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Designed to Densify: A Study of the Netherlands Government Impact on Architecture

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In line with much of the world, the Netherlands is experiencing the damaging effect of large-scale suburban sprawl. Several factors have facilitated this beginning in the 1960’s. While the Netherlands declared itself neutral during World War II, the Nazis invaded and occupied Holland in 1940’s. Consequently, the Netherlands was heavily bombed and damaged by the Allied forces. After the war was over, the Netherlands experienced a period of high growth in the 20th century. In response to the population growth, the government began financing large scale building projects, which were often on the outskirts of cities. Most notable was the VINEX project, where during a ten year period the national government along with regional developers built over 30,000 houses. As a result of mass production building, chaotically planned neighborhoods began to pop up all over the Netherlands. While this provided building opportunities for many young architects, who have now developed into internationally known firms, it also destroyed the purposeful spatial planning the Netherlands is known for.

As housing began to grow outward into the countryside, inner cities began to fall into despair. Plans to redevelop demolished cities from the war were abandoned and replaced by housing plans. Developments in the city often required demolition of large areas which was consequently too costly. The green county side of the Netherlands began to shrink as people, businesses, and industries began to migrate to the suburbs.

Due to the steady population growth and the lack of social change there was a growing dissatisfaction about the way the Netherlands itself looked. To prevent further unplanned growth the national government began passing policies for future guidance. National polices are created by the Office of Chief Government Architect and Minister of Housing, Spatial Planning and the Environment (VROM). The role of the chief architect is two fold; to one, advise the government building agency and other
limited views against the highway
focus: single unit facade
green space
focus: social programs & voided park space
expanded views against the waterfront
focus: multi-unit facade & voided parks

In 2010 the Office of the Chief Government Architect released its latest policy “Splendid Compact NL” in response to a proposed phase two VINEX. Additional VINEX homes were proposed to appear in suburban cities of the Netherlands and would further contribute to suburban sprawl. To combat this the national government is proposing redensifying and redesigning cities. Redensification is defined as reinforcement of the built-up area across all layers, both spatial and social. While high rise buildings are often associated with densification, if correctly planned out densified areas can solve space scarcity, mobility, and provide affordable facilities. At present, the Office of the Chief Government Architect believes buildings, complexes and sites will become vacant on a large scale during the coming years. Examples of these buildings include schools, prisons, post offices, and religious buildings all of which make up a large percent of commercial buildings in cities that must be addressed. Consequently, the government intends to move redensification higher up on the social agenda, provided that proposed designs would put forward solutions for improving the situation, labor, identity, and sustainability of a city.

With the proposed policy of densification and redesignation in mind, our studio at the Academy van Broskworth under University of Kentucky professor Kyle Miller was asked to revitalize the GAK building as it relates to its façade and interior program use. Over the course of eight weeks we analyzed the site, cultural conditions, and desired programs of the GAK building to develop a proposed design that would stimulate economic growth in the area as it relates to redensification. Projects such as the GAK building support the chief architect’s policies by redesigning vacant buildings in the inner city to help revitalize the area and prevent suburban sprawl.

The GAK building is located in the Bos en Lommer district of Amsterdam, a community on the western bay between the A10 highway and the Kolenkitbuurt. Traditionally the Bos en Lommer was considered an impoverished area of Amsterdam. The Bos en Lommer district dates
back to post World War II where tents were set up for displaced citizens. Today, Boes en Lommer is a diverse family oriented area of Amsterdam with 127 of the 177 nationals of Amsterdam represented. Bos en Lommer continually receives national funding to improve infrastructure and general livability.

The GAK building was built in the 1950’s by architect B. Merkelbach as the city’s Administration Office for Social Security. Its original function speaks to the social state of the Bos en Lommer at the time. The building is composed of 3,000 offices, 320,000 square feet, and is still one of the biggest office buildings in Amsterdam. The GAK building has been vacant since 2005 and has been used for a variety of temporary programs, such as the Rietveld and Stedelijk museum collections. Today, the GAK building sits empty, as the city proposes revitalization projects that would make it once again beneficial to the surrounding community.

For our design studio Kolder, McGraths, and I proposed the concept of creating a self contained community inside the GAK building to once again stimulate the area. Due to the large amount of available space we proposed a variety of new programs that would work together to occupy the interior. Through interior circulation paths and exterior green spaces the GAK building would become one community where a variety of programs would interact and live. This would further stimulate the surrounding areas by providing new commercial amenities to the Bos en Lommer district as well as bring a new demographic of people.

In order to create a self contained community the multiple programs that inhabit the interior of a building must work together. In theory, there would be no reason to ever leave the GAK building for everyday living. Through designating space for living, grocery, retail, restaurant, entertainment, recreation, and hotel people can carry out everyday tasks without ever leaving the building, such as eating, living, shopping, and working. The interior circulation paths serve as access paths between two programs causing different types of people who come to the building to interact. This would also cause people who live in the building to form better relationships with one another.
New people would be drawn to the building for convenient one-stop-living where they can stay over night, go to an art gallery, buy an outfit, and eat dinner all in the same building. This would bring both people and economic stimulus to the Bos en Lommer area.

It is proven that urban, often green public spaces are highly valued, possibly even more than natural rural areas. Even though revitalization of the GAK building promotes densification of buildings, it also provides green space. At the edge of multiple programs there are voided spaces that serve as recreation areas. It is proposed that these spaces would be used as communal garden areas. Also available to residences of the GAK building is the green park area in the rear. This proves that buildings in cities can offer both the convenience of location and a green environment.

Traditionally, a façade is considered the front surface of a building. For this project Kolder, McGrath, and I treated the façade as a thicker unit, blurring the lines of where the interior meets the exterior. Based on the orientation of the GAK building on the site, program and façade units were applied to each side corresponding. For example, the side of the GAK building that runs parallel to the A10 is deemphasized through smaller façade units, while the park side has larger units. The façade also relates to the interior program. Programs such as entertainment have larger façade openings, while programs such as living have smaller façade openings. Consequently, the façade is no longer simply the outer surface, but also a determinate of the interior use. The green circulation area exists between the façade and the interior, creating protected balconies. The façade units are the largest in the voided areas, which expand on the park side.

As previously discussed, the number of vacant buildings in inner cities in the Netherlands can be attributed to growth in suburban areas due to the opportunity for new construction. Since new land is not available in cities the ability to reuse constructed space provides opportunity for future changes. To prevent the GAK building from once again becoming vacant the design is made up of standard units 3x6 meters. Through post and beam construction these units can be easily altered to be a different number of units. For
example, a 3x6 one unit apartment could easily be made into 6x12 four unit penthouse through the addition and subtractions of walls. Though the proposed interior design would have a specific function at the time of renovation it could be easily reoriented to accommodate a change in program due to the demand of residences over time. This would make the interior less ridged and provide the building a longer life span.

Through increasing a building’s life, living in proximity to resources and in a denser area, a person begins to live a more sustainable lifestyle. The reuse of materials and lost construction pollution save resources when revitalizing an existing building. By living in proximity to everyday needs people are now able to walk to their destination, instead of driving and polluting the environment. Denser living prevents suburban sprawl and the surrounding countryside can be preserved for natural growth.

The work of the Netherlands Office of Chief Government Architect’s polices and the design research Kolder, McGrath and I accomplished this summer can be applied to multiple localities today. As a whole, cities are becoming more spread out into suburbs. Through purposeful redensification, redesignation, and revitalization of abandoned buildings cities can once again become more vibrant. Combined with adaptable interiors, responsive facades, and green space there is no reason a building should ever become vacant.