# Dutch Domestic Architecture: Cultural Identity Revealed

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#### INTRODUCTION

That the Dutch landscape suggests expansion and unboundedness, will come as no surprise to anyone. Dutch painting is known for its vast skies, limitless vistas and distant horizons. One has only to think of the landscape paintings by van Ruysdael in which at least two thirds of the canvas depicts the sky, or the rain swollen clouds that loom above the city in Vermeer's View of Delft. As with all cultures, the physical landscape is an essential condition of the culture it sustains. It is not surprising for instance that ideas of abstraction culminating in the de Stijl movement, originated in this country and found favor with its inhabitants. The geometric patterning of the planar landscape, its very constructed nature, suggests a ground that is changeable, malleable, unstable, but with infinite possibilities. The vast ever-changing but enduring sky is a constant reminder of the ineffability of life.

This paper argues that the spirit of this landscape is intrinsic to and permeates the architecture of Dutch dwelling. It does so by means of three interrelated but distinct devices:

- 1. The characteristics of the daylight intrinsic to this landscape are appropriated and celebrated throughout the dwelling spaces.
- 2. The enclosure of the interior space is dissolved in order to favour the extension of space outward, to reproduce the experience of boundlessness associated with the landscape. The window is not there so much to frame the landscape as to open the inside to outside. If anything, the intention appears to be to dissolve the frame altogether.
- 3. Finally, there is a relatively public staging of everyday life that reflects the easy visibility and openness of the landscape. The flatness of the landscape is as a table upon which life is set out as a display. Distant villages seen across open fields, are proclamations of human life and activity. The large farmhouse/barns are objects set

boldly upon the landscape, identifying clearly the place of inhabitation. Similarly, in the dwellings themselves, life is set out to be seen from the street.

### DAYLIGHTING

Holland has very particular daylighting conditions that result from its relatively northern location (latitude 52 degrees north) and its flat topography. For much of the year it exhibits the almost perfectly diffused light conditions commonly referred to in lighting circles as "a perfectly diffused overcast sky." When the sun does come out, the sky displays the clear light blue typical of northern climates. But these clear conditions are short lived as weather systems moving east from the Atlantic, provide the material for a powerful atmospheric drama displaying dynamic lighting effects.

Dwellings in the Netherlands are constructed in such a way as to maximize the experience of this light in the interior. Typically, the public spaces of row houses and apartments are arranged as two connected spaces that receive light from both almost fully glazed exterior walls (see fig. 1). In such circumstances, the visual comfort index is likely to be high: with light coming from two directions, the contrast ratios tend to be lower, reducing the likelihood of problems associated with glare. In a



Fig. 1. Typical through house condition, Molenlaan,

room with unscreened glazing facing only one direction, the contrast between the luminance of the window and the surrounding wall surfaces is oftentimes painful to the eye.

Equally important is the height of the glazing in the rooms. Windows that are situated in the upper portion of the wall deliver light further into the room. The rule of thumb is that daylight (as opposed to direct sunlight) penetrates into the room approximately 2.5 times the height of the window. (Eg. A 6 foot high window will deliver daylight 15 feet into the room.) A 10 foot high window will deliver daylight 25 feet into the room.)

Finally, the inclusion of glazed partitions in the planning of the interiors of dwellings increases the likelihood that balanced lighting conditions will prevail. In the Pendrecht postwar Apartments by H. D. Bakker (1952-58), the partition between the living room and bedroom is glazed (see fig. 2). The closet of the bedroom is the only opaque surface providing some privacy between the two rooms, but even it is surmounted by a glass transom panel.



Fig. 2. Pendrecht Apartments, H. D. Bakker 1952-58. Looking west from the living room to the bedroom.

A similar condition exists in the Lijnbannflat urban complex designed by H. A. Maaskant (1957), built upon the bombed out center of Rotterdam. In this case the glazed interior partition separates the living room from the interior workspace and kitchen.

In some cases, glazed partitions have also been used on walls perpendicular to the exterior walls to increase the feeling of spaciousness on the inside of very small apartments and to widen the distribution of light to the interior. This is the case in the Bergpolderflat by Brinkman and Van der Vlugt (1935) where the living room "borrows" space from the bedroom. A similar situation exists in the Kiefhoek by J. J. P. Oud (1927) where the perpendicular window allows more light from the stairwell into the adjacent bedroom while still maintaining privacy to that room (see fig. 3).

In almost all cases, glazed doors and windows (often frosted), permit the use of interior rooms, particularly service rooms and hallways, without the need of electric lighting.



Fig. 3. Kiefhoek, J. J. P. Oud, 1927.

#### DISSOLUTION OF THE ENCLOSURE

A striking characteristic of Dutch domestic architecture is the high percentage of fenestration on the exterior wall. Clearly there is a desire to minimize the visual boundary between inside and out; in other words, to maintain as much as possible the feeling of extension experienced in the landscape. Up to and including the first quarter of the 20th century, windows were typically of the standard casement or sash variety. A distinguishing feature of these windows however is their size. Often 8 feet tall, they occupy close to 50% of the front and back facades. The most familiar example is the standard canal house dating from the 16th century where, as a result of the structure spanning from party wall to party wall in the continuous row of Bourgeois houses, the facade was a virtual curtain wall with few structural demands other than to be self-supporting.

The transition therefore to the actual curtain wall in the early modern period of the 20th century was accomplished rather seamlessly. In Rotterdam, pressures to provide housing for workers from southern Europe resulted in very efficiently designed small apartment units with full glazing on the balcony side and close to 50% glazing on the public outdoor corridor side. The intention was clearly to compensate for the compressed size of the unit.

The culmination of the dissolution of the interior/exterior boundary came with the Schroder House by Gerrit Rietveld. built in Utrecht in 1925. The design strategy of the upper floor describes a clear desire, firstly to be able to eliminate (fold or slide away) all interior partitions when desired, but also to dissolve any idea of enclosure completely. The kitchen corner window that opens to reveal no corner support at all, is the most obvious example of this condition (see fig. 4). The large central skylight is an equal contributor to the feeling of boundlessness. Looking up towards the sky, the light bouncing off the framed glass of the skylight enclosure results in reflections that give the appearance of infinite expansion of the space. Standing in the center of the upper floor one experiences light coming from all directions. The contrast with the confined feelings of the more traditionally planned ground floor is dramatic.



Fig. 4. Schroder House, Utrecht, Gerritt Rietveld 1925.

At a similar time in Rotterdam, Brinkman and Van der Vlugt are also taking advantage of the new steel technologies to open up the corners of their villa style houses. In their Sonneveld House of 1929, large corner windows are used as a device to minimize the feeling of enclosure in many of the rooms (see fig. 5).

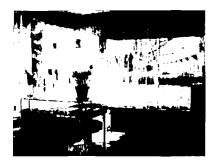


Fig. 5. Sonneveld House Brinkman & Van der Vlugt, 1929. Ground floor study.

Subsequent to this pivotal time in the history of Dutch architecture, the corner window becomes a standard element in domestic architectural vocabulary. In most cases the issue is not about structural gymnastics. The focus appears to be simply to deny as much as possible the enframing of the view to the exterior.

#### THE STAGING OF EVERYDAY LIFE

And so the "window", the framed view out, has been replaced by glazed areas and transparent walls with the intention to deny enclosure. Enclosure is never one-sided however, and with the openness to the outside comes also an openness to the inside. From a North American perspective, where distinctions between private and public life are clearly defined, the loss of privacy due to the large glazed areas of exterior wall would be culturally very problematic. The Dutch cultural imperative, however, appears to be quite different and that difference, I would argue, is a consequence of the nature of the Dutch landscape.

Because of the flatness of the land as well as the very high level of the water table, buildings in Holland are not set into the landscape: rather they are set upon it. In many cases, they float upon it (see fig. 6). As such, the object-like quality of the architecture is emphasized and dramatized. The bulky molded thatched house/barn structures assertively establish their presence in the vast patchwork of fields. Small villages can be seen as entire entities intersecting the line of the horizon. Leaving one village, the next is already visible. Nothing is hidden from view. Life is set out on the landscape as dishes on a table. Life is on display.



Fig. 6. Waterwoningen, Mecanoo Architects, 2000.

This condition is yet another instance of the impact that the Dutch landscape has on the design instincts of the nation's architects. I say instinct, because I believe that the desire to display is not so much a conscious intention as an embodiment of a cultural psyche. The big clear (sparkling clean) picture windows into the lives of Dutch residents is a liet motif that is striking to the typical north American traveler. In many cases, the house becomes almost completely transparent at the ground floor, with glazed walls both front and back. Walking along the sidewalk, one is presented with a compressed section of people's lives. The foreground is a display case of precious objects, the mid ground, the furniture and decorations of everyday living, the background, the garden, together with the front display garden, brackets the whole. Inhabitants animate the section almost like fish in a tank, their world brilliantly revealed as a gift, for the pleasure of the viewer (see fig. 7).



Fig. 7. "Life on display." Molenlaan.

A more deliberate, almost exaggerated, illustration of this propensity to exhibit the spectacle of everyday life is evident in the Mecanoo Architects' most recent housing project in the reclaimed Nieuw-Terbregge district of Rotterdam. Here, the notion of "window" has been challenged at many levels.

In the most extreme case at the end unit, the corner is fully glazed from floor to ceiling. The family's dining event is set out as on a stage at the most public corner of the housing project (see fig. 8). This same condition is repeated in the flat plane of the bracketed units with only the single pane of glass to separate the occupants from the project's public entry terrace. Clearly, the question is no longer simply of the view out but equally, if not more importantly, of the view "in" to the private world.



Fig. 3. Nieuw-Terbregge Housing, Corner unit, Mecanoo Architects, 2000.

At the upper level of the units, bedrooms and study spaces are also placed on display. Here we begin to understand that the window takes on a screen like quality. This is reinforced by its juxtaposition with the adjacent identically sized terrace wind screen. In an ironic twist, the exterior activities that take place behind the translucent terrace wind-screens exist in shadow play while the more private activities of the bedroom are revealed through clear glass (see fig. 9).

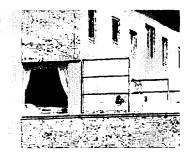


Fig. 9. Nieuw-Terbregge Housing, Framed views, Mecanoo Architects, 2000.

But what has happened to the dissolution of the frame? I would argue that there is a curious reversal that takes place between inside and out. A horizontal slippage has taken place. From the inside, the large glazed walls continue to provide the unfettered and relatively unbounded view to the outside. From the outside, however, life becomes enframed, as on a television screen. The

window is seen exclusively in its capacity for viewing. The ventilation aspects of "window" have been assigned to adjacent opaque panels.

In another recent housing development in the Prinsenland district, an equally explicit "slice of life" is presented to the main public walkway of the community. A horizontal window invites passersby to "partake" in the dinner being served on the table just the other side of the pane of glass. One feels almost as if one could reach out and help oneself to the offerings on the table. This framed view is found in a wall that visually stands free of the body of the house. Once again the contained view is counterbalanced by the extended view into the landscape provided by the adjacent vertical glazing completed at the roof by a skylight (see fig. 10).



Fig. 10. A. Tartaud-Kleinstraat, Prinsenland.

## CONCLUSION

There is no question that the Dutch landscape and Dutch domestic architecture speak the same language of space and light. The landscape is the basis for a type of cultural (zeit)geist. but one that is timeless and intrinsic to the physical/phenomenological experience of a seemingly boundless. flat-surfaced world. I have chosen to elaborate the example of the Dutch landscape because its spirit is so palpable, and so clearly based on a distinctively recognizable topography. But I would argue that all regions of the world display unique attributes that ultimately stem from topography and climate.

In some cases, the spirit is not as plainly identifiable as in the case described above. Nonetheless, I feel that it is precisely the capacity to be sensitive to "place" that distinguishes those destined to be architects. Through our work, we articulate a cultural identity. We creatively interpret the physical and cultural landscape of a particular place to coincide with, and elaborate an essential existing condition.