off the rails

Robin Hickman explores Houten in the Netherlands – where everyday life is enabled by cycling and active travel

paradise in paradise



In these COVID-19 affected times, perhaps we can use our very changed circumstances to understand that lifestyles can be very different – and that we can design attractive lifestyles and travel behaviours for ourselves in future years, depending in part on how we build our urban areas.

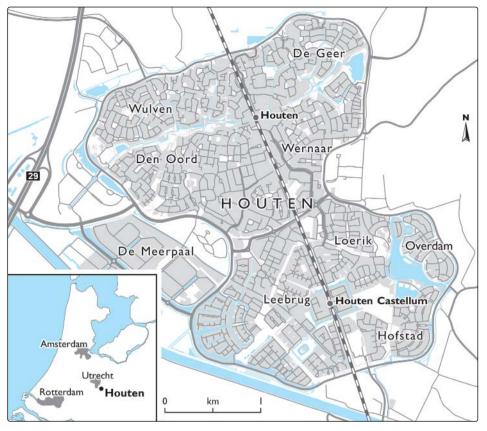
Many of you will have heard of Houten – a new town, planned in the 1960s as part of the VINEX regional growth strategy in the Netherlands. We recently visited as part of our annual UCL (University College London) MSc student trip, to see some good practice and find inspiration. Houten is one of those places that we occasionally visit and really blows the mind – a place that makes you think you have seen the future, at least for transport and city planning. There are many lessons that can be learnt, including the use of regional planning, the development of cycling and active travel networks around which development is planned, traffic restriction, consistent application but refinement of principles over time, and high-quality implementation. This is a cycling town with exemplar cycling networks – even in the context of the Netherlands, where almost all cities and urban areas have high-quality cycling facilities.

Let's start at the regional scale and narrow down to the neighbourhood. Houten is one of a number of new towns, city extensions and new neighbourhoods which collectively make up a regional approach to urban planning. In the Netherlands the strategic location of new development has been planned over decades, through a series of reports from the Department of Housing, Planning and Environment (VROM). In the 1970s and 1980s a policy of concentrated decentralisation pushed growth towards designated urban centres and restricted the growth of smaller rural settlements. In the 1980s and 1990s the focus changed and compact urban growth was pursued, with the existing urban housing stock renewed, out-of-town shopping centres prohibited, and new employment guided to locations well served by public transport under the 'ABC' location policy.¹ Alongside, the open space in the centre of the Randstad region, the Green Heart, has been protected from urban sprawl for decades.

A central element of this approach was the VINEX strategy (supplement to the Fourth National Policy



Houten town centre - most people, including children, access the retail and commercial activities on foot or by bike



Houten new town

Document on Spatial Planning), published in 1993, in which housing development was planned within a ten-year programme, across multiple urban areas, in a polycentric and compact form. VINEX provided locations for new development, co-ordinating new housing, industrial and commercial development with transport investment. Nearly 1 million new homes were planned between 1995 and 2010, with new housing located in urban areas or as urban extensions or new towns, distributed across different urban centres, including in the Randstad and other regions.² The plan aimed to control suburbanisation, protect open spaces from development, and improve public transport accessibility to help shape sustainable travel behaviours. The connection of VINEX locations relative to public transport was not always successful, but new development has been well focused on existing urban centres or extensions.

Houten was designed by Robert Derks, an urban planner who is now retired, but worked on the new town for most of his career. The development was conceived as a *Groeikern* (a new centre of growth), accommodating the growing population in Utrecht and the surrounding region. The main goal was to create a liveable neighbourhood – where communities know each other and could visit their local centres and interact without having to use the private car. 10,000 new dwellings were constructed from 1979, expanding the small existing rural village of Houten. The population reached 30,000 by the 1990s. The neighbourhood is served by Houten station, which opened in 1982 and was refurbished in 2010. Local commuter trains connect to Utrecht, just 10 minutes' journey time to the north, and to Geldermalsen to the south.

A second phase of development was planned in the 1990s, as a contribution to the VINEX regional growth strategy, and broadly followed the planning principles from the earlier development. A new station, Houten Castellum, was opened in 2010, serving the southern town centre and residential areas. The neighbourhood is still being expanded and the population stands at around 48,000 inhabitants in 2020.

The map above shows the layout of the different neighbourhoods. Each area is developed as a distinct neighbourhood, with a different architectural design, adding housing variety. The earlier garden village housing is found in the northern areas, and some of this is in need of refurbishment. The later development to the south includes more contemporary architectural styles, including so-called 'English', 'Italian' and 'French' inspired neighbourhoods. The initial village remains, with older housing, and there are occasional rural farm buildings, which have been surrounded by the new development.

The design seeks to create a city of villages, each with its distinctive character. Open space is provided throughout, with a linear park to the north which crosses east to west, and a city wall park to the south. There are lakes, streams and canals; open space is hence central to all of the development – indeed, it provides the framework for the different neighbourhoods.

The transport system is, in my view, the most impressive element – it really is revolutionary – but the local community simply view it as the sensible way to organise travel behaviours. Internal vehicular movements are restricted, with traffic allowed on the ring road surrounding the town, and access is given only to particular neighbourhood areas and not between them. To drive to another neighbourhood area, residents have to revert back to the ring road and then access the local streets from the particular entrance point. Cycling, walking and public transport are used to travel between the neighbourhoods.

This concept of distinct neighbourhoods has echoes back to Clarence Perry's neighbourhood unit of the 1920s. It provides what is nowadays known as filtered permeability, where the walk or cycle journey is designed to be much quicker than the journey by car – hence people choose to walk or cycle.

This design was innovative when developed in the Netherlands in the 1980s, particularly compared with other new towns, which tended to be car dependent. It was a response to the environmental concerns of the 1970s and the adverse impacts of car usage, including the deaths of children in traffic accidents. The *Stop de Kindermoord* ('Stop the child murder') campaign by cycling activists led to a changed approach to transport planning in the Netherlands. Hence cycling and walking are much the preferred means of travel within Houten and are the dominant modes.

There is an internal network of low-speed streets (using a 30 kilometre per hour limit), including trafficcalming at entrances from the ring road and nonlinear street alignments which slow traffic. The extensive cycle and pedestrian networks provide for most trips, including 130 kilometres of cycle routes, mostly coloured red and segregated from vehicles and pedestrians. Cycle mode share is at 28%. walking at 27%, public transport at 11%, and private car at 34% of trips.³ There are examples of cycle streets, where cars share the street with cycles, and hence speeds are low - a forerunner to later shared-space street designs. Subway and bridge connections are provided across the ring road. There is a segregated, multi-level road and cycle roundabout at the internal ring road connection, which is a key crossing location.

Travel within and between the neighbourhoods is safe by cycle and walking, including for children, and



The old village - still an attractive centre, with shops and restaurants



The segregated cycle routes provide the quickest journeys through the town

many children travel to and from school and other activities by themselves, even at very young ages. Schools are located adjacent to the parkland areas and accessed by cycle paths to encourage active travel.

Houten rail station is located at the northern town centre, with an elevated railway line, which allows cycle parking and pedestrian access at ground level. The station was refurbished as a *Fietstransferium* (cycle transfer station), with extensive cycle parking, cycle hire and repair. OV-fiet (public transport cycle hire) is available, as well as more conventional cycle hire. There is a mix of retail and commercial development in Houten town centre, although office development has been over-provided and is sometimes being converted into residential use. The southern centre is smaller but has the second railway station and a mix of retail and commercial developments. Travel for those with disabilities is made much more possible, including using small electric vehicles.

So far, so good – perhaps you know much of this already. But the real reflection is in thinking why this new town has not been replicated in wider contexts on a mass scale, subject to local differences, of course. This is an appropriate response to the climate emergency – but there are few equivalent developments being built in the UK, or indeed in many countries beyond the Netherlands.

I put this question to André Botermans, International Cycling Ambassador in Houten, and his reply was rooted in the historical development of the town. Everyday life is premised on use of the cycle and walking because the village of Houten was opposed to the idea of the large, modernist city, which was the mainstream approach to urban planning and traffic planning in the 1970s and 1980s. The village residents agreed on accommodating some growth, but not on the scale requested by central government: initially just 25,000 instead of 100,000 inhabitants. In terms of the urban characteristics, the town was designed as liveable, with a village-like appearance. This meant no high-rise buildings and no car-dominated residential streets and neighbourhoods. The transport model was relatively easy to implement, owing to the small scale of the existing village and population.

The municipal administration was decisive in putting forward its views and the scale of participation was manageable. The ambition to transcend mainstream views in urban design and traffic engineering was a greater challenge, certainly in an era with a clear top-down governance culture and structure. But there was unity in aspiration between the residents and the politicians, and this won the day. A programme of development was designed and implemented in phases. The success of the first neighbourhoods did the rest.

Hence the potential for replicability rests on a number of factors – there needs to be a popular rejection of car-based living; highway planning; and demand for life based around active travel. We do not currently have this, at least in the UK. But, there is a growing aspiration among the city-living and



Attractive lifestyles and travel behaviours are on offer - a neighbourhood model to be re-examined and replicated

younger generations, and we can develop this. For sure, we need to improve the sharing of knowledge concerning different ways of living and travel so that people can see what is on offer. Most people wish to be fitter and healthier – and this can be achieved with active travel between everyday activities.

The planning and transport community then need to be effective in implementing different aspirations for neighbourhood designs. How many transport planners and engineers have been to Houten? I would guess not that many, and this leads us to many wider questions concerning how transport planning is taught, and what knowledge we are delivering in practice.

There are, of course, concerns even in the Netherlands. The Houten transport model is an answer to the climate problem, but perhaps only at the micro-scale in providing a solution for internal neighbourhood travel. At the regional, national and even international scales there are longer and more complex journeys - and these need to be delivered by clean public transport, most likely rail and perhaps high-speed rail. The Netherlands is also effective at delivering these options, and there are excellent efforts to integrate the rail and cycle parts of journeys. But, still there are relatively high levels of inter-urban car usage in the Netherlands, and hence these longer journeys need much further consideration of how they might be made less car dependent.

Houten, itself, represents paradise in paradise – providing exemplary cycling provision for journeys to everyday activities, excellence even within the context of very high-quality wider cycling provision in the Netherlands. It is this practice that we can seek to re-examine and replicate within new and existing development – to discuss and design attractive lifestyles and travel behaviours for our future years.

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Notes

- 1 T Schwanen, M Dijst and F Dieleman: 'Policies for urban form and their impact on travel: the Netherlands experience'. *Urban Studies*, 2004, Vol. 41 (3), 579-603
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