demands more axial circulation. Residents are still brought from the parking lot to their own houses via the common house. Sightlines do not provide as strong a connection to the entire community. However, a greater variety of public/private gradients exists along the street. This form also presents the opportunity to cover the street, perhaps hardening the edge between public and private, but also fostering social interaction year-round.
Program arrangement within individual units can contribute to a smooth gradient of public and private. Most cohousing units locate the kitchen and dining areas at the front of the house facing community meeting places or thoroughfares. This provides residents visual access to the community from the room in which they spend the most time. Private living rooms are located at the back of the house, often separated from the semi-private kitchen/dining rooms by a few steps. This can further lead to private outdoor spaces, which according to McCamant and Durrett are less frequently used than semi-public outdoor space.

Attention to transition and variety is also important in the conception of common outdoor spaces as well as the common house. Public courtyards, plazas and thoroughfares should be well defined by buildings, and support numerous activities to create a strong sense of community. These spaces should accommodate both small and large groups. The presence of benches, tables, low walls and steps all encourage informal interaction at various scales. Within the common house, there should be a place for the entire community to gather (usually the common dining room) in addition to places for smaller gatherings defined by activity, i.e. playing games, making crafts, exercising or watching television. Common buildings that are perhaps used less frequently or by a more select group of people, such as storage sheds, workshops, etc., can be scattered throughout the community to create an even more subtle weave of public/private.

A final consideration in public/private relationships in urban and suburban cohousing communities is how the community relates to the surrounding neighborhood. McCamant and Durrett believe that insularity should be reduced to foster good relations with outside neighbors, who are often skeptical of cohousing groups. This can be accomplished with goodwill gestures such as shared recreational areas, the continuation of neighborhood paths, allowing public use of community facilities and designing buildings that blend in with the neighborhood. Marcus, on the other hand suggests that intrusion by outsiders be minimized or eliminated to enhance the sense of community. While sharing community amenities with the general public is an altruistic aim, security problems can arise.

According to McCamant and Durrett, eight feet is enough depth to provide an adequate buffer zone between public and private outdoor space. Paving changes, porches, outdoor furniture and individual gardens can ease this transition. Too much depth discourages neighborly interactions.