

# Streets are Not Enough: The Introverted Block as a Neglected Type

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*Modernism in planning and urban design led to the erosion of the traditional city's morphology. Samuels and Kantarek use the plan for Nowa Huta, a 1949 new town near Krakow, to point out the problems related to the introvert block, particularly walkability, connectivity, and the lack of direct entrances to the residences from the street. The introvert block type evolved into present-day gated communities.*

This essay discusses the first phases of Nowa Huta, a Polish new town started in 1949, parts of which are now officially conserved and much admired, including by the New Urbanists. Although celebrated for its propaganda value at the time of building in the 1950s and later for its role in the fall of the communist regime in the late 1980s, both of which have been described in English, such as by Lebow (2013), there is a limited amount of material available about its urban form.

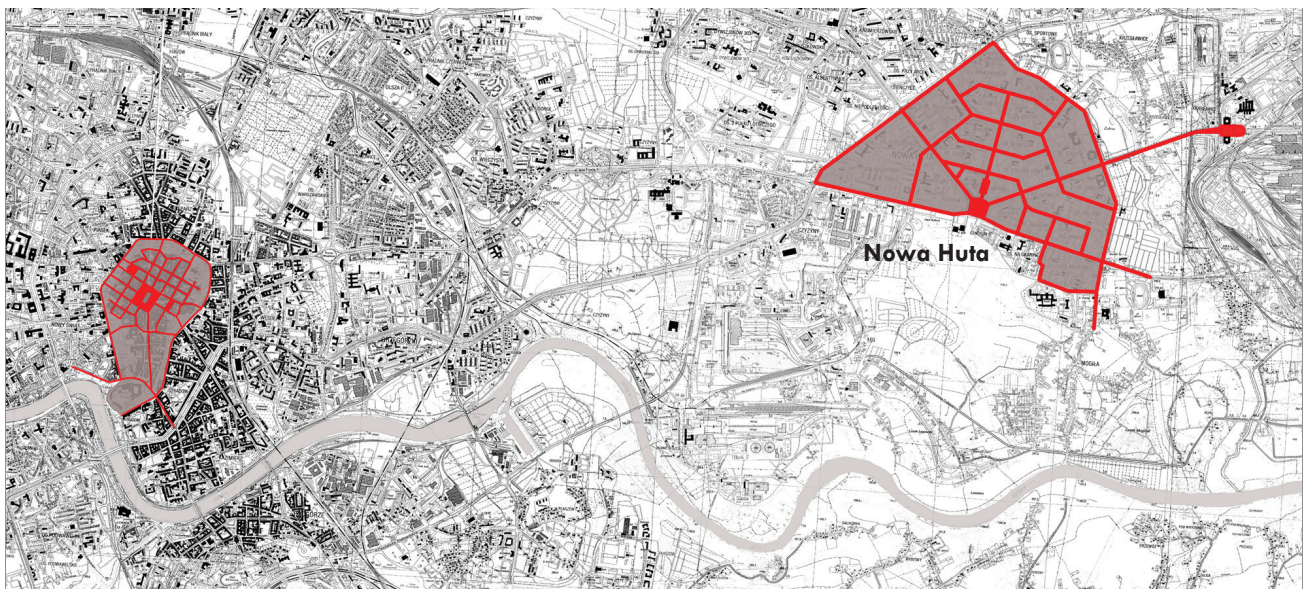
Nowa Huta has even been ignored in Polish books of the last century since it did not fit into the dominant modernist canon. For example, a book published in English to celebrate the achievement of modern Polish architecture ignores the earlier neighbourhoods of the new town, and only includes Nowa Huta's later prefabricated tower blocks (Lisowski, 1968). Of particular interest is its earlier housing of a type which, although

widespread between the two world wars, has been largely ignored in the literature on the evolution of urban form over the last century. Presumably, this was because it did not fit the modernist orthodoxy. Its antecedents and successors are then discussed, from medieval monasteries to contemporary gated communities.

## Nowa Huta New Town

Nowa Huta is located ten kilometres (6.2 miles) from the center of the medieval city of Krakow which was the capital of Poland until the sixteenth century (Figure 1). Part of a post World War II programme to urbanise a mostly rural population, it was constructed to house the workers of the enormous Lenin Steelworks (now called the Sendzimir Steelworks and owned by the multinational Arcelor Mittal) whose site covers an area

Figure 1: Nowa Huta is located a little over six miles from Krakow's old center.





more extensive than the total area of early twentieth century Krakow. It is an example of the heavy industrial plants and their associated new settlements which were built in several Central and Eastern European countries during the post-war period of Soviet domination. Dunaujvaros in Hungary and Eisenhuttenstadt (originally named Stalinstadt) in Germany are other examples (Jaglo, 2013).

The new town was built on land where human settlements had been long-established and, in addition to preserved monument such as monasteries, traces of the old villages can still be found, if only in the names of some of the new housing areas. Construction began in 1950, and the intention was to create a city of 100,000 inhabitants adjacent to the factory that started operating in 1954.

The site is on a plateau 14 metres (46 feet) above the scarp of the River Vistula, and the central space (now renamed as Ronald Reagan Square) overlooks the valley giving extensive views across the countryside with a panorama of the Tatra Mountains on clear days. This space, crossed by the main road and tram line from central Krakow, is also the focus of the three main streets which radiate outwards to form a neo-baroque plan resembling the plans of such early twentieth century British new settlements such as Hampstead Garden Suburb or Welwyn Garden City.

In other respects, Nowa Huta is very different from its contemporary British New towns such as Stevenage or Harlow. Instead of a garden city mainly comprised of two storey row houses with private gardens, the first phase consists of four to seven storey apartment blocks alongside the streets with shared

open space in the interior of each block (Figure 2). However, there is a similar recognition of the importance of the neighbourhood unit, or its Soviet equivalent, the micro district, as an effective way of organising a settlement, so that shared facilities such as schools and playgrounds are easily accessible to all the inhabitants. At Nowa Huta, these are located inside the perimeter blocks defined by the apartments, together with some other housing blocks.

The style of the buildings is a variation of Communist Social Realism which incorporates variations of classical details such as pilasters and pediments. Particularly noteworthy are the entrance arrangements to the staircases and lifts to the apartments. They are all accessed from the interior of the block so that there are no doors on the streets (Figures 3 & 4). This characteristic will be discussed further below.

A fictional and dramatic account of the building of the new proletarian city is to be found in the 1977 film directed by Andre Wajda, *Man of Marble*, in which a bricklayer working on the new town is the main character. The fact that it should become the setting of a highly acclaimed motion picture indicates the cultural significance of the building of Nowa Huta.

### **Nowa Huta as New Urbanism**

The later stages of Nowa Huta replaced the earlier masonry structures by more modern building technology using precast elements with more extensive landscaped spaces between the free-standing apartment blocks which were unrelated to the surrounding street network. They were similar to modernist mass housing built in other parts of European countries.

The team led by Tadeusz Ptaszycycki, authors of "Old Nowa Huta"

*Figure 2: Neighborhood around central Nowa Huta.*





Figure 3: All the entrances to the apartments in Nowa Huta are reached from the inside of the block not from the street.

—the new town plan first stage, did not have much design practice experience and based the concept on the knowledge acquired during their studies, although their model could have been Russian new town Magnitogorsk. In 2004 Old Nowa Huta, the subject of this essay, was listed in the Register of Historic Monuments by the Malopolska Voivodeship Monuments Conservator ((Małopolska Voivodeship, 2004):

“The urban layout of Nowa Huta district in Krakow, as a representative example of the urbanism of socialist realism in Poland. The subject of the protection is the urban layout, i.e. the layout of streets, squares, green areas, the location of blocks and dimensions of the buildings, architectural and landscape enclosures, the composition of greenery”.

It was to this first stage of Nowa Huta that Elizabeth Plater Zyberk, a doyenne of the New Urbanism movement in the US, at a conference in Krakow referred to by declaring that:

“... you have excellent examples of modern town building here in Poland. I was happy to hear that Nowa Huta is being rehabilitated in the literature. It is a remarkable achievement with a highly characteristic sense of place, connected to the city of Krakow by transit, and exhibiting so many of the principles of good urbanism. So you have beautiful models, in your distant history but also in the more recent history of planning.” (Plater Zyberk 2015).

From its neglect in the 1960s when urbanists were exhorted by Le Corbusier to destroy the corridor street, the rediscovery of the virtues of the street in the last two decades has resulted in this reevaluation of the virtues of Old Nowa Huta. In order to ascertain the extent to which it fulfils the principles set out in the Charter of the New Urbanism, we carried out a short assessment of its characteristics in regards to those criteria.<sup>1</sup> Ref-



Figure 4: Nowa Huta street frontage without any entrances.

erence is made below to the criteria that are directly relevant to a new town or a district of a metropolitan area, and to housing in detail. The regional scale, the subject of the first section of the Charter, was not considered as appropriate to the case of Nowa Huta. The way the original project has been modified since its initial implementation is also noted in the following discussion. Of course, all the principles are linked and, when these connections are apparent, the principles have been considered together (Kantarek & Samuels, 2017).

#### Walkability and Connectivity

Almost all the entrances to the staircases and elevators are oriented towards the internal common space of the blocks, that is on the back of the buildings concerning the street facades. With a few exceptions, there are no entrances on the street side. Therefore, streets cannot be considered very pedestrian friendly, and this configuration reinforces the inhabitants' identity with the urban block rather than the rest of the town via the street network. Furthermore, postal addresses are set by urban block number rather than street address further reducing the residents' identification with the street.

Although the streets are such an important element of the plan, it is doubtful whether they can be considered as comparable with those of a traditional layout, where the entrances to the dwellings act as the interface between the public and private realms.

There is a high degree of connectivity within the semi-private space of the urban blocks, and the configuration of the wide and straight main streets makes the development very legible. However, with no traffic calming measures, high vehicle

<sup>1</sup> See the Charter of the New Urbanism at: [www.newurbanism.org/newurbanism/principles](http://www.newurbanism.org/newurbanism/principles)



speeds are encouraged while some of the main streets have long central barriers which enable the trams to travel at high speed but hinder connectivity for pedestrians between the urban blocks. The neglect of these two critical aspects certainly reduces considerably the extent to which we can say Nowa Huta responds to the tenets of New Urbanism.

#### Diversity of Uses and Mix of Housing Types

Initially socially homogenous, Nowa Huta is becoming more socially diverse as its merits are being recognised by families with no connections to the steel plant, which locally is the only major centre of employment. However, the housing is entirely in apartment blocks with some retail uses fitted into the ground floors of the apartment blocks. Some new single storey units have been constructed which are better suited to modern retail functions.

#### Quality of Architecture and Neighbourhood Structure

The listing of Old Nowa Huta has acknowledged the value of the architecture, and the original neighbourhoods continue to function effectively by providing easily accessible facilities even though some of the original proposals have not been realised.

#### Density and Green Transportation

The predominant dwelling type has ensured a relatively high density (average 600 persons per hectare, or approximately 243 per acre), and has ensured a very efficient tram and bus service to the rest of the metropolitan area, particularly to the full range of employment possibilities available in the city centre. However, the high density was never planned to consider the rapidly increasing level of car ownership, resulting in much of the green space inside the blocks being taken over by parked cars.

#### Sustainability and Quality of Life

Although the initial decision to locate the new town on good quality agricultural land can be considered a negative factor for sustainability, its height above the Vistula conserves the river's catchment area, and agricultural land has been retained in the valley. The quality of public transit has already been noted, and some buildings have been given extra insulation and the windows upgraded, which must reduce the carbon footprint of the community. However, the increased car parking has reduced the area available for planting with a consequent reduction in the biodiversity of the whole development. While the quality of life is a result of the extent to which all the previous principles have been fulfilled, it is difficult to assess objectively. Nevertheless, the way wider social groups are now moving in, even if this is a form of gentrification, is an indicator of the advantages of life in Nowa Huta.

In conclusion, it will be noted that while Nowa Huta meets many of the requirements set out by the New Urbanists, it fails in those of walkability and connectivity. This is due to the configuration of the blocks and the way the private dwellings relate to the public realm of the street. This has produced inward looking developments more concerned about reinforcing the relation within the blocks at the expense of those with the rest of the town. This configuration also ensures a degree of control over the movement of the residents by making it potentially easy to control the reduced number of entrances and exits to the blocks. Although this potential has never been exercised in Nowa Huta, its introverted blocks are characteristic of a type which has many historical antecedents in forms used to control communities. Some of these followed by more recent manifestations will be discussed below.

#### **Typologies of control**

##### Monasteries, beguinages and colleges

If we exclude ancient walled cities and the gated quarters of cities such as the Venetian Ghetto because of their large size, we can consider monasteries or convents (Figure 5) as the direct European ancestors of the twentieth century introverted block. These institutions are built around a closed courtyard or a connected series of courtyards which are accessed through one or more controlled entrances. Accommodation and shared facilities

*Figure 5: The Begijnhof in Amsterdam, an introverted block and a gated community.*







Figure 6: Queen's College in Oxford.

ties, such as chapels or refectories, are grouped around these courtyards or cloisters, in the case of monasteries or quadrangles in colleges whose layout is based on the monastery.

Where this typology was inserted into urban areas or was incorporated to them by organic growth, they usually present blank walls to the surrounding streets, even though these walls may have windows or be decorated, as in the case of Queen's College, Oxford (Figure 6). In the case of Belgian and Dutch convents, they often consist of urban row houses surrounding a landscaped garden where a chapel, shared by all the members of the community, is located.

#### European interwar social housing

In various European countries during the period between the two world wars, social housing followed the model of the monastery: there were no entries to the dwelling from the streets but only from the interior of the block. The most extensive programme of this type of housing was built by the Social Democrat administration of Vienna which built 64,000 dwellings from 1919 until the fascist coup d'état in 1934 (Forster n.d.). The biggest and most famous of these complexes is the Karl Marx Hof, although there are many other smaller schemes which either established new traditional street patterns or followed existing networks (Figure 7).

Typical of these projects is their inward-looking perimeter blocks with no entrances onto the streets that they established or maintained. They contrast with their contemporary modernist housing projects in such cities as Frankfurt which, based on parallel streets oriented for maximum sunlight, rejected the perimeter block. At the time of their construction,



Figure 7: Karl Marx Hof is Vienna's most famous housing complex. (source [https://www.designingbuildings.co.uk/wiki/Karl\\_Marx-Hof](https://www.designingbuildings.co.uk/wiki/Karl_Marx-Hof))

the Hof projects were criticised by the German avant-garde as "an eclectic architecture of compromise, heterodox, self-reflexive (sic), cut off from, and seemingly unaware of the larger discourse of modernism in European architectural culture." (Blau, 1999, p. 8).

Despite this criticism, they were widely emulated throughout Europe, especially by socialist authorities seeking to provide good quality housing environments to replace private slum dwellings. Among the English examples are the London Peabody Trust Estates, the Garths at Sunderland and Quarry Hill, Leeds. Started in 1938, Quarry Hill provided 900 flats near the city centre and, at the time, was the largest social housing complex in Britain (Figure 8). Its design, following a visit by a

Figure 8: Built in 1938 as England's largest social housing complex, Quarry Hill in Leeds was demolished in 1978. (photo by RAF, circa 1951; courtesy Phill Davison)





Leeds delegation to Vienna in 1932, was clearly inspired in the Karl Marx Hof. It was in direct contrast to the then predominant British housing model of the Garden City with low rise family houses. Quarry Hill was also criticized because it rejected the parallel blocks of the then architectural avant-garde. The complex was demolished in 1978 because its steel frame structure, an advanced technique for its time of construction, required too much maintenance and the Garchey waste disposal system, also advanced for its time, had ceased to function properly.

With a low site coverage of 14%, the scheme was laid out as a system of perimeter blocks which backed onto and followed the line of the surrounding streets. There were some parallel blocks in the interior. All the apartments were accessed from staircases from the courtyards which had a limited number of entry points from the surrounding streets. The range of facilities planned for these courtyards – playgrounds, nurseries, a swimming pool, medical facilities, were never built although a handful of shops eventually opened. Ravetz, who documented the project's design and implementation, suggests that it demonstrates "a belief in community and that a fragmented society could be made whole through architecture alone" (Ravetz, 1974, p. IX).

Although the individual apartments were liked, the public space and access proved to be problematic. As a former tenant observed:

"I remember walking through the Quarry Hill development in the mid-70s. It felt deserted and barren. I was nervous about walking through it because it had a bad reputation. It seems to me that it failed - not because of the buildings themselves - but because architects failed to realise that you cannot cage people and expect them to like being cut off from the rest of the city by their own dwellings, which acted as walls". (Edge, 2013)

This is a devastating critique of the introverted looking block type which, nevertheless, was a ubiquitous model in other European countries. For example in Rome, Villa Riccio, a development built in 1919 for a housing cooperative. With apartment buildings three or four storeys high around the edge of the block it covers the same area as three or four of the surrounding blocks (Corsini, 2018) (Figure 9). However, unlike Vienna, there is no extensive open space or shared facilities because the centre of the block, which is approximately the same size as the blocks of Now Huta, is occupied by lower apartment blocks which are laid out along an informal private route. The intensity of development at Villa Riccio is far higher than could be achieved if all the blocks opened to public streets. Is this a gated community before the concept became formalized?



Figure 9 Villa Riccio, Rome. A housing cooperative built in 1919. All the entrances to the apartments are from inside of the block.

A final European example is Square de l'Avre, built in 1932 in the Parisian suburb of Boulogne Billancourt (Figures 10 & 11). When these buildings were rehabilitated in 1992-97, the blocks in the central courtyard were demolished and two floors were added to the existing structures (as shows in Figure 10). The entries from the courtyard have been retained, and the perimeter blocks continue to present only windows and no doors to the surrounding streets. It was not considered necessary to revise this arrangement (Joffroy, 1999).

### Contemporary introversions

The introverted block is a firmly established contemporary type, as demonstrated by the great variety of their locations and sizes found around the world. These range from the inner city to new out-of-town developments. Two inner-city examples in Milan are two adjacent projects by star architects whose names are used as part of the developers' marketing strategy. Completely ignoring the pre-existing nineteenth-century ur-

Figure 10: Square de l'Avre, Paris, built in 1932. There are no doors on the street





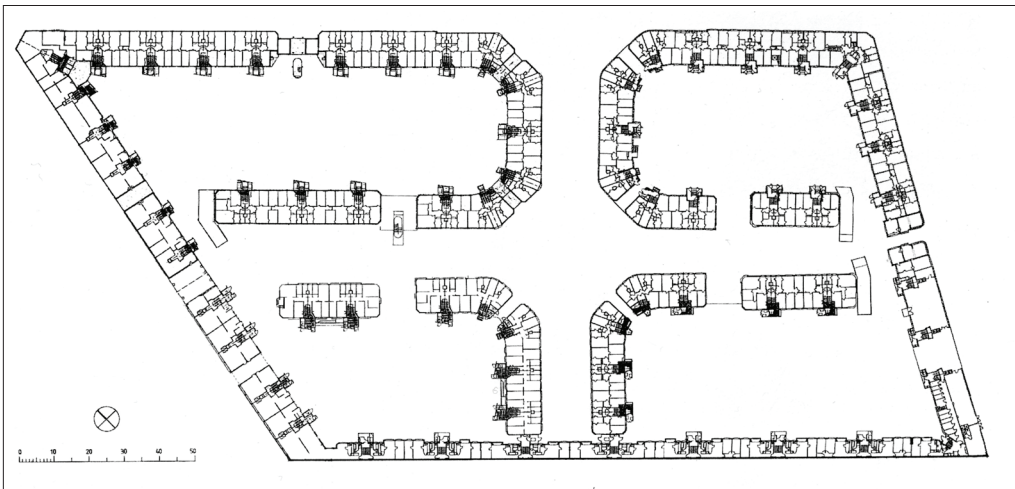


Figure 11: The Square de l'Avre, Paris, 1932.



Figure 12 a, b & c: Two gated developments recently designed by starchitects in Milan have no relationship to the surrounding streets and morphology.

ban tissue into which they were inserted, they are entered by gates and enclosed by steel fences which also enclose the pedestrian routes which traverse each scheme (Figures 12 a, b & c). Although these fences are partly transparent, due to the disposition of the buildings there is little if any surveillance of these pedestrian routes or the surrounding streets. It has recently been reported that these two privately owned public routes (POPRs?) are now closed at nights for security reasons.

A much smaller example is Long Walk Villas in Windsor, located outside London but part of its conurbation. This is a development of nine very expensive terraced houses which the promotional material seems to advertise row houses along a street, but the site plan reveals that there is a single gated entrance to this "street". The image of the street has a marketing value but only if privatized if controlled access.

At the end of the urban transect, on a greenfield site 39 kilometres (24 miles) from the Brazilian city of Belo Horizonte and de-



liberately separated from existing settlements, Alphaville Lagoa dos Ingleses is another example of an introverted community. Built and managed by Alphaville Urbanismo, a private developer responsible for numerous similar projects since 1971, it is an excellent example of the increasing number of gated developments in the Americas. It is the size of a new town, but it is divided into a number of walled communities, each with its own streets and no linkages between them. Each community is exclusively reserved for similar housing types and can only be entered through controlled gates (Figure 13). The whole project is of such a scale that it seems to represent a return to the Middle Ages when town gates served to keep out undesirable individuals from the whole of the settlement.

### Conclusion

The widespread use of the inward-looking enclosed block type in the interwar years and its later manifestation as the gated community bring into question the widely diffused and generally accepted disintegration of the urban block as represented in Ernst May's iconic diagram (Figure 14). The introverted blocks, which have been largely ignored, presumably because they do not have "the imprint of CIAM" (Panerai et al., 2004, p. 36) follow traditional street layouts but tell a different story, the continuity of which has been suppressed and needs to be acknowledged. It would be tempting to link the introverted block to those regimes and authorities which insist on exerting control over the behaviour of their communities. However, this type of block, in the form of gated communities is now widespread including in societies which do not seek to control their citizens in any other way.

For the last half-century, arguably since the publication of Jane Jacobs' seminal book, urban designers have been preoccupied with the recovery of the street as the basis for making towns. This was a reaction against the modernist paradigm emphatically advocated by Le Corbusier in his exhortation to kill the



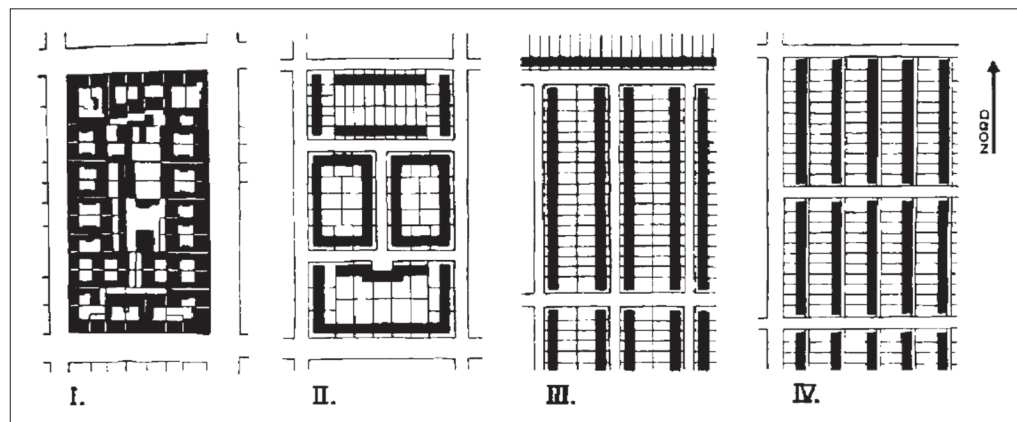
Figure 13: A gate to one of the residential walled communities in Alphaville Lagoa dos Ingleses, near Belo Horizonte, Brazil.

corridor street. In this desire to reclaim the street, those post World War II projects such as Nowa Huta, which went against the predominant grain by retaining streets, are held up as exemplary. Urbanism based on a return to the street has gained momentum in recent years, not only in greenfield projects such as Seaside in the United States and Poundbury in the United Kingdom, but also in initiatives to transform existing modernist projects, such as the Completing London's Streets recent report to the British Government (Savills, 2016).

Nowa Huta and the numerous gated communities being built all over the world demonstrate that, while streets are a fundamental component in the making of towns and cities, they are not enough by themselves if other aspects of the urban configuration are ignored or negated.

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Figure 14: Ernst May's 1930 diagram showing the erosion of the traditional city block through the advancement of modernism.





## Acknowledgements

The authors wish to thank Maria Grazia Corsini, Anne Vernez Moudon, and Phill Davison for their generous help in tracking down important historical examples of introverted blocks.

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