



Post-World War II Urban Development in American- Dutch Perspectives

Levittown, PA & Rotterdam, NL 1945-1965

Timo Nijssen, s4341597

BA Thesis American Studies, Radboud University

August 15, 2016

Advisor: Prof. F. Mehring



Abstract

After WWII, the way people lived changed drastically in both the United States and the Netherlands. In the United States, the end of the war meant an influx of veterans looking for a place to start their families outside of the cities, which had gone neglected for decades. Government policies favored suburban housing, and pioneers like the Levitt & Sons company handily picked up on these by constructing massive developments such as Levittown, Pennsylvania. Levittown focused on creating communities through homogeneity in spatial layout and social structure. In the Netherlands, the German occupation during WWII left its marks. People were housed in appalling residences, which called for a large scale reconstruction (“wederopbouw”) of the country. The centers of cities like Rotterdam were bombed, giving urban planners an opportunity to rebuild them using new ideas. Rotterdam was rebuilt with a city center focused on shopping and public services, while residential areas were located on the edges of the city. These new residential areas followed the “neighborhood model”, which meant that they had a certain level of self-sufficiency and were supposed to encourage the formation of socially diverse communities.

Keywords: urban planning; suburbs; Levittown; Rotterdam; reconstruction; wederopbouw

Table of Contents

Introduction-----	3
Theoretical Approach.....	5
Methodology	6
Chapter 1: American Post-WWII Urban Development: Exodus into the Suburbs-----	8
Chapter 2: Levittown, Pennsylvania -----	16
2.1: Government Policies.....	17
2.2: Spatial Layout.....	21
2.3: Social Characteristics.....	23
Chapter 3: Dutch Post-WWII Urban Developments -----	27
Chapter 4: Rotterdam, the Netherlands -----	32
4.1: Government Policies.....	32
4.2: Spatial Layout.....	34
4.3: Social Characteristics.....	35
Chapter 5: Comparison Between Levittown and Rotterdam-----	37
Conclusion -----	41
Bibliography-----	45

Introduction

After the WWII, the way people lived changed drastically both in the United States and in the Netherlands. The return of peace caused population booms in both countries (the so-called “baby boom”). However, there was a shortage of housing. Before and during the war, housing issues were pushed to the margins due to the war effort in the United States (Harris 133). In the Netherlands, cities like Rotterdam were bombed and the occupation by Nazi Germany had taken its toll across the country. With a pressing need for new houses in both countries, a new housing industry developed. The American government supported builders through generous funding via the Federal Housing Administration (FHA) and the Veterans Administration (VA). The US also realized that the European governments were too weak after WWII to rebuild their nations themselves. In order to prevent Western Europe from falling into Soviet hands, the US State Department initiated the European Recovery Program (commonly referred to as the Marshall Plan) in 1948.

In America, novel housing policies led to new suburbs all over the country. Middle class white Americans, including many WWII veterans, sought to flee the city and moved into newly built suburbs where they could start their families. In the suburbs, people felt they were able to regain a sense of community – something they were convinced “could not be achieved in the modern city” (Conn 6) – by excluding people who are different (i.e. from a different social class or race.) One of the most prominent builders in this regard, was the Levitt & Sons company. Their Levittown development in Pennsylvania, on which construction started in 1952, resulted in a meticulously planned suburb of 17,311 homes (Popenoe 112) that serves as an archetype for post-WWII suburban America. The suburban focus of post-WWII American urban development was a stark departure from urban-oriented developments in earlier times. It gave rise to a car-

centric and highly segregated living environment – not only in terms of race and social class but also in respect of land use.

In the Netherlands, the housing situation also changed after WWII leading to new urban environments. There was a general consensus that this time, “the Netherlands could finally be organized the way it should be” (Blekendaal n. pag.). Crammed houses had to make way for more economic high rise housing units, despite a popular preference for single family homes (Blekendaal n. pag.). Similar to their US counterparts, Dutch urban planners tried to create a sense of community in their projects (Wagenaar 368), but they differed in their inclusive approach regarding different social classes. During the “wederopbouw” (reconstruction) period, the rebuilding of Rotterdam was one of the biggest projects in the Netherlands. In 1940, the bombing of the city left approximately 80,000 people homeless and during the war period only emergency shelters were built (Post-War Reconstruction Community Rotterdam, “Plan Witteveen, The First Reconstruction Plan”). The vast scale of the destruction gave urban planners the opportunity to completely rethink the city.

Given that these urban developments in the United States and in the Netherlands took place in roughly the same time period, it is interesting to see how they compare and how American ideas influenced the reconstruction of the Netherlands. In this thesis, I will examine Levittown, Pennsylvania and Rotterdam, the Netherlands between 1945 and 1965 and analyze them along social, spatial, and political lines. I chose this time frame because 1945 marks the end of WWII and roughly the beginning of modern suburbanization in the United States. There is no clear end date to the processes described, but I chose 1965 as a 20-year period seems appropriate for urban development (the developments I describe did not take place overnight) while still maintaining a sense of unity in the processes. I will offer a comparative approach in order to identify the differences and similarities between the two developments in the United States and

the Netherlands. An aspect I am particularly interested in, is the way in which Rotterdam has been influenced by American ideas that can be identified in Levittown. I will delineate American post-WWII urban developments to see why suburbanization gained so much momentum. In doing so, I aim to answer the following research question:

What motifs and themes can be identified in Levittown, PA along social, spatial, and political lines, in how far can these be recognized the reconstruction of Rotterdam, NL, and how do these two developments differ?

Theoretical Approach

It is important to understand that in the comparative analysis of urban developments in Levittown and Rotterdam along spatial, social, and political lines, the individual categories are all interlinked: politics decide spatial and social policies, spatial arrangements influence social structures and the social makeup of an area influences its politics. I have chosen to consider “space” exclusively as a concrete construct: the locations where buildings and places are and the distances between them. This definition allows us to look at the ideas urban planners had in mind when they created a specific urban layout without further complicating the discussion.

Philosophers like Michel de Certeau also wrote about space in a more abstract manner in *The Practice of Everyday Life*, but I think that adding those ideas to the discourse of this thesis would not contribute to an understanding of the ideas the planners of Levittown and Rotterdam had.

Most of the research on cities and urban development comes from the social sciences, with research based on interviews with inhabitants instead of literature. In my discussion of the social aspects in Levittown and Rotterdam, I will base my findings on existing literature. The

discussion will focus on matters of race and social class. Both case studies offer interesting approaches to these matters, as will be demonstrated below. The political side (i.e. government policies that influenced the developments) will mostly be used to demonstrate against which context the projects were developed. All three factors are linked to the American Dream ideal of homeownership: the Dream in itself is a social construct, but it is reflected in the way in which American suburbs, including Levittown, are set up spatially. In my analysis I will investigate in how far the American dream also resonates in the urban planning of Rotterdam.

Methodology

In order to understand postwar trends of many Americans collectively moving out of the cities into suburbs, we have to take a broader look at US urban development at that time. What exactly is a “suburb”? What kind of government policies were in place? How did these influence the spatial and social makeup of the newly built neighborhoods? Why did Americans move to these new suburbs and what role does the American Dream play? In Chapter 1, we will critically address these subquestions to look at urban developments in the US.

In order to answer the research question, we have to look at both case studies individually. In Chapter 2, we will look at Levittown, Pennsylvania. In order to guide my analysis of this particular suburb, I will aim to answer the following questions: How have the developments outlined in Chapter 1 influenced Levittown? What other factors, such as available building methods, played a role? How did Levitt & Sons give shape to the spatial layout of the development, and how has this influenced the lives of its inhabitants? How were social classes organized within the suburb and what role do racial tensions play? In doing so, we will better understand how Levittown is constructed and what led to this. My hypothesis for Levittown is

that it strongly pushed for social homogeneity through its spatial and social layout in order to create a sense of community through “sameness”.

In Chapter 3, we will briefly review post-WWII urban development in The Netherlands in order to get an idea of the circumstances under which Rotterdam was reconstructed. Similar to Chapter 1, we will look at the government policies in place and how they influenced the reconstruction spatially and socially.

After that, we will zoom in on the case study of Rotterdam in Chapter 4. We will analyze the post-WWII redevelopment of the city addressing similar questions as those in Chapter 2, focusing on what factors shaped the plans and how the spatial layout influenced the social makeup of the city. My hypothesis for Rotterdam is that the opportunity to start with a clean slate allowed the urban planners to implement a number of new ideas. However, I suspect that in general the rebuilding of the city resulted in a continuation of past developments rather than a radical new way of living that breaks with the past.

Finally, in Chapter 5, we will take the analyses of Levittown and Rotterdam and contrast them, in order to see what similarities and differences we can trace between the two and in how far Rotterdam was guided by American ideas present in Levittown. We will also consider how the differences were determined by their contexts and what they can tell us about the goals urban planners in each country were trying to achieve. This will allow us to answer the research question: What motifs and themes can be identified in Levittown, PA along social, spatial, and political lines, in how far can these be recognized the reconstruction of Rotterdam, NL, and how do these two developments differ? My hypothesis is that some ideas applied in Rotterdam were similar to those used in Levittown, but that there was a stronger focus on social cohesion and diversity in the neighborhoods, resulting in a different execution.

Chapter 1: American Post-WWII Urban Development: Exodus into the Suburbs

A popular image of the United States is often based on the country's largest cities: New York, Los Angeles, Chicago, Washington DC. These are the places people see in TV shows and movies. Whether the story is about an alien invasion, a terrorist plot threatening to destroy the city, or the high-paced life of snappy lawyers: the backdrop is hardly ever a rural village. And yet, while American life is still centered in urban areas, this does not mean that they live in what is commonly thought of as a "city." According to the 2010 United States Census, 80,7% of Americans live in so-called "Urbanized Areas" of at least 50,000 people or "Urban Clusters" inhabited by 2,500 to 50,000 people, while just 19,3% of people live in rural areas. But that does not mean that eighty percent of Americans live in dense, urban neighborhoods like the ones in e.g. Manhattan. As will be demonstrated below, most Americans live in suburbs. This move out of the city and into the suburbs gained momentum after WWII. In this chapter, we will discuss what a "suburb" actually is in an American context, why Americans moved to them and what role the American Dream played, what kind of government policies led to this, and how these policies influenced the social and spatial makeup of these new suburban neighborhoods.

The US Census does not actually use the term "suburb" in its analyses; data about suburbs is mixed with data about Urbanized Areas and Urban Clusters. To get a better view of what a suburb is and how many suburbs exist in the US, economist Jed Kolko asked 2,008 adult Americans whether they thought of their neighborhood as urban, suburban or rural. He published his findings in a post on the data analysis blog *FiveThirtyEight*. While a sample of roughly 2,000 is hardly representative for all of the United States, it does say something about how people classify their neighborhoods. Kolko found that 26% of the people he surveyed thought of their surroundings as urban, 53% suburban, and 21% rural. This classification is mostly based on the

density of households in a ZIP code area, with some exceptions. An analysis of the data showed that ZIP codes with more than 2,213 households per square mile are typically seen as urban, a density from 102 to 2,213 households per square mile is considered to be suburban, and ZIP codes with less than 102 households per square mile were described as rural. If this is extrapolated to the rest of the country, 8,406 ZIP codes classify as suburban while only 2,352 ZIP codes are seen as urban. Thus, a “suburb” can be defined as an area with a medium housing density.

A suburb is of course made up of more than just its housing density. The American suburb is perhaps most strongly characterized by its strict separation of land uses: housing, retail, and commerce are all in different places. This particular form of urban development, as well as its ubiquity, was strongly influenced by the policies of the Federal Housing Administration (FHA). Through its *Underwriting Manual*, the FHA dictated that suburbs should promote “strict separation of land uses” (Hanchett 22). This meant that the (local) government decided what kinds of buildings were allowed on a certain plot of land through the act of zoning. “Zoning is the division of an area into zones within which uses are permitted as set out in the zoning ordinance. The zoning ordinance also details the restrictions and conditions which apply in each zone” (Cullingworth and Caves 92). The types of zones vary, but they usually go further than just ‘residential’, ‘commercial’ and ‘industrial’: specific types of houses (e.g. apartments or single family homes) are also grouped together, for example. Zoning makes neighborhoods much more homogenous; in fact, this was exactly why it was implemented in the first place. By saying that certain types of houses could not be built in certain areas, or dictating that garages cannot be put next to schools, a suburban recreation of the “dirty” inner city city, which, as we will see below, Americans wanted to escape, could be avoided. “Anything which might threaten the sanctity of the single-family dwelling suburb could now be excluded” (Hanchett 65). However, as pointed

out in *Planning in the USA*, the most important purpose of zoning was perhaps social: “the exclusion of unwanted people or uses, and thus the preservation of the status quo” (72). By stating what was allowed by who in specific areas, zoning was excluding all other uses and users. This provides an interesting parallel with Steven Conn’s point that communities are inherently about exclusion: “any community is necessarily defined by those whom it includes, and thus also by those whom it does not” (6). By means of zoning, certain communities could protect their interests and exclude other people from joining their community, leading to social homogeneity. Hanchett points out the role the FHA played in this uniformity: the Administration held an ideal of “homogenous communities” which were achieved through “blatant discrimination on the basis of gender, race, and class” (22) by only allowing people of the same social and racial class to live together. Its *Underwriting Manual* even states that “if a neighborhood is to retain stability [...] it is necessary that properties shall continue to be occupied by the same social and racial classes” (qtd. in Hanchett 22). Through zoning and other policies, suburbs became strictly separated in both function and inhabitants. Not only are homes surrounded by only other homes with stores far away, those homes are inhabited by people of the same social class. “Dependent on the automobile, with land uses carefully separated into homogenous pods, and lacking any central coming-together place where citizens of all backgrounds mingle and interact, this new “metropolitan region” or “galactic metropolis” was unlike any urban society in the history of the human race” (Hanchett 48).

This preference of the FHA for strict zoning is reflected in suburban sprawl, which according to Duany, Plater-Zyberk, and Speck consists of five “homogenous components” (5): housing subdivisions, shopping centers, office parks, civic institutions, and vast amounts of roadways (5-7). The housing subdivisions are purely residential, often with comparable homes as they have all been built by the same developer. The shopping centers are just for shopping with a

big parking lot, varying from a couple of big-box stores (Walmart, Best Buy) along a collector road to an enormous indoor mall with both smaller and larger stores, dining options and sometimes even entire theme parks. Office parks are areas exclusively for work, again with a big parking lot. The “civic institutions” component consists of public buildings, such as schools, town halls, and churches. Duany, Plater-Zyberk, and Speck write that “these buildings often serve as neighborhood focal points [in traditional neighborhoods], but in suburbia they take an altered form: large and infrequent, [...] surrounded by parking and located nowhere in particular” (6). Finally, miles and miles of roadways connect the components of sprawl to each other. Recurring factors in these components is that they are exclusively used for one purpose, and that they feature ample of space for cars. In fact, often the only way to get to them is by car. Since every type of building is located apart from the rest, people need to drive everywhere. The need for more parking areas and more roads once new buildings open up only causes even bigger distances between the actual buildings, leading to inefficient use of both land and time (people spend a lot of time in their cars).

Now we have discussed what a suburb exactly is and what policies shaped it, we shall discuss what led to its fast rise in the United States. Suburbanization boomed because of two major developments: the Federal Housing Administration (FHA) and the Veterans Administration (VA) strongly favored suburban housing developments after WWII, and the 1956 Interstate Highway Act literally opened new ways to leave the city. Duany, Plater-Zyberk, and Speck, Thomas W. Hanchett, and Cullingworth and Caves all describe these processes. The FHA and the Veterans Administration pushed banks to provide cheap mortgages to returning veterans by insuring them, often making buying cheaper than renting (Cullingworth and Caves 32). Duany, Plater-Zyberk, and Speck write that these funds encouraged the construction of new single-family homes, as the construction sector needed a boost after the war (8). The population

boomed after the war, with many veterans coming back wanting to start a new family. New houses were needed to accommodate all the people. Outside of the inner city, there was ample room to build new houses. Cullingworth and Caves also mention that these suburban locations were seen as “economically sound locations” and “racially homogenous” and thus were favored over “more doubtful inner-city areas” (33). The FHA explained its favor towards suburbs by stating that “interior locations in the metropolis have a tendency to exhibit a gradual decline in quality” in its *Underwriting Manual* (Hanchett 20). These programs made the choice for new home owners very simple: stay in the crowded city, or begin a new life in a brand-new, spacious, “safe” (i.e. white) suburb at a lower price.

The other major catalyst of suburbanization was the Interstate Highway Act of 1956, which provided funding for 41,000 miles of highway, making it easier to commute between the suburbs and the city. Cullingworth and Caves state that these highways were actually meant to give cities a boost, not the suburbs, as they would provide an easy way to get to the city. This thinking did not take into account that the highways also provided an easy way to get out of the city (34). As Hanchett explains, the construction of expressways and highways through urban centers required demolition in the city center, disrupting neighborhoods and further weakening the city. The new roads also made cheap land outside of the city borders accessible, providing an attractive alternative location for offices and shops to the expensive city center (43). At the same time, the automobile industry lobbied to make car ownership as attractive as possible with the opening of many roads, while “a consortium of auto, tire, and oil companies purchased and tore up over one hundred streetcar systems nationwide” (Duany, Plater-Zyberk, and Speck 8). Americans could now easily flee the city, and were supposed to do so by car. As car ownership rose, the suburbs became more attractive as they were built for cars. The inner city was congested and gridlocked while the curvy, wide roads of the suburbs provided a captivating alternative. The

suburban boom was further strengthened by urban renewal programs, which demolished large amounts of inner city housing (Hanchett 42). Other financial motivators in favor of suburbs described by Hanchett are federal financial aid for extending sewerage systems into the periphery, tax breaks for homeowners that renters did not get, and a 1951 law taxing home sales profits “unless the money was used to buy another house of equal or greater value” (45), creating a situation where people kept owning homes while they might prefer going back to renting and a market for increasingly expensive houses.

Government policies were clearly instilled on homogenous suburban developments, giving the American people an economic incentive to move to them. However, as Steven Conn in *Americans Against the City* and Jim Cullen in *The American Dream* argue, the move out of the city was about more than just economics. Conn argues that throughout the 20th century, (white) Americans became increasingly fed up with the inner city. The industrial revolution brought factories, the city center got dense, overcrowded and unsanitary. The availability of factory jobs also led to an influx of cheap labor immigrants from southern and eastern Europe and a move towards the north of African Americans from the south. Conn describes an aversion to the collective mechanisms of city government, and a sense of nostalgia to close-knit communities. Communities where people still knew each other, just like in the small American town, the only place where “true American values [could] be fostered” (Conn 9). A place that offered an alternative to the impersonal character of the big city. Because zoning secured their homogeneity, the suburbs offered such a place: “any community is necessarily defined by those whom it excludes, and thus also by whom it does not” (Conn 6). After WWII, whoever could afford it left the city and moved into the newly built suburbs, giving rise to the so-called “white flight” where the white middle class flees the inner city. Technological advances, such as private car ownership and telecommunications, made it possible to commute back to the city or to work from a

distance. The poor, mostly non-white Americans and immigrants, were left behind in the cities. Cullingworth and Caves describe this as a bit of a paradox in their book *Planning in the USA*: the city boomed, leading to tremendous economic activity, which in turn made people want to flee to quieter surroundings (34).

The American Dream also plays a role in the move to the suburbs. Jim Cullen argues that the ideal of land ownership has been instilled in the promise of “America”, or the American Dream, right from the beginning. Land was plentiful, and unlike in Europe where land was owned by aristocrats, everyone (i.e. free, white men) was able to buy it thanks to policies like the 1862 Homestead Act. As the American society became less agrarian, land ownership became home ownership. Through the FHA and VA policies, the United States “afforded opportunities for a great many people (including some black and Latino people, among others) to do something that was previously difficult, if not impossible: acquire a place they could call their own” (Cullen 136). As outlined above, the FHA had a preference for suburban developments, meaning that the people making use of its policies also moved to the suburbs. Cullen also argues that the dream of home ownership was motivated by “a thirst for privacy and autonomy [and] [...] a Dream of Upward Mobility” (135) and that the move to the suburbs specifically was driven by a fear of racial desegregation (133). The suburbs offered all this: they were accessible through government policies, they were strongly focused on ownership, and they were racially homogenous.

As people left the inner city, initially they commuted to the old cities for their jobs and shopping needs. But soon, shops followed their shoppers to the suburbs. Not just because land was cheaper, but also because the construction of new buildings for businesses was more attractive tax-wise than restoring an old building. Outside of the city, there was plenty of space for new commercial buildings (Hanchett 46). However, there was a problem: in the newly built housing suburbs, there was no room for retail. In the inner city, a block of housing often features

a few corner stores, but the suburbs were funded by programs that focused only on housing (Duany, Plater-Zyberk, and Speck 9). The FHA even demanded that retail “would be grouped into a single shopping center” (Hanchett 22) instead of having corner stores intermingled with houses. Initially, retailers set up shop next to collector roads between housing divisions, giving rise to the strip mall. This car-centric environment did away with the idea of walking to a shop and called for large parking lots. The shopping centers got bigger and bigger, eventually eliminating the need for city center shops. As the malls became ever larger, they no longer went where the people were: “the huge enclosed malls that began to be developed in the late 1950s [...] became development catalysts themselves.” The malls “provided a center for a center-less suburban spread, and an identity for a diffuse area” (Cullingworth and Caves 35). With housing and shopping having moved out of the pedestrian-friendly city center into the car-centric suburbs, people got less dependent on the city and yet they relied more on their cars. Businesses similarly started to move out of the city in order to shorten the commute for their workers and to benefit from the lower taxes outside of the city boundaries (Duany, Plater-Zyberk, and Speck 9). Industry also moved out of the city during WWII because locating them near where people lived would be dangerous in case of enemy attacks (Cullingworth and Caves 35). Most of the components that make up a city have now moved out of the city, forming a new kind of urban settlement without a clear center while leaving the emptied out city center behind.

In this chapter, we reviewed what a suburb is: a place with medium housing density that is homogenous on all fronts: strictly zoned land uses and little racial and social variation. (Middle class) Americans moved to them because they longed for a sense of community they felt was lost in the racially and socially diverse cities, and various government policies opened up the land and made it easy and attractive to move out of the cities. FHA policies were strongly geared towards protecting the homogeneity of the suburbs, making it hard for minorities to break through this.

Chapter 2: Levittown, Pennsylvania



Fig. 2.1. Areal overview of Levittown, PA, ca. 1953-54. From: Harris, Dianne. *Second Suburb*.

151.

In the previous chapter, we saw how suburban America came to be. In this chapter, we will focus on the suburb of Levittown, Pennsylvania specifically. A suburb less famous than its Long Island, New York namesake, but one that is perhaps even more exemplary for post-WWII car-centric suburban America. Built by the Levitt & Sons company that gave it its name, the Pennsylvania suburb (fig. 2.1) was one of the first large-scale planned communities in the United States and unlike its Long Island predecessor, it was meant to be sold right from the beginning. It is remarkable both in scale and in building speed: the Levitt & Sons company devised an assembly line-like construction method that enabled them to build up to 30 houses per day. We will review

how Levittown came to be and how the government policies outlined in Chapter 1 have influenced the development of Levittown. We will also see how Levitt & Sons gave shape to the spatial layout of the development, and how this has influenced the lives of its inhabitants. How were social classes organized within the suburb and what role do racial tensions play?

The Pennsylvania Levittown was built from 1952 to 1958 and housed up to 70,000 people in 17,311 affordable homes (Longstreth 123), all built by the Levitt & Sons company. Levitt & Sons was founded by Abraham Levitt in 1929 who ran the company together with his sons William and Alfred. The company did not always concern itself with affordable housing, and initially focused on high-end developments. Government and market influences made it shift its focus from luxury homes to mass produced cheap housing, but all their developments shared some characteristics. Already in their first luxury developments, the Levitts wanted to create a sense of community (128). The Levitts did not believe they were simply building houses, but instead they were creating “residential enclaves where the houses, landscaping, streets, and infrastructure were designed according to a comprehensive plan, which also included some recreational facilities and restrictive covenants” (129-130). This was later carried over into their low cost mass housing projects and was an important part of their appeal.

2.1: Government Policies

In Chapter 1, we outlined some of the government policies that shaped American suburbia: a FHA and VA focus on suburban housing, strict zoning, and the opening up of cheap land outside the city through the Interstate Highway Act. These policies impacted Levittown, PA. The FHA and VA made suburban home ownership affordable for millions of Americans, but it also made providing mortgages to them very attractive to banks. The FHA-backed mortgages were safe and profitable, so lenders “actively sought projects to bankroll, the bigger, the better”

(Hanchett 21). This created a construction boom. As Hanchett explains, “savvy developers found themselves commanding virtually unlimited capital – very little of which they actually had to supply themselves – which enabled construction on a scale virtually unknown in US history” (21). The Levitt & Sons company was one of those savvy developers, using the FHA funds to develop its massive suburbs.

Even though Levitt revolutionized the building process, his company and other suburban developers were heavily influenced by what the FHA thought were proper ways of building communities. Its ideals “emphasized privacy and homogeneity rather than diversity” (Hanchett 21), both regarding building style and inhabitants. Only subdivisions that met the FHA standards could apply for its generous funding, so developers followed its rules (Hanchett 22). The FHA rules originally “underwrote [that] large-scale suburban developments like Levittown mandated housing segregation and usually restricted banks from giving loans and mortgages to homeowners in racially mixed or all-black communities” (Sugrue 177), something the Levitts willingly obliged to by stating that “we can solve a housing problem or we can try to solve a racial problem [...] but we cannot combine the two” (William Levitt qtd. in Sugrue 176). Even after the Supreme Court struck down the FHA-encouraged racial segregation in 1948, the Levitt & Sons company continued its practice while the FHA “insisted that racial matters were not in [its] purview” (178).

Another factor that literally shaped Levittown was the FHA preference for strict zoning. As can be seen from fig. 2.2 below, Levittown has four of the five “homogenous components” of suburban sprawl, as defined by Duany, Plater-Zyberk, and Speck (5): the majority of the development consists of housing divisions and roads, with shopping centers on the outer edges and some room for civic institutions like schools, all mostly separated from each other. The fact that Levittown even had these civic institutions and public services can also be traced back to

government influences. Despite its size, Levittown was not incorporated, and unlike other developments it was not within the limits of a big city (Longstreth 159). Instead, Levittown was spread across four different governmental jurisdictions, and initially had to rely on its rural neighbors for schools and other public services. These did not suffice for a development of Levittown's scale, leading Levitt & Sons to build their own facilities.

Government policies have also indirectly shaped Levitt & Sons throughout the years. Before WWII, the company concerned itself mostly with luxury developments, but during the war, "the federal government allocated enormous sums and developed sweeping provisions to stimulate construction related to the war effort and [mounted] restrictions on 'nonessential' buildings" (Longstreth 133). With no opportunities to construct private residences, the Levitts took on the task to build low-cost housing quarters for naval officers in Norfolk, Virginia. This turned out to have a lasting impact on future Levitt & Sons developments, as the large-scale Norfolk project had to be executed on a tight budget. That requirement allowed the company to fine-tune its assembly line-like approach to building. Longstreth quotes William Levitt saying that "Norfolk infected us with the fever of mass building. We saw house-building with a tract of land as a factory, turning out low-cost houses as its product" (137). The wartime construction work was geared towards speed and cost-effectiveness, reflected in the use of concrete slab foundations instead of building basements.

Already during the war, Levitt & Sons realized that the end of the war would result in an influx of veterans coming back to the US, looking to start a new family in a new home. The FHA and VA policies outlined in Chapter 1 meant that a lot more people could afford to purchase a home than before the war. Furthermore, because there had been little construction during the Great Depression in the 1930s and because non-essential building was limited during the war, the need for new homes was pressing. "An estimated 5 million dwelling units [had] to be constructed

as quickly as possible and a total of 12.5 million by 1955” (Longstreth 139). The Levitts adopted their wartime production lines to build more luxurious yet affordable homes. This resulted in the first Levittown in Long Island, New York. After its completion, the Levitts wanted to shift to building luxury communities again and drafted up a masterplan for a new project called Landia, which came with “a full range of amenities” (147). It was supposed to be everything Levittown, NY was not: meticulously planned, equipped with all sorts of amenities, and most importantly, a stand-alone community “that was nonetheless part of a metropolitan network” (148). Landia was an upmarket blueprint for the stereotypical post-war suburb. However, the Korean War put restrictions on building materials and the project never materialized. Levitt & Sons ended up combining the planned character of Landia and its full range of amenities with the scale, affordability, and building speed of the New York Levittown by setting out to build Levittown, Pennsylvania in 1952, a carefully planned, large-scale, affordable suburb. “Born out of necessity rather than choice, the second Levittown would integrate its creators’ skills in high-volume production acquired during the 1940s with their penchant for planned amenities” (149).

2.2: Spatial Layout

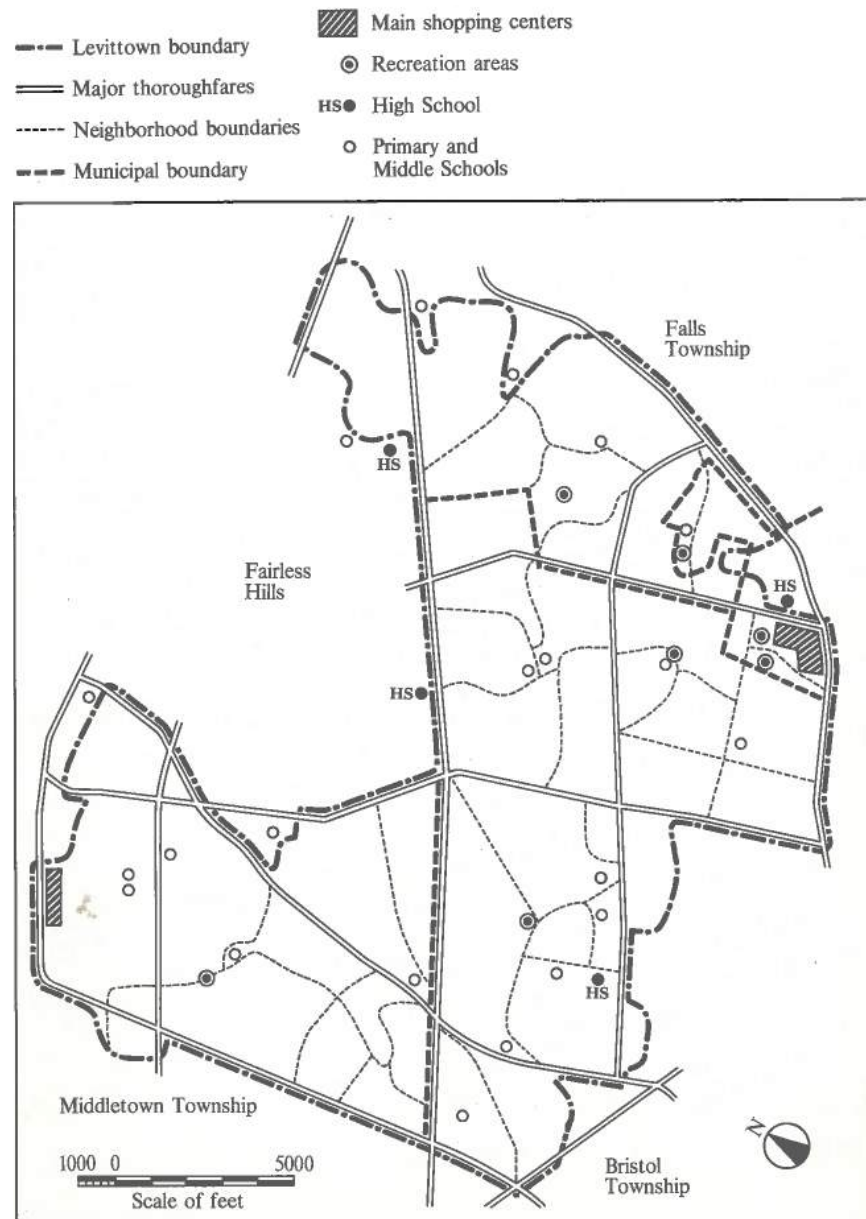


Fig. 2.2. An overview of Levittown, PA. From: Popenoe, David. *The Suburban Environment*.

114.

The first Levittown in Long Island was not exactly a *planned* community: more and more houses were added on the go. “On Long Island, we never knew from one year to the next how much we could build so we never had an over-all master plan” (Alfred Levitt, qtd. in Longstreth 151). As a result, few facilities were built while it was quite far away from existing facilities.

Levitt & Sons constructed shopping and recreation centers, but these were added almost as an afterthought to the edges of the neighborhoods instead of mixed with the residential areas. The company wanted to rectify this through its Landia project, and used those ideas in the Pennsylvania Levittown. It believed that it could not just sell houses, but that it needed a community, or neighborhood, to market the homes. “Community building means quality building, which, in turn, should mean lower prices, and lower prices plus a ‘guaranteed’ neighborhood [i.e., one with a master plan and restrictive covenants] means easier selling” (Abraham Levitt qtd. in Longstreth 130). Company founder Abraham Levitt thought that these strictly planned communities would retain their value easier and thus would be easier to sell. “The Levitts employed the idea of comprehensive planning as a marketing device to reassure their clientele that their purchases would be sound, long-term investments, the value of which would only increase over time” (130).

While Levittown was strictly planned, it was also strictly zoned, with main shopping centers away from the housing divisions and no notable room for offices. There was also a sense of homogeneity to the types of houses built. The Levitts offered six different types of houses; the Levittowner, the Jubilee, the Country-Clubber, the Rancher, the Pennsylvanian, and the Colonial. Each had its own characteristics regarding size, layout, appearance, and facilities, and was geared towards a specific income class. The construction method used by the Levitts, where houses are produced with assembly line-like methods, only allowed for one type of house to be built at the same time, which meant that only one type existed in every neighborhood (Longstreth 154). While this homogeneity is typical for American suburbia in general, the Levitt’s building method might have strengthened this.

The social centers of Levittown were the shopping centers, most notably the Shop-a-Rama mall (completed in 1955). The mall “encompassed an array of goods and services [...] then

unmatched between downtown Philadelphia and Trenton” (Longstreth 157) and had an enormous parking lot. Along with smaller neighborhood shopping centers, the mall served as the social center of Levittown. However, unlike old-fashioned city centers, these centers were set apart from housing on the edges of the development, only reachable by car, and mainly focused on



Fig. 2.2. The Levittown Shop-o-Rama. From: The State Museum of Pennsylvania.

shopping instead of offering a wide array of public services. Its location in the periphery of the development was meant “to make it less obtrusive for residents and more accessible to outside shoppers” (The State Museum of Pennsylvania) and while it was a pedestrian mall, it was completely surrounded by carparks, setting it apart (fig. 2.2).

2.3: Social Characteristics

To protect the sense of community in their developments, including Levittown PA, the Levitts thought they had to be racially homogenous. Levitt & Sons only allowed “refined, American families” (Longstreth 130) to live in its communities. Others were not allowed to live in the Levitt houses, ironically including Jews even though the Levitts themselves were Jewish. This sense of an exclusive community comes back again and again in the analysis of suburbs: just as Steven Conn describes, many post-WWII suburban neighborhoods built their communities by excluding the “other”, people of different classes. To become a “Levittowner,” residents had to

live up to certain expectations from their neighbors and Levitt & Sons. Many of the new Levittowners came from Philadelphia (163), where they lived in row houses. As many of them moved to a house with a private garden for the first time, Levitt & Sons saw a need to 'educate' the residents. The company instated rules which dictated that lawns had to be mowed weekly and that laundry could only be hung out to dry in specific ways and during limited times. Residents were not allowed to build fences around their houses and changes to the exteriors of the homes had to be approved by the company.

This corporate influence was also present in the blatant racism as to who could live in Levittown. Levitt & Sons continued its policy of allowing only whites to buy its houses, fearing it would be unable to sell its houses to whites if it allowed African-Americans to move into its developments. As stated above, the company was initially backed in its racial stance by the Federal Housing Administration, but even after the Supreme Court struck down this policy, Levitt & Sons kept its position that it had the right to decide who got to live in its houses. African Americans were legally allowed to live anywhere, but these rules were not enforced, allowing developers to act however they saw fit. As hardly any developer allowed African Americans to move into its houses, they were "crammed into old and rundown housing, mainly in dense, central neighborhoods left behind by upwardly mobile whites" (Sugrue 176). In 1957, a white family sold their Levittown house to the black Myer family with support of the Religious Society of Friends (Quakers). Levitt & Sons had little to do with this, as the house was no longer owned by them. The Myer family were hand-picked by the Quakers, as they believed that the first blacks had to be "ideal pioneers" who were "as nonthreatening as possible" (182). The Myer move was met with great protest by white residents, and their house and the houses of those supporting them were vandalized. Police had to patrol their street for weeks to protect them from further violence. The Myers persisted, supported by local liberals, Quakers, and left-wing

residents, and eventually “the overt resistance to black move-ins was spent, but white neighbors remained on edge” (191). In 1958, a second black family moved in without any problems. Overt racism disappeared, but Levittown remains predominantly white even today: Dianne Harris writes in her introduction to *Second Suburb* that even in 2000, 94.4% of the residents in Levittown were white, and that “many of Levittown’s original residents moved there in order to live in an all-white community” (6).

The Levitt construction method led to homogenous neighborhoods with just one type of house per neighborhood, which meant that “geographic distribution of income levels followed the distribution of house types in neighborhoods” (Harris 5). This is confirmed by David Popenoe, who studied Levittown census data for his book *The Suburban Environment* and concluded that “the geographical distribution of income levels is strongly influenced by the grouping together, in Levittown, of similarly priced housing” (122). The company’s method of building had caused a situation where people were surrounded by people of the same social class living in the same type of house, perhaps even strengthening their protectionism of their “community.” Sugrue quotes one of the residents protesting the Myers moving in: “As moral, religious and law-abiding citizens, we feel that we are unprejudiced and undiscriminating in our wish to keep our community a closed community... to protect our own” (Sugrue 183). This resident reacted primarily to the idea of a black family moving into a white neighborhood, but the reaction could also be to someone of a lower social class moving in. Perhaps the Levitts succeeded in their goal of building communities (Longstreth 125) by making them inherently unmixed and allowing neighbors to bond over the common fear of those other than themselves.

We have seen how Levittown was a product of the government policies of its time. The Levitts’ ideas about housing built upon these policies: just like the FHA, Levitt & Sons thought neighborhoods had to be homogenous and semi self-sufficient. The Levittown homes were

qualitatively good and provided an alluring yet affordable alternative to housing in the city.

Levittown provided thousands of Americans with a house that was better than any they could previously afford. At the same time, the Levitt & Sons company strongly influenced how people lived in its development, and who was allowed to live there. Choices such as the segregation of social classes and the refusal to let African Americans buy its homes, made that residents did not come into contact with other classes and became afraid of diversity, but for many that might have been the reason they left the inner city for the suburbs from the beginning. The company's racial standpoints are inexcusable; by illegally denying African Americans access to their neighborhoods, they further strengthened the homogeneity of their development and created a hotbed for protest when this homogeneity was broken. While Levittown was relatively walkable and offers lots of parks and public spaces when compared to other, less meticulously planned suburbs, it also stimulated car ownership by placing retail in separate areas. The Levitts were clear in the vision they had and thought that cities were "hopelessly antiquated [...] beyond the point of retrieval" (174), and by offering a way out of urban blight, they did not do anything to counter it. Levittown offered the American middle class better houses than they had had before, but ultimately, it created homogenous, car-centric communities that were not very viable on the long term.

Chapter 3: Dutch Post-WWII Urban Developments

In Chapter 1, we saw what developments led to the massive suburbanization after WWII in the United States, and in Chapter 2, we focused on the case study of Levittown, Pennsylvania to see how these developments took place there. In this chapter, we will briefly look at what urban developments took place in the Netherlands during the same time period. What government policies were in place? How did these influence the spatial and social markup of (newly built) neighborhoods? Were there any American influences on the Dutch developments?

While WWII brought a fair share of atrocities around the world, Europe was perhaps the most severely hit. Many countries lay in ruins because of a lack of maintenance during the war and because of bombings and battles. The Netherlands was no exception: multiple cities were bombed, with the German bombing of Rotterdam leading to the capitulation of the Dutch government in 1940. Cor Wagenaar writes how the ruins of the European cities signified two things in his book *Town Planning in the Netherlands since 1800*: “the definitive collapse of the old European culture, completing a process that had begun during the first world war, and, at the same time, hope for a brighter future” (355). With the slate wiped clean, urban planners could build a new Europe that did away with the old, pre-war traditions that had caused so many tragedies.

The Netherlands has always been human-made. Without human intervention, large parts of the land would be under water. Wagenaar argues that after WWII, the country was simply “remade once more: everywhere, bulldozers and draglines replaced the countryside by urban expansion plans, superimposed new infrastructure, and made centuries-old historical landscapes suitable for large-scale industrialized agriculture” (18). However, as said in the Dutch television documentary series *Ondersteboven: Nederland in de Jaren 60* (“Upside Down: The Netherlands

in the 1960s”) episode “Our House”, this time there was a general consensus that “the Netherlands could finally be organized as it should be” (Blekendaal). With the old literally swept away, the path was clear for cities and civilizations of the future. The old European cities were very dense and as a result, bombings did a lot of damage. The Dutch Ministry of Infrastructure and the Environment published a celebration of Dutch spatial planning in 2012 titled *35 Icons of Dutch Spatial Planning*. In it, the Dutch policy for post-WWII reconstruction is outlined:

Functional town planning was embraced as the most suitable approach. An efficient transport system formed the basis for the zoning of new residential and employment areas. Everything was focused on growth. Two potential problems were identified: social upheaval and dislocation, which were a legacy of the war and the housing need. In the residential areas the primary goal was promotion of social cohesion and streamlining of housing production. Functional town planning did not just focus on new areas. The existing urban areas also required a new planning concept. The existing urban areas suffered from pollution, traffic chaos and large areas were in ruins. In functional terms the city centres needed to be reserved for two main functions: representation and retail. (64)

This emphasizes how there was the idea that the devastations of WWII should be avoided in the future through spatial planning. The old cities did not necessarily foster social cohesion, but the new model of urban planning would. Wagenaar writes how after WWII, the concept of the “neighborhood unit” was important (365) and played on this idea of getting rid of the old. This model was a “modular approach to urban expansion” (365), inspired by American urban planning and formulated by a group led by the director of the Rotterdam Municipal Housing Department, Alexander Bos, and published in a book titled *De toekomst der stad, de stad der toekomst* (“The Future of the City, The City of the Future”). The “neighborhood unit” was supposed to integrate people in their social environment, so they would be able to develop their personality through

contact with others, making them less individualistic and less prone to fall prey to “any leader who presents himself with rousing slogans and [...] displays of power” (367) – a direct reference to how so many people followed the German Nazi regime without question. At the same time, “society would be saved from the risk of being dominated by the masses” (367). Thus, a balance had to be struck between “the purely collective and the strictly personal” (367) by the neighborhood unit.

The group proposed an ideal neighborhood of 20,000 residents, divided in subdivisions of 2,000-4,000 people. These neighborhoods had to be separated from the existing city and from other neighborhoods so they could flourish as their own community (367). The traditional shopping streets and main streets with traffic had to be replaced by separate centers for everything: a shopping center, cultural center and a sports center. All these centers then had to be combined in the middle of the neighborhood, with smaller centers in the subdivisions. The neighborhood unit model did away with the organic growth European cities had known for centuries, with new rings of expansion being added to the outer rim of the existing city. It was remarkably similar to models of suburban growth in the United States, with one key difference: the neighborhoods were supposed to be diverse in population. “All classes were brought together within the confines of the neighborhood,” (368) causing interaction and equality between social classes. Different house sizes were to reflect the size of the families living in them, not their social class. Because of the modular nature of the model, it could easily be adopted to the changing housing demand. Less neighborhoods would not mean lesser facilities, and more neighborhoods could be added without any problem. Since the Cold War loomed, the lower density was also intended to lessen the impact of potential air strikes. This new type of neighborhood was a departure from previous urban developments, as it was much more based on the idea of a neighborhood as its own community than previously.

This concept of neighborhoods as communities is remarkably similar to the ideas surrounding suburban America. While Dutch cities have not been rebuilt in the exact same way as American urban areas expanded at the time, the US did have influence on Dutch developments. After WWII, European economies and industries were damaged, and governments were unequipped to deal with the housing shortage. European countries had to import many goods, more than they exported: a trade deficit loomed and their dollar supplies depleted. The American Secretary of State at the time, George C. Marshall, realized something had to be done to strengthen Western Europe and to make sure it would not fall into the hands of the communists. He proposed a plan, the European Recovery Program (also known as the Marshall Plan). This plan provided billions of dollars of aid to European countries, but it was not given to them directly. The receiving nations could place orders with American export companies, who would then receive payments in dollars from the United States government. The European countries would put the equivalent of the payment in their own currency into a counterpart fund, which could only be used to repay debts and for big reconstruction projects approved by the United States. This gave the United States an enormous influence on the reconstruction: European governments had to put large sums of money into the counterpart funds, and the Americans controlled on how that money was spent.

In this chapter, we reviewed Dutch urban development during the reconstruction period. Government policies were mostly focused on breaking with the old cities, with a city center reserved for commerce and civic functions, and housing neighborhoods that would stand on their own as communities. Especially the focus on neighborhoods as communities makes it similar to the suburbanization in the United States. The developments might have been influenced by the US through the Marshall plan: the Americans had a say in how the money was spent. However, there are also notable differences to the American suburbs: the Dutch neighborhood model

encouraged social diversity, whereas the US suburbs were notably homogenous. The city center also remained important as a social center and combined retail with public services.

Chapter 4: Rotterdam, the Netherlands

In the previous chapter, we have seen how the devastation caused by WWII called for a large scale reconstruction of the Netherlands. The government opted for a model where neighborhoods are seen as individual communities, while city centers are focused on commerce and public services. In this chapter, we will take a closer look at Rotterdam and see how these developments have influenced its post-WWII reconstruction. What were the plans, how did they come to be, and how did this influence the social makeup of the city?

4.1: Government Policies

On 14 May 1940, a Nazi air raid on Rotterdam led to the destruction of 25,479 homes, 31 department stores, 2,320 smaller shops, 31 factories, 1,319 workshops, 675 warehouses, 1,437 offices, 13 banks, 69 schools and many other buildings. Approximately 80,000 people lost their homes (Post-War Reconstruction Community Rotterdam, “Plan Witteveen, the First Reconstruction Plan” n. pag.). As this happened during the beginning of WWII, plans to rebuild the city were already developed during the war. Rotterdam city planners wanted to have a plan in place before the Germans came up with their own plan for Rotterdam. City architect Gerrit Witteveen was ordered to come up with a plan for the new city. His proposal, the “Plan Witteveen,” was rather conservative, consisting of a reconstruction of the pre-war situation with only some changes to traffic flows through the construction of parkways (“The First Reconstruction Plan” n. pag.). The architectural style he offered was traditional and Witteveen personally wanted to instate supervisors who had to approve the designs of new buildings (Post-War Reconstruction Community Rotterdam, “The Basic Plan Van Traa” n. pag.). All the land that was hit during the raid, was forfeited to the government so the rubble of the old city could be cleared as soon as possible and reconstruction could start. No one thought the war would last very

long, certainly not five years. Already in November 1940, the rubble and ruins were gone and emergency shelters and shops were built to deal with the most imminent needs, but all construction was halted on 1 July 1942 due to war circumstances. As the war endured, not much of the Witteveen plan was realized and the desire to rebuild the city in a conservative fashion faded (Van Traa 105–106).

A new proposal was made by Cornelis van Traa, Witteveen's assistant, called the *Basisplan voor de Wederopbouw van Rotterdam* ("The Basic Plan for the Reconstruction of Rotterdam"). It replaced the old city's street pattern by a "more regular grid of major arteries" ("Basic Plan Van Traa" n. pag.) and called for a separation of functions: housing, workspaces, and recreation areas would now be in different places. The city center was meant to be "for working, shopping and entertainment. Businesses and factories were relocated to special industrial estates [...] outside the centre. Housing was chiefly planned in districts on the city outskirts [...] and in the new garden suburbs to the south" ("Basic Plan Van Traa" n. pag.). The old city had grown during the years, but with the Basic Plan, the city would be ready for the future, which would bring a "tripling or quadrupling of traffic and a population twice as big" (Van Traa 116). The group led by Van Traa wanted to take these future developments into account and made sure that there would be enough space for wide roads and transportation of goods. The Basic Plan was much more liberal regarding building styles than the Witteveen plan, with no real requirements as to how buildings had to be designed. In the center, a revolutionary new shopping district was built called Lijnbaan, the first car-free pedestrian shopping zone in the world. Of all the land in the city center, only 31% was meant for construction; a lot less than the 55% in use before the bombing (118). Van Traa's Basic Plan was very much in line with the policies of the central Dutch government: the city center was focused on retail and civil buildings, while housing was located on the outskirts of the city.

4.2: Spatial Layout



Fig. 4.1. The Basic Plan for Rotterdam. From: *Het Nieuwe Hart van Rotterdam*. 1.

Van Traa's Basic Plan (fig. 4.1) did not specify exactly how the new city center had to be built; instead it provided a flexible framework on which building plans could be made. Because Van Traa only allowed for so little land to be used for construction, land had to be used efficiently. This resulted in high rise constructions, as offices could easily be built on top of stores (Van Traa 118). Service streets ("expeditiestraten") behind stores were also built extensively, meaning that stores could have their supplies delivered to them without having big trucks in front of them – a relatively novel concept at the time. An interesting example of what this policy resulted in, is the Lijnbaan shopping complex. As the first car-free pedestrian

shopping zone in the world, the Lijnbaan provided a space where shoppers could leisurely stroll from shop to shop while still being integrated in the urban environment. This was different from the old Dutch shopping streets that also often acted as traffic thoroughfares.

In line with the neighborhood model, the rebuilt residential areas of Rotterdam were located outside of the city center and were relatively self-sufficient. One of the most well-known new districts was Pendrecht, constructed from 1949 onwards. It was built south from the city center, across the Nieuwe Maas river. Because of its distance to the city center, Pendrecht had its own facilities (e.g. schools and supermarkets). The neighborhoods in the district each had their own small shopping center, community center, and kindergarten (Gemeente Rotterdam, “Pendrecht”, n. pag.). At the same time, they were integrated in the framework of the city: architect Lotte Stam-Beese “saw the neighborhood as part of the larger organism of Rotterdam and opposed the anti-urban sentiments associated with garden cities” (Wagenaar 424). While the homes were all similar looking, they “were meant for various types of residents” (“Pendrecht”), furthering the ideal of a diverse community. Because of the pressing housing shortage, construction in Pendrecht and other districts took place in the form of high rise housing combined with low rise buildings, as high rises were faster and cheaper to build with the manpower available.

4.3: Social Characteristics

The ideal of having the city center as a social center has well succeeded: the center of Rotterdam is still bustling with activity today and was even named as the number five “top city in the world” by travel guide *Lonely Planet* in 2015 (Bas n. pag.). However, the neighborhood model has been less successful. People living in the high rises were less happy than they thought they would be in the single-family detached homes they preferred. While the apartments were

comfortable, they were also quite noisy and families with children did not have much room for the children to play in (Blekendaal n. pag.). In Pendrecht, the 1950s homes lost their popularity after some time, as people thought they were too small. The children of the original inhabitants left, leading to an ageing population. Combined with new low-income residents attracted by the low rent, the neighborhood deteriorated and became more uniform with mostly inhabitants of lower social classes ("Pendrecht"). Only recently has this been countered by the demolition of some housing blocks and the addition of larger and more expensive houses, bringing back social diversity.

In this chapter, we saw how the neighborhood model played a large role in the reconstruction of Rotterdam. Residential areas were placed outside of the city center and were supposed to be diverse communities on their own while remaining part of the city framework. This did not always turn out as intended, with social diversity decreasing as neighborhoods became outdated and less popular. The city center itself was reimagined as a social and commercial center, and has proven to be successful.

Chapter 5: Comparison Between Levittown and Rotterdam

In the first four chapters, we have looked at post-WWII urban planning in the United States and in the Netherlands, and we have focused on Levittown, PA and Rotterdam, NL specifically. Now, we will take the analyses of Levittown and Rotterdam and contrast them, in order to see what similarities and differences we can trace between the two and in how far Rotterdam was guided by American ideas present in Levittown. We will also consider how the differences were determined by their contexts and what they can tell us about the goals urban planners in each country were trying to achieve. This will allow us to answer the research question: What motifs and themes can be identified in Levittown, PA along social, spatial, and political lines, in how far can these be recognized the reconstruction of Rotterdam, NL, and how do these two developments differ?

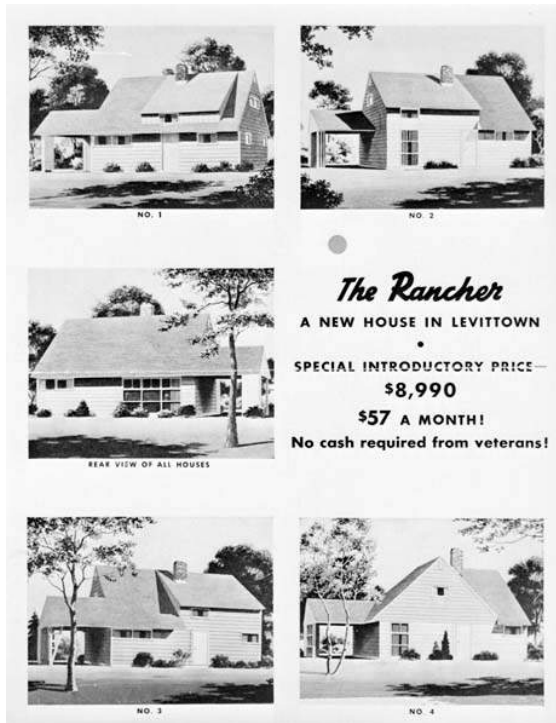


Fig. 5.1. The Levittown Rancher. From: The State Museum of Pennsylvania.

First and foremost, both developments are very different: Levittown was strictly suburban, while Rotterdam was a reconstruction of an entire city. There are however still themes that can be recognized in both: different land uses were separated and the houses built were all quite similar. The use of zoning was novel in the Netherlands and inspired by how Americans allocated different places for different functions in their cities. It was however implemented less rigorously in the Netherlands. To compare the two developments, it is best to look at housing and other functions

separately. The houses built in Levittown were all very similar looking and had a rather traditional architectural style despite the modern production methods (fig. 5.1) and had names that seem to call to the past: the “Rancher” and the “Colonial.” All Levittown homes were single-family homes with their own garden. This sense of tradition and space is related to the American Dream and the Frontier: the idea that everyone can have their own piece of land, away from the city and the government it represents. Levittown played directly into this sentiment by making home ownership affordable, having a medium housing density, and keeping its neighborhoods homogenous, i.e. void of the urban diversity middle class Americans sought to flee. Through this homogeneity, a sense of community was created, a village-like mentality where people were surrounded by similar people in similar homes.

The homes built in Rotterdam were often more modernist in style and were an integrated part of the city. The architecture broke with the traditionalist building style that had come to represent the past, and looked towards the future. Like in Levittown, the houses all looked similar, but there were various sizes and styles of houses so they could accommodate different income classes and family sizes within one neighborhood (fig. 5.2). Like Levittown, Pendrecht was meant to deal with an acute



Fig. 5.2. Different housing sizes in Pendrecht. From:
Nationaal Archief

shortage of houses, but builders chose to use high rise buildings to deal with this problem quickly as space was more scarce than in the United States and there were fewer construction workers.

This is one of the key differences between the two developments: Levittown offered its residents the space they did not find in the city, while the Pendrecht high rises made families live closer together than they had before. The Rotterdam neighborhoods were also more diverse than Levittown, hoping to create communities with people of all kinds in order to fight the individualism the Americans looked for.

Levittown was constructed as a residential development with retail at its outer edges, which could only be reached by car. The project used nearby steel plants as a catalyst for jobs (Longstreth 149), but did not really provide for jobs itself. It was perceived as a community that could replace the city by its designers, but it ultimately could not. Most workers relied on nearby cities for their jobs. Rotterdam, on the other hand, was developed as a much more cohesive development. The center was meant for retail, work, and recreation, while housing was concentrated in the rings surrounding the center. Through its construction, the city was made ready for the car, but it did not rely solely on it. Its center remains remarkably walkable. And while both developments use a separation of functions, the way it was implemented in Levittown also created a separation of classes by having different types of houses in different neighborhoods. The Dutch “neighborhood unit” model on the other hand actively sought to put different social classes together in one neighborhood. This social policy turned Levittown into a hotbed of discrimination at times: when people only encounter their “own kind” of person on a day-to-day basis, they are more likely to be afraid of the “other,” while continuous interaction with people who are different might make people more tolerant of diversity. But perhaps it is not entirely fair to put the blame for the lack of diversity in Levittown on the Levitt & Sons company: people moving there actively sought a way out of the diverse cities, while Rotterdam was already diverse before it was redeveloped. The Dutch neighborhood model did not work out the way it was intended either: as the neighborhoods became dated and less popular, only low-

income groups remained. Only recently has income diversity been promoted in the neighborhoods by creating bigger differences in housing styles through redevelopment.

Ultimately, Levittown looked to the past and wanted to provide a Frontier-inspired alternative to people who were unhappy in the cities. At the same time, it broke with the traditional idea of having a center where social and civic functions come together, as these functions were shattered across the development and pushed to the edges. Rotterdam, on the other hand, wanted to break with the past and sought to implement new forms of housing: modern neighborhoods that could stand on their own with diverse communities. At the same time, the Rotterdam city center was to remain the main place for social and civic functions and was in the actual center of the city. Both developments wanted neighborhoods to form their own communities, but they had different approaches to this. Levittown wanted to create communities through homogeneity and independence from the city, while Rotterdam's neighborhoods wanted communities to form through the neighborhood centers where people of different social groups could meet and bond, all while remaining part of the larger city.

Conclusion

In this thesis, I have looked at post-WWII developments in the United States and in the Netherlands and compared the developments of Levittown, PA and Rotterdam, NL in order to see how they compare and what American influences can be identified in Rotterdam. My research question was:

What motifs and themes can be identified in Levittown, PA along social, spatial, and political lines, in how far can these be recognized the reconstruction of Rotterdam, NL, and how do these two developments differ?

In order to answer this question, I have examined and compared Levittown and Rotterdam along social, spatial, and political lines.

In Chapter 1, we looked at what a “suburb” is in an American context, why Americans moved to them, what role the American Dream had, what government policies led to this, and how these policies influenced the social and spatial markup of these new suburban neighborhoods. We found that a suburb is a mainly residential place with medium housing density that is characterized by homogeneity on all fronts. Land uses are strictly zoned, with different types of homes in different places and functions like retail and public services pushed to the edges. This also led to little racial and social diversity. Middle class (white) Americans moved to these newly built suburbs because they longed for a sense of community they could no longer find in the cities, and they found this in the social homogeneity of the suburbs. The suburbs also played into the American Dream by giving residents more space than they had in the cities and by making home ownership possible. Various government policies made the land

outside of the city accessible by car and made it financially attractive to move out of the cities.

FHA policies were focused on protecting the lack of diversity in the suburbs, making it hard for minorities and lower social classes to follow the middle class out of the city.

In Chapter 2, we followed up on the policies and motives described in Chapter 1 by looking at the suburb of Levittown, Pennsylvania. We saw how the Levitt & Sons company gave shape to its suburb by organizing different social groups in different neighborhoods. Functions other than housing were pushed to the edges of the development, but they were still there within the development and were accessible as long as residents had a car. It wanted to be an alternative to the city, but it still relied on the city to provide jobs for its residents. Levittown helped a large group of people achieve the American Dream of home ownership, but it also excluded minorities from this in order to protect its sense of community. My hypothesis for Levittown that it strongly pushed for social homogeneity through its spatial and social layout in order to create a sense of community through “sameness” was proven correct.

Chapter 3 took us to the Netherlands, where we looked at the post-WWII urban developments in place there. We found that the Dutch reconstruction wanted to break with the past and called for a separation of functions similar to the one in the US: the city center was to focus on shopping and public services, while housing was organized in the “neighborhood model” where diverse communities had a certain level of self-sufficiency. American influence came in the form of the Marshall plan, giving the US government a say in how money was spent by the Dutch. However, its focus on diversity and the importance given to the city center set it apart from American developments.

In Chapter 4, we then looked at the reconstruction of Rotterdam. What factors shaped the plans and how did the spatial layout influence the social makeup of the city? Rotterdam was bombed during WWII, giving urban planners a clean slate to develop a new city. The city was

rebuilt using zoning, in line with the policies outlined by the central Dutch government. The center was for retail and public services, while the majority of housing was on the edges of the cities in new neighborhoods that followed the neighborhood model. While these new districts had a certain level of independence and were supposed to be communities on their own, they still looked towards the city center as a social meeting ground. The new neighborhoods were supposed to create diverse communities through their spatial layout with different housing types, but as the houses became dated, only lower incomes remained in the high rise buildings. Recent redevelopments have added some diversity by creating bigger differences in housing types. My hypothesis for Rotterdam was that the opportunity to start with a clean slate allowed the urban planners to implement a number of new ideas. However, I suspected that in general the rebuilding of the city resulted in a continuation of past developments rather than a radical new way of living that breaks with the past. This was proven half correct. The new city center was more different than I had expected, with little residential areas, and the new neighborhoods also broke with the past. At the same time, the new neighborhoods were much more independent from the rest of the cities than old neighborhoods had been.

In Chapter 5, we compared Levittown and Rotterdam. We saw that there were some similarities: both developments used zoning and the houses all had similar looks, and the Dutch neighborhood model was inspired by the American suburbs. However, there were major differences: Rotterdam assigned a major social role to its city center, while Levittown had no social center to speak of. Levittown's shopping and civic functions were pushed to its edges. Levittown looked more to the past by promising residents a piece of the American Dream and housing themes inspired by the Frontier, and created communities through similarity. Rotterdam, on the other hand, wanted to break with the past and used modernist styles and wanted to have

diverse communities in its neighborhoods. However, residents were not always happy in the high rise building style, and the diverse communities disappeared as homes became outdated.

In conclusion, the answer to the research question is that Levittown promised its residents a piece of the American Dream by providing a refuge from the diverse city in the form of homogenous neighborhoods with a focus on individualism and sameness. It was the result of government policies that seemed to go against the central city and it successfully offered many Americans the chance to own their house. However, in order to protect its uniform communities, minorities were excluded. Rotterdam took some of these elements by placing self-sufficient residential areas outside of the city center, but it was much more focused on enabling diverse communities to form and its center kept playing an important role in the lives of its residents. In the end, the model used to promote diversity was not completely successful, with mostly lower social classes remaining due to an apparent lack of housing type variations.

Suburbia has been one of the key characteristics of post-WWII American life, and it remains an interesting and important topic for future research. In my research, I have focused on its political causes and its spatial layout, but more in-depth studies to its cultural impact can be interesting. I also mainly looked at Levittown and Rotterdam as a whole, but future research could perhaps focus on how functions like shopping were implemented, for example why strip malls and super stores never caught on in the Netherlands while they are common practice in the United States, or how the domestic realm in the suburbs and the workspace downtown relate. Suburbia will remain an important topic, especially as its impact on cities becomes more and more apparent.

Bibliography

Bas, Robert. "Rotterdam op Vijf in Steden-Top-10 van Lonely Planet." *NOS.nl*. 27 Oct. 2015.

Web. 2 Aug. 2016.

"Our House." *Ondersteboven: Nederland in de Jaren 60*. Dir. Martijn Blekendaal. VPRO/NTR.

23 Apr. 2016. Television.

Conn, Steven. *Americans Against the City: Anti-Urbanism in the Twentieth Century*. United

States: Oxford University Press, 2014. Print.

Cullen, Jim. *The American Dream: A Short History of an Idea That Shaped a Nation*. New York:

Oxford University Press, 2002. Print.

Cullingworth, Barry J., and Roger W. Caves. *Planning in the USA: Policies, Issues, and*

Processes - 3rd Edition. United Kingdom: Routledge, 2008. Print.

Duany, Andres, Elizabeth Plater-Zyberk, and Jeff Speck. *Suburban Nation: The Rise of Sprawl*

and the Decline of the American Dream. 10th ed. New York: Farrar, Straus and Giroux, 2010.

Print.

Gemeente Rotterdam. "Pendrecht." *Cityportal Rotterdam*. n.d. Web. 3 Aug. 2016.

Hanchett, Thomas W. "The Other 'Subsidized Housing': Federal Aid To Suburbanization."

Journal of Housing and Community Development 58.1 (2001): 19–22, 42–49. Print.

Harris, Dianne. *Second Suburb: Levittown, Pennsylvania*. United States: University of Pittsburgh

Press, 2013. Print.

Kolko, Jed. "How Suburban Are Big American Cities?" *FiveThirtyEight*. 21 May 2015. Web. 19

May 2016.

Longstreth, Richard. "The Levitts, Mass-Produced Houses, and Community Planning in the Mid-

twentieth Century." Harris. 123-174.

Popenoe, David. *The Suburban Environment: Sweden and the United States*. United States:

University of Chicago Press, 1977. Print.

Post-War Reconstruction Community Rotterdam. "Plan Witteveen, the First Reconstruction

Plan." *Wederopbouwrotterdam.nl*. n.d. Web. 12 May 2016.

---. "The Basic Plan by Van Traa." *Wederopbouwrotterdam.nl*. n.d. Web. 12 May 2016.

Reinhardt, Hans. *The Story of Rotterdam: The City of Today and Tomorrow*. Rotterdam: Public

Relations Office of the City of Rotterdam, 1955. Print.

Sugrue, Thomas J. "Jim Crow's Last Stand. The Struggle to Integrate Levittown." Harris. 175-

199.

US Census Bureau. "2010 Census Urban and Rural Classification and Urban Area Criteria." *US*

Census Geography. 9 Feb. 2015. Web. 20 Apr. 2016.

Van Traa, Cornelis, ed. *Rotterdam: De Geschiedenis van Tien Jaren Wederopbouw*. Rotterdam:

Ad. Donker, 1955. Print.

Wagenaar, Cor. *Town Planning in the Netherlands Since 1800*. Netherlands: 010 Publishers,

2011. Print.