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Article

## Change in the Dispersed Territory: (Proto)Types for a New Urban Paradigm

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### Abstract

Dispersed territories such as Flanders (Belgium) have been amongst others described as layered territories, as a palimpsest landscape, or as both a selective and a-selective infill of the territory. In the constant re-editing and change of this territory, historical remnants remain visible and often form a departing point for further adaptations and changes. One of these remnants, the moated farmstead, has evolved from a historical (proto)type to a common typology in South-West Flanders and enabled inhabiting the territory dispersedly. Moated farmsteads are typically composed of a series of different buildings and are surrounded by an artificial water body. The moat formed the central point of a larger land management system. Nowadays, many of these farmsteads still exist, however, over time they lost their original purpose and transformed into a variety of uses. The design of a prototype, i.e., a first model later evolving into a type, a recurring model, as an architectural object can simultaneously relate to a larger theoretical reflection on the scale of the territory. Subsequently, these farmsteads lead to the question: What (proto)types have been developed to demonstrate the uniqueness of the relation between the land/labour/living in a dispersed territory? Can we re-interpret the moated farmstead as a new (proto)type to establish a more sustainable way of urbanising the countryside in a dispersed context? Therefore, this article first documents the historical figure of the moated farmstead as an architectural object, socio-economic and political organisation, and ecological land management, and documents its change throughout time. Then, a reflection is built on how, at the time of their emergence, these moated farmsteads were an exponent of a sustainable and ground-breaking type that enabled a dispersed settlement pattern. Finally, the potential of the farmstead as a new prototype for a twenty-first-century dispersed territory is discussed.

### Keywords

architectural prototype; architectural typology; Belgium; dispersed territories; Flanders; moated farmstead; urban transformation

### Issue

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## 1. Introduction

### 1.1. New Urban Paradigms

Large parts of the European territory are described by different authors and institutions as sprawl, or “the physical pattern of low-density expansion of large urban areas, under market conditions, mainly into the surrounding agricultural areas” (European Environment Agency, 2006, p. 6). However, the comparison of different definitions in literature reveals that there is no general agreement,

no exact definition of what sprawl is (Bruegmann, 2005; European Environment Agency, 2016, p. 20). As a result, the term “urban sprawl” is used in different and often contradicting readings, leading to inconsistent interpretations and comparisons. This is particularly the case in the field of architecture and urbanism, in which urban sprawl was described by different authors, interpreted, and coined as for instance the patchwork metropolis (Neutelings, 1990), *città diffusa* (Indovani et al., 1990), *Zwischenstadt* (Sieverts, 1999), the horizontal metropolis (Viganò et al., 2017) and so on (for a more extensive

reading of this genealogy of sprawl, see Gheysen, 2020, pp. 42–52), each time describing particularities and qualities of a specific territory as opposed to the generic urban sprawl. As a result, the generic urban sprawl was localised as a non-hierarchical juxtaposition of urban fragments in the Netherlands (patchwork metropolis), the description of a new urban form (*città diffusa*), an awareness of the qualities of the daily environment in the Ruhr-area (*Zwischenstadt*), or the valorisation of a natural, social, and infrastructural capital in Switzerland (horizontal metropolis).

Flanders (Belgium) in general and South-West Flanders in specific is no exception to the continuous transformation of greenfields into housing or industrial areas (Vermeiren et al., 2018). When looking at historical maps such as the de Ferraris map (1771–1778), one can already distinguish an almost completely man-made landscape with a mosaic of agricultural fields, grassland, orchards, and built-up spaces structured by roads and paths. The absence of a pronounced topography and the omnipresence of fertile soil facilitated a dispersed occupancy pattern, i.e., a dispersed territory long before the post-war suburbanisation (De Meulder & Dehaene, 2001).

This dispersed pattern was strengthened in the nineteenth century when the Belgian government decided to avoid the densification of the cities by a growing labour force and instead urbanised the countryside with a vast railroad system that enabled factory labourers to be housed in the countryside through cheap train subscriptions and housing policies (De Block, 2013; De Decker, 2020; De Meulder et al., 1999; Grosjean, 2010). This railroad system was constructed to such an extent that it inspired scholars such as Seebohm Rowntree (1910) for his *Lessons From Belgium*, advocating a dispersed territory to concur poverty. South-West Flanders, and to a larger extent the area reaching from Rotterdam (The Netherlands) to Lille (Northern France), has a dispersed built surface pattern (sometimes called the North Western Metropolitan Area; Academic, n.d.). Contrary to what is often thought, this is not (merely) the “spillover” of sprawling post-war cities, but also (and rather) strongly linked to the territorial characteristics of this region (see also Smets, 1986). By incorporating the countryside in urban development, the dichotomy between urban and rural dissolved and was replaced by in-situ urbanisation of the countryside, an urbanisation that did not erase the countryside as the city expands, but, on contrary, an urbanisation that inscribed itself in the spatial logics of the countryside and that resulted in an urban condition (connectivity, ecology of choice, etc.) without an urban form (density, open/built, ...). Historically, the in-situ urbanisation made it possible to tie together the place where one lives, a means of growing food nearby, and small scaled economical activities in a domestic context (in this case the weaving of linen). This triad of living/land/labour, historically an economic necessity, is clearly opposed to centralised models of pro-

duction and could only thrive due to its dual relation with both the urban and rural.

Confronted with this dispersed territory and its historical overlaps and overlays, the constant rewriting and re-editing of the territory (Corboz, 1983), we started to rethink its name-giving. Sprawl, the low-density expansion of the urban fabric in the countryside, simply deficits the multi-layered and historical richness of this territory. As written above, this is not a generic expansion of the city. Moreover, many of the terms used depart from a dominant urban perspective (for instance peri-urban), stressing the centre-periphery relation and thereby implicitly subordinating this territory. Therefore the territory of Flanders was coined “all city/all land” (Figure 1) as it holds characteristics of both (Gheysen & Van Daele, 2016), a territory that is both urban and rural and positioned as a third term in relation to the “city” and the “countryside.” The long history of an in-situ urbanisation, the political project of dispersion, and the presence of a social, ecological, and infrastructural capital are just a few of the characteristics that serve as an argument for the name-giving. Without denying the difficulties dispersed territories are facing and certainly not advocating a further land take, this name giving enables to reflect on qualities and possible futures without being trapped in a discourse that focuses solely on the lack of urbanity or the loss of agriculture and nature (Sharpe, 1932).

## 1.2. Scope of the Article

To deal with the challenges of this territory we took a particular interest in the role of the prototype. As the scale of the territory is too large to be the subject of a project (Viganò, 2010), we reflected on the prototype as a knowledge producer. Looking at the work of Le Corbusier with his “Unité d’Habitation” and “La Ville Radieuse” or Frank Lloyd Wright with his “Usonian house” (De Long, 1998) and “Broadacre City” (Lloyd Wright, 1932), one clearly sees the relationship between the theoretical model on the territorial scale and the prototype as a demonstrator and test. As elaborated further in the article, both for Le Corbusier and Lloyd Wright, the built tested the theory, as a “proto-type” to reflect on the parcel, the house, the family, and ultimately on the city. The *prototype* later became a *typology* for modernist apartments (in the case of Le Corbusier) or suburban detached single-family houses (in the case of Lloyd Wright). A prototype can thus be considered a test configuration or a first model, while a typology can be considered an already established model that exists in different locations.

Therefore, the aim of this article is to further elaborate the thesis that the moated farmstead once was a prototype that enabled the transformation of the proto-urban territory of Flanders at the end of the eighteenth century to an in-situ urbanisation. Rather than an extensive historical reading, this article offers an interpretation of the moated farmstead as a historical typology for



**Figure 1.** An urban condition that no longer coincides with the form of a “city.” This condition is built upon an ecology of choice enabling its inhabitants to live an urban life in diffuse settlements. Source: Photograph taken by Maarten Gheysen, 2016.

the dispersed city through case studies and ultimately calls for new prototypes with similar sustainable socio-economic and ecological relations with the territory. For this reason, the moated farmstead will be discussed as an architectural (proto)type, as a particular land management system, and as a social and economic model. To conclude, the current state of these moated farmsteads is further examined as a possible prototype to tackle the contemporary challenges all city/all land is confronted with.

### 1.3. Method

The research presented in this article is based on both a literature study and case study research. The literature study focuses on existing historical and archaeological literature (Becuwe et al., 2016; De Gunsch & De Leeuw, 2022; De Gunsch et al., 2022; Despriet, 1978; Goedseels & Vanhaute, 1978) to explore the historical role and dimension of the moated farmstead as a prototype. The literature was selected based on its historical and geographical relevance, meaning studying moated farmsteads in South-West Flanders. Based on the existing literature, the moated farmstead is conceptualised as an architectural, economic, social, and ecological (proto)type and is thus described in the following section.

This literature study is complemented by two case studies, the farmstead Goed te Mouden in Moen, south-east of Kortrijk and close to the current Flemish–Walloon border, and the Heerlijkheid van Heule in Heule, just northwest of Kortrijk (Belgium). The cases are chosen as an empirical inquiry to test the contemporary notion of the (proto)type as a phenomenon within a real-life context (Yin, 2003). These cases are analysed using images and plans to illustrate their different elements. Both cases are situated in South-West Flanders, a part of Flanders characterised by medium-sized cities, small towns, and hamlets, interwoven with small and medium enterprises in agriculture and industry. Within this region, the typology of the moated farmstead gave rise to the study of its historical value as a prototype to inhabit the territory in a dispersed way.

## 2. The Prototype as Territorial Research

In reaction to the dense and overcrowded city, architect Frank Lloyd Wright developed Broadacre City as a new urban model (Lloyd Wright, 1932). One of the main elements is a one-acre parcel provided for each family (approximately 4,050 m<sup>2</sup>) resulting in a dispersed city model driven by the automobile. While Broadacre City never was realised, Frank Lloyd Wright simultaneously

designed and constructed a series of 60 so-called Usonian houses (De Long, 1998, p. 204). These were visionary houses intended for the Broadacre City model and therefore mass-scale produced with a moderate cost of approximately \$10,000. Interesting is the relation Lloyd Wright established between the theoretical model for a new city and an actual design and build on the scale of the single-family house. In this regard, the Usonian house functioned as a built experiment or test, a “proto-type” for the urban theory which enabled Lloyd Wright to reflect on the parcel, the house, the family, and, eventually, on the city. In this Usonian house prototype, two lines of thought are particularly interesting in relation to the contemporary dispersed territories. First, the Usonian houses urges to reflect on the nature of the prototype. Conceptualised as houses in a settler’s tradition, they were easy to set up (brick, wood, metal) and easy to adapt to whatever later needs (Maumi, 2015, pp. 86–87). The house was not to be considered as a finished object but instead in continuous transformation, as never-ending research answering different phases in one’s life. Second, the Usonian houses open the question of how the “new” territory is constructed. Where Le Corbusier departed from a tabula rasa to imagine his Ville Radieuse, Broadacre City was developed along a grass-roots strategy. By constructing its smallest unit, the house, and multiplying it, the traditional city would vanish over a time span of four generations. Building a series of these houses ultimately started to form a city (Maumi, 2018, p. 57).

The *prototype* later became a *typology* for suburbia as the suburban detached single-family house. A prototype can thus be considered a test configuration or a first model, while a typology can be considered an already-established model that exists in different locations (von Ballestrem & Gleiter, 2019).

Lloyd Wright’s Usonian houses as a reaction to urban questions in the dense city are illustrative examples of how architectural prototypes become a test of an urban planning model that addresses a new urban form. The dispersed territory context of South-West Flanders can be read in a similar way because today it is confronted with important, yet complex urban questions: How to deal with a changing climate, the need for sustainable energy production, ageing populations, and social disparities (Secchi, 2009)?

The solutions proposed for large-scale urgencies in the dense urban fabric of concentric cities cannot just be projected onto the dispersed territory. Centralised systems, density, and collective modes are absent in the dispersed territory and urge to rethink, amongst others, the infrastructure networks that support the occupation of the dispersed territory (Leemans et al., 2021). One way of dealing with these urban questions within the disciplines of architecture and urban design is to work with prototypes. As illustrated by Lloyd Wright’s Usonian house, the prototype can be considered a testing ground to become an architectural typology. Even

though the emphasis of a prototype can easily be put on the small-scale architectural form of the building itself, it inevitably interacts with its context or surroundings, engaging with the present large-scale urban questions. In the framework of this article, we distinguish the historical moated farmstead as a typology that once unlocked the territory and the moated farmstead as a prototype for a future recalibration of the living/land/labour triad in answer to a series of contemporary challenges this territory is facing. Building upon the knowledge of the typology, the prototype allows to experiment in search of new dialogues and to question society through the architectural prototype.

### 3. A Brief Historical Reading of a Multi-Layered System

Apart from large-scale infrastructure interventions such as roads, polders, and dikes, the historical architectural prototypes and typologies have played a substantial role in South-West Flanders’ dispersed settlement pattern (De Meulder & Dehaene, 2001). The moated farmstead as depicted in Figure 2 is such a typology that contributed to a rationalisation of the Flemish territory from the Middle Ages on. Besides being organised as a collection of architectural elements or buildings, they were also inscribed in a social, economic, and ecological land management system and thus connected to large-scale networks such as water. Close observation of the Popp maps (Popp, 1842, in Geopunt Vlaanderen, n.d.-c) reveals hundreds of these moated farmsteads in South-West Flanders, with an average distance of 500 m between them (Figure 3). Even though the farmsteads found on the Popp maps are all unique, they do show similarities and thus form(ed) a dense network representing an isotropic, dispersed settlement pattern.

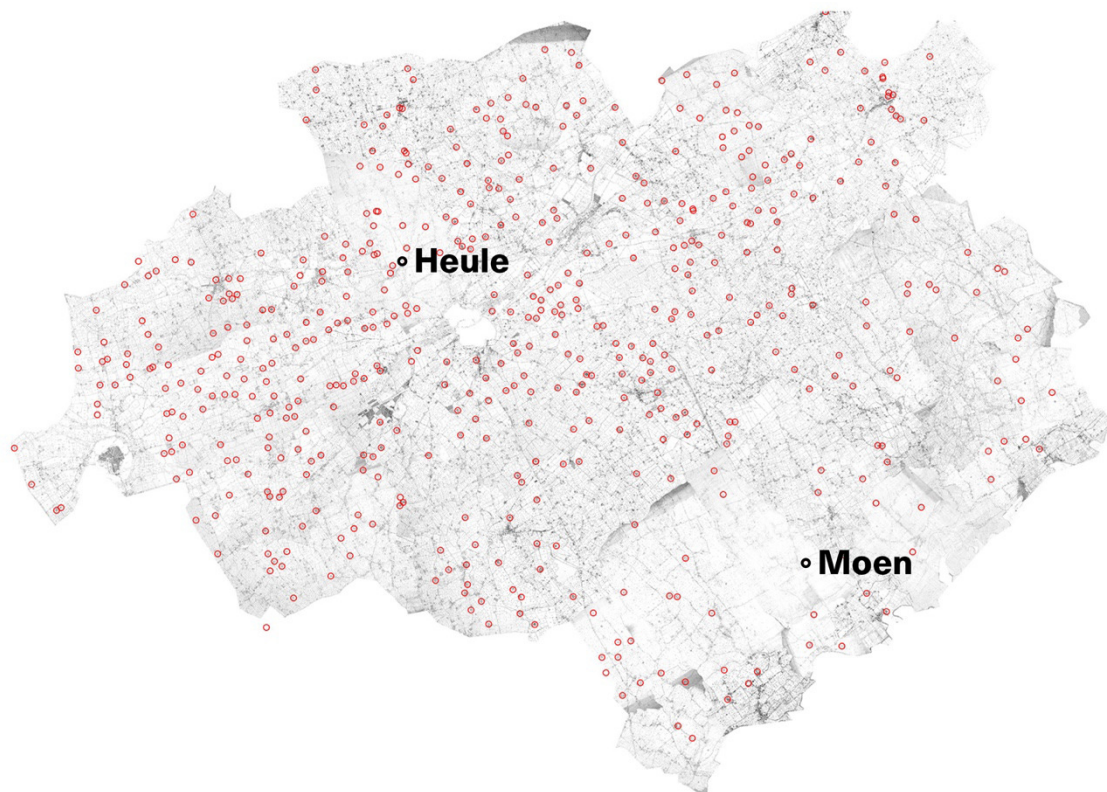
When comparing the Popp map to today (Figure 3), it becomes clear that many moated farmsteads have been (partially) destroyed or abandoned and have made a place for allotments or road infrastructure. While most of these farmsteads in South-West Flanders were originally established before the fourteenth century (Despriet, 1978), it was not uncommon for one to burn down or get destroyed the following centuries, mostly being (partially) rebuilt after. This continuous (re)building and adaptation of the farmsteads emphasises its prototypical character, each time adapting to the zeitgeist and timely challenges and needs. In the current debate on sustainability and dispersion, the rhythmic presence of these moated structures raises questions on their historical and multi-layered importance as (a) architectural, (b) socio-economic and political, and (c) ecological land management prototypes.

#### 3.1. An Architectural Prototype

First and foremost, the moated farmstead can be recognised as an architectural system with a number of typical spatial elements. Largely, four functions could be



**Figure 2.** Moated farmstead in Heule. Source: Courtesy of E. Falomo, J. Hallaj, and E. Froelich (personal communication, 16 December 2020).



**Figure 3.** By the nineteenth century, hundreds of moated farmsteads in the region around Kortrijk formed a dense network. Source: Courtesy of E. Falomo, J. Hallaj, and E. Froelich (personal communication, 16 December 2020).

distinguished: (a) cattle stabling; (b) harvest, fodder, and tools storage; (c) product processing; and (d) living (Becuwe et al., 2016). These functions are articulated in physical spaces namely (a) stables, (b) storage space, (c) working space, and (d) housing. These buildings could be arranged in different configurations such as the long-drawn-out farmstead (*langgevelhoeve*), the farmstead with separate buildings (*boerderij met losse bebouwing*), the farmstead with semi-detached buildings (*halflosse bebouwing*), and the square-shaped farmstead (*vierkantshoeve*; Despriet, 1978; Goedseels & Vanhaute, 1978). Influencing factors for a type of configuration were both time- and place-specific.

For example, the farmstead Goed te Mouden in Moen was originally constructed with isolated buildings around the eleventh century but was rebuilt as a semi-closed constellation after a fire in 1893 (De Gunsch & De Leeuw, 2022). A possible explanation for this new configuration lies in the increasing size and amount of new farm buildings resulting in a square form as the most efficient to minimise the distance between the different elements. Additionally, after the rebuilding, the farm focused mainly on cattle breeding. A similar thing happened to the Heerlijkheid van Heule, which is preserved quite well, regarding severe fire and war damage at the beginning of the twentieth century. While the gate was reconstructed with old material, the barn and stables were never rebuilt. Clearly, farmstead buildings evolved and transformed throughout time (Figure 4). Yet, it is interesting to have a closer look at a number of recurring spatial elements to get a better idea of the farmstead's architectural configuration.

The close relation between living, labour, and land in the moated farmstead was facilitated by the fact that the farmer and his family would live on the premises.

One of the main buildings would thus be the farmhouse, mainly consisting of a living room with a fireplace, an alcove, the pantry, the scullery, the upstairs room, the antechamber, the weaving room, and the attic (Becuwe et al., 2016, p. 10). Besides the farmhouse, the farmstead consisted of buildings that were related to labour activities. Sheds were intended both for storage of the harvest and for activities such as threshing grain. The space for animal husbandry on a farmstead usually consisted of several buildings such as horse, cow, pig, and fodder stables with a manure pit in between. Other buildings that were usually present were a carriage house, an oven, a gatehouse (often with a bridge), a small chapel, and a pigeon tower. All these architectural elements were developed and redefined over the years, leading to a set of specific architectural typologies.

From the nineteenth century on, besides the above-mentioned changing building configurations, the upscaling of agricultural activities also induces new types of buildings such as potato cellars, horse mills, breweries, and tobacco and flax processing pits. The industrial evolution can also be seen in the use of building materials. Whereas buildings were mostly initially erected with local, ready-made materials such as Roman rubble, straw, and wooden frameworks filled with wickerwork and loam, from the seventeenth century, farmsteads were more and more constructed with bricks, an emerging industry.

The farmstead's buildings were often located on a local elevation and surrounded by a moat of varying shape and size. Besides the buildings, land use within the moat consisted of small-scale farming such as a garden with vegetables, a kitchen, medicinal herbs and flowers, and a fruit orchard with chickens and small cattle. Large(r)-scale farming such as agricultural crops would take place on fields outside the moat. The way the



**Figure 4.** Farmstead Goed te Mouden in Moen (top) and farmstead Heerlijkheid van Heule (bottom) evolution. Sources from left to right: de Ferraris' 1771 map (Geopunt Vlaanderen, n.d.-a), 1843 Atlas der Buurtwegen (Geopunt Vlaanderen, n.d.-b), 1904 topographic map (Zwartjes, 2020a), 1969 topographic map (Zwartjes, 2020b), and Google Earth.

land was used in- and outside the moat had to do with the distance to the farmstead, instigated by a system of governance.

### 3.2. A Prototypical Expression of a Larger Socio-Economic and Political System

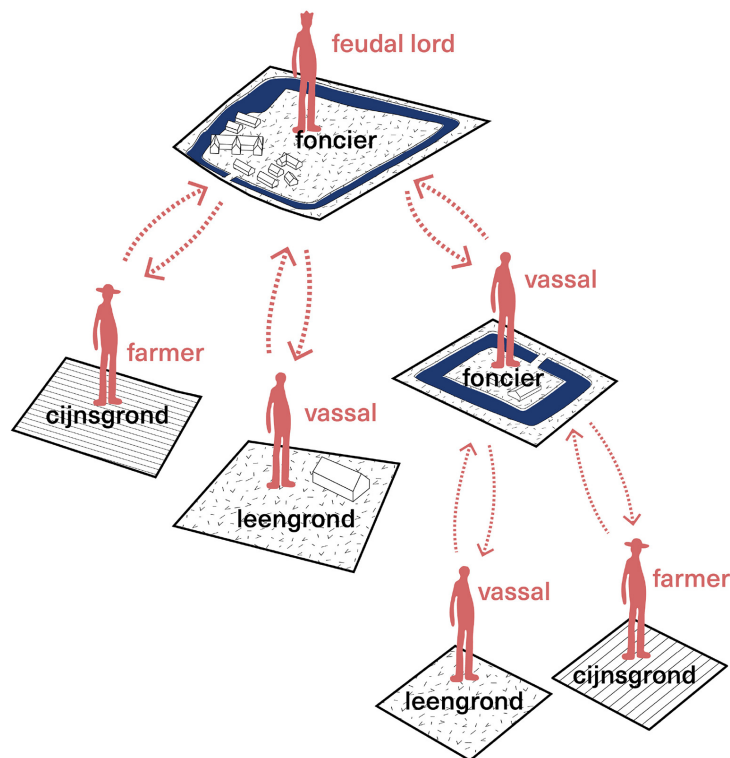
Besides its architectural or spatial composition, the significance of the moated farmstead as a prototype is simultaneously related to the larger socio-economic and political system, leading to the interpretation of the moated as a built expression of both. Most of the farmsteads in South-West Flanders originated within the medieval feudal system as a centre of a seigniorship (*heerlijkheid*), a lord's property to which certain rights and duties were attached.

In this hierarchical system (Figure 5) feudal lords (*leenheren*) would "borrow" land from their vassals (*leenmannen*) to live on in exchange for loyalty, services, and goods. The vassal would then hold and cultivate the land through his own farmers and hand over the largest part of the revenue to his feudal lord. The farmers at their turn had their own servants and family helping them on the land (Becuwe et al., 2016, p. 27). Even the construction of a farmstead was often a community event, for example when inhabitants from a nearby village would come to help straighten wooden beams (Goedseels & Vanhaute, 1978, p. 14).

In a seigniorship, three types of land existed in hierarchical relation to each other: the *foncier*, the *leengrond*,

and the *cijnsgrond*. First, the *foncier* was owned by the lord himself, often containing a moated farmstead including the typical architectural elements described above such as a chapel and a pigeon tower, expressing secular or spiritual power. Another symbol of social status was the coat of arms on the buildings and the entrance gate as was the case in the farmstead Goed te Mouden in Moen (Despriet, 2018, pp. 92–94). Second, the *leengrond* was a piece of land "borrowed" from another person, which could also be a seigniorship with an own *foncier* and so on. Finally, the *cijnsgrond* was the land used for agricultural activities, cultivated by farmers and their servants. The moated farmstead, both its buildings and its surrounding land were thus spatial translations of the (at times hierarchical) socio-economic and political system in place (Despriet, 1978, pp. 21–22).

Interestingly, around 1400, most of the owners of the moated farmsteads had moved to an urban agglomeration while leaving their farmstead to the care of a tenant. From their house in the town or city, they managed their property (Despriet, 1978, p. 13). This movement reveals a first hint of how living, labour, and land relations would be physically established over longer distances. However, the relationship between moated farmsteads and increasing urbanisation worked in two ways. While owners increasingly moved to towns or cities, urban concentration also grew around the moated farmsteads, often located in the proximity of a church, forming the core of a village or town. The moated farmstead was a nucleus around which urbanisation appeared.



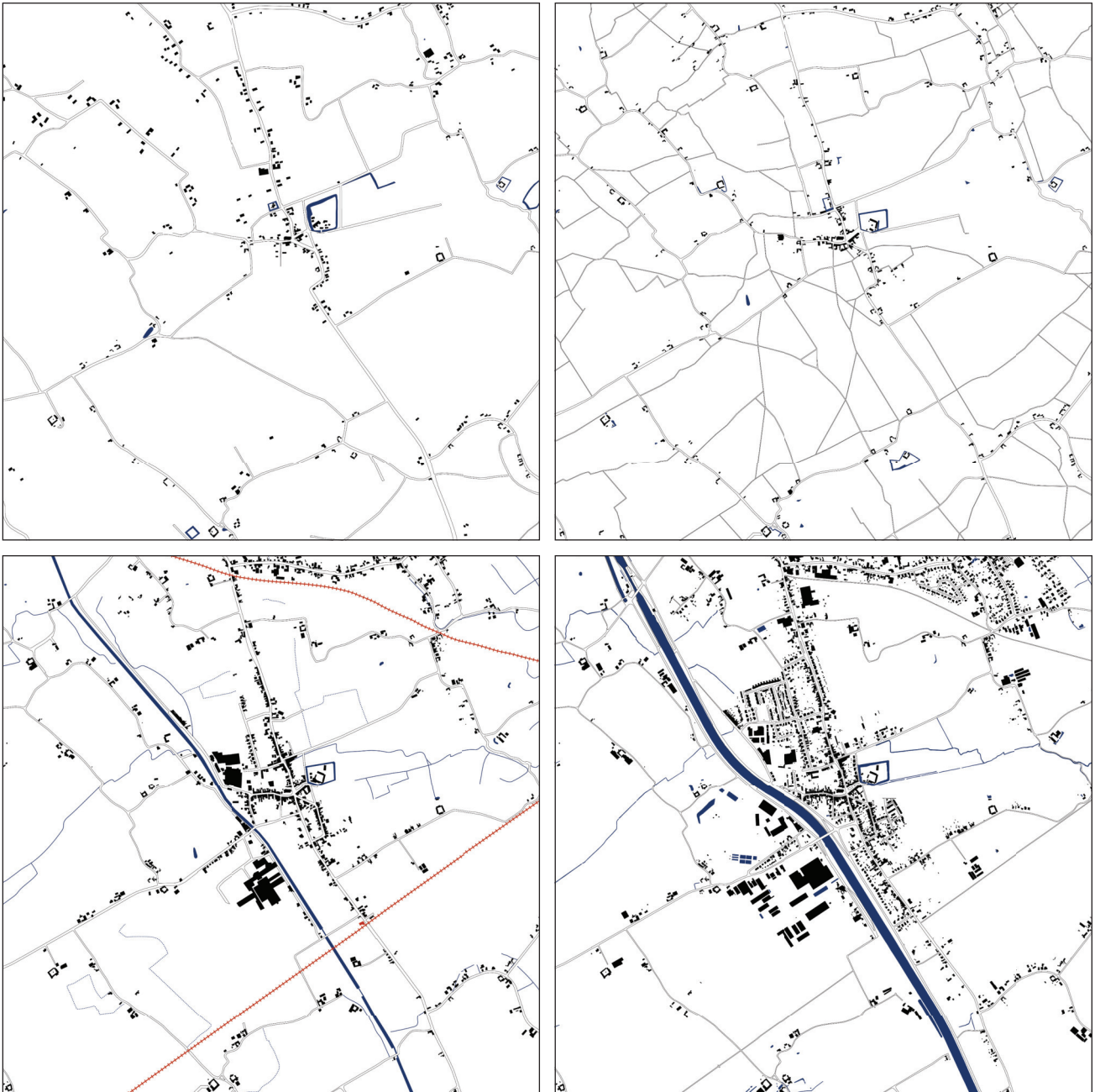
**Figure 5.** Moated farmsteads were ingrained in the feudal system, where a lord would allow a vassal to live and work on his land in return for revenues from labour activities. Source: Figure elaborated by Sophie Leemans, 2022.



The dialogue between the moated farmstead and its built surroundings provoked an incremental clustering ultimately making them one of the drivers for the urbanisation of the countryside.

The reciprocal relations between the moated farmstead and urbanisation are also articulated in the case of Goed te Mouden, which was the centre of the seignior and county of Moen, including 59 feudal lords (Despriet, 1978, p. 121, 2018, p. 95). For Moen, not located in the proximity of a city, the moated farmstead clearly

formed a centre of attraction (Figure 6) for settlement. This urbanisation was reinforced during the twentieth century with the construction of the Kortrijk-Bossuit canal and an extensive local railway network, providing labourers with cheap and easy transportation to factories (De Block & Polasky, 2011). A similar development can be seen in the Heerlijkheid van Heule. The growing large-scale infrastructures expressed another socio-economic and political system, with increasing distances between living, labour, and land.



**Figure 6.** The presence of the moated farmstead Goed te Mouden and the church in Moen were important elements for the increasing urbanisation of the village. Sources: Sophie Leemans' work based on the de Ferraris 1771 map (top left; Geopunt Vlaanderen, n.d.-a), Popp map (top right; Geopunt Vlaanderen, n.d.-c), aerial picture (bottom left; Geopunt Vlaanderen, n.d.-d), aerial picture (bottom right; Geopunt Vlaanderen, n.d.-e).

### 3.3. A Prototype for Ecological Land Management

The moated farmstead was also ecologically ingrained in its surroundings. Its location was determined by territorial characteristics such as the alluvial valleys of the Scheldt, Lys, or local creek or a swamp, and thus inevitably also related to topography. The area within the moat was often raised to a higher level (*motte*), and the moat itself, of varying size and shape, was always (partially) man-made but also connected to a nearby river or creek (Goedseels & Vanhaute, 1978, pp. 57–67). This is the case in Heule, where the position of the moated farmstead maintained a constant water level of the nearby creek Heulebeek. In Moen, the marshy area and natural drainage of the surrounding hills ensure a permanent water level.

While the oldest moats could have had a defensive purpose, most of the moats were constructed as a symbol of status, similar to castles and monasteries. Additionally, the moat also ensured a constant supply of water, a fishpond, and property demarcation (for example for small cattle in the orchard). Around the mid-twentieth-century, more than half of the moats in South-West Flanders were filled in. As we know today, weather extremes and water dynamics urge us to think of resilient water systems in which the moats remind us of their usefulness as water buffers (Despriet, 1978, p. 7). The (re)construction of a vast and dispersed water system, based on century-old patterns, could build a more resilient territory capable of holding the water in place, feeding the groundwater table, and as a resource for a newly defined ecological land management.

Besides regulating ecological water systems, the farm also organised the surrounding land. Within the moat, land use consisted of small-scale farming for self-sustenance, usually a farmer's garden with vegetables, kitchen and medicinal herbs and flowers, and a fruit orchard with chickens and small cattle. Furthermore, specific types of plantings would shield off certain areas, while at the same time having functional purposes such as firewood and hedgerows. The large(r)-scale farming such as agricultural crops would take place on *cijnsgronden* outside the moat (Despriet, 1978, pp. 21–22).

## 4. Living, Labour, and Land Configurations

One way to position the moated farmstead as a historical typology is to look at it through the lens of living, labour, and land. The typology is an architectural expression of a way of living together, an economic model (labour), and a reciprocal relationship with the land or territory both in terms of food production and the resulting spatial organisation (think of water management and the spatial layout). As mentioned above, moated farmsteads clearly evolved throughout time, reflecting different both socio-economic and political and urban planning models. Whereas a medieval moated farmstead was part of the hierarchical feudal system with mainly

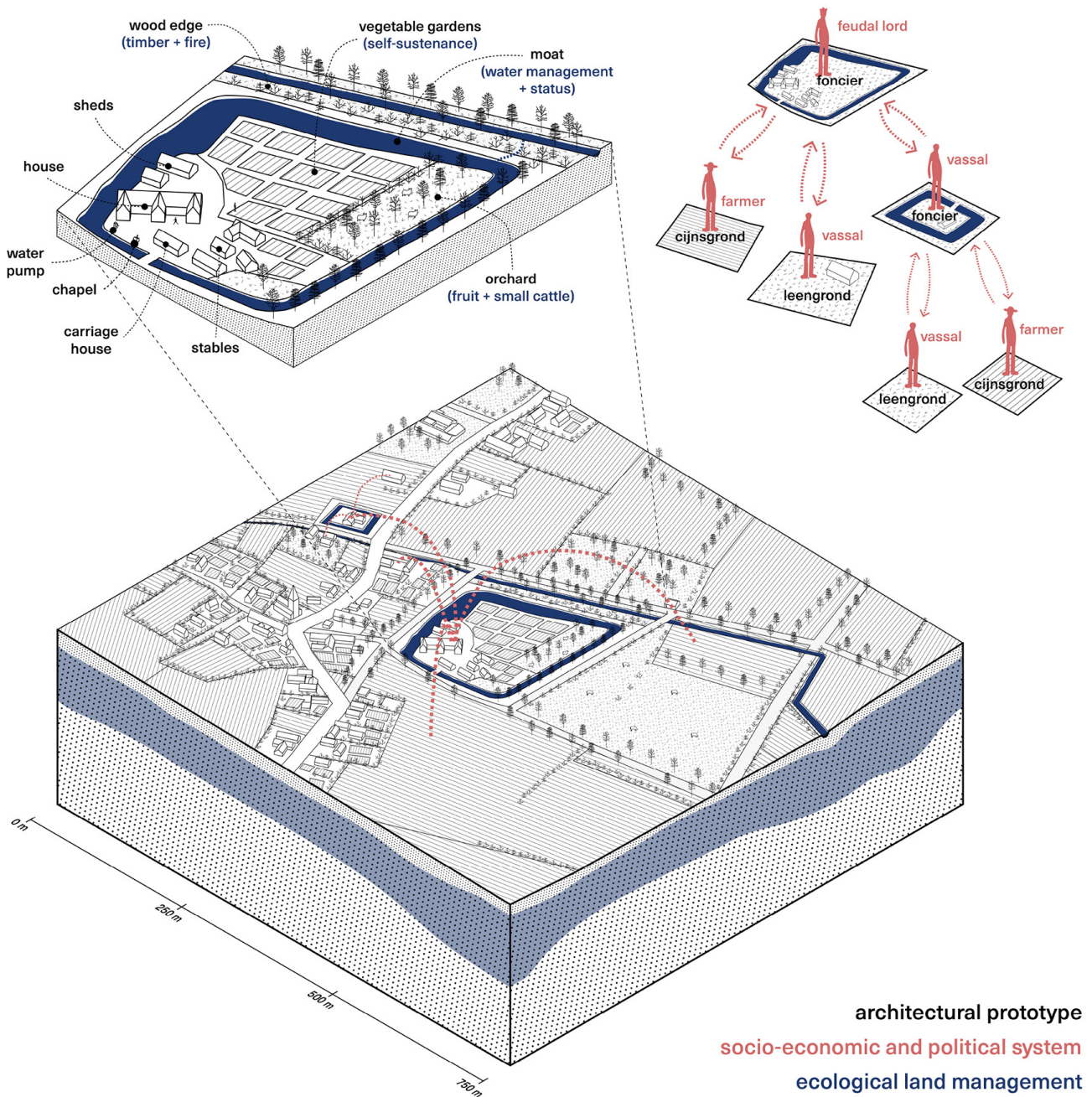
agricultural activities, this was upscaled to industrial-like activities during the nineteenth century (Goedseels & Vanhaute, 1978, pp. 203–211). Despite these time- and space-specific characteristics, an optimal, harmonious living, labour, and land situation is imaginable, of which the moated farmstead was a spatial expression.

First, the moated farmstead was clearly (part of) a social system, initiated by the feudal system and expressed through the hierarchical organisation of the different social classes living on the farmstead premises, or by larger extent in the seignior (Figure 7). Second, over time, the moated farmstead accommodated different types of labour: from agricultural activities such as land cultivation to proto-industrial crafts such as weaving (Demasure, 2011, pp. 432–434). Third, the moated farmstead had a strong relation of proximity with its surrounding land, both expressed in its geographic location and land use such as vegetable gardens and orchards within the moat and meadows and farmland outside the moat.

The moated farmstead clearly was based on the physical proximity of living, labour, and land. The lord or farmer and his family would live within the moat in a house and work on the premises or in the immediate surroundings. Additionally, the moated farmstead was anchored in its land and benefited from present territorial characteristics such as building materials (wood, Tournai natural stones, bricks), trading routes (over the Scheldt and Lys), and topography (water management).

When comparing the farmstead with other (later) typologies such as the semi-detached house and the *fermette* (a modern dwelling in cottage style), generally the elements defining living, labour, and land become increasingly detached from the territory (Leemans et al., 2021). When the large-scale construction of an extensive railway network in the nineteenth century stimulated factory labourers to live in the countryside, besides a small vegetable garden, their semi-detached houses did not have any need-based labour or land relations. Similarly, the construction of highways, the rise of the car, and increasingly service-based labour in the twentieth century were accompanied by the rise of the *fermette* typology, which besides some formal references, did not have any relation with its surroundings (Figure 8).

Today, many moated farmsteads have been repurposed as solely residential dwellings or recreational activities such as bed and breakfasts, wedding locations, and so on. However, the combination of living/labour/land configurations are rare. A recent publication by the Flemish Heritage Department strives for a valuable development of historical farmsteads adapted to a sustainable future but remains rather limited to the architectural elements (Becuwe et al., 2016). An exceptional example is the Heerlijkheid van Heule, which has been repurposed as a care farm, combining organically managed agricultural activities with a training and daycare centre for youth counselling. Again, the historical typology of the farmstead plays a leading example in the prototyping of new forms of labour and agricultural models.



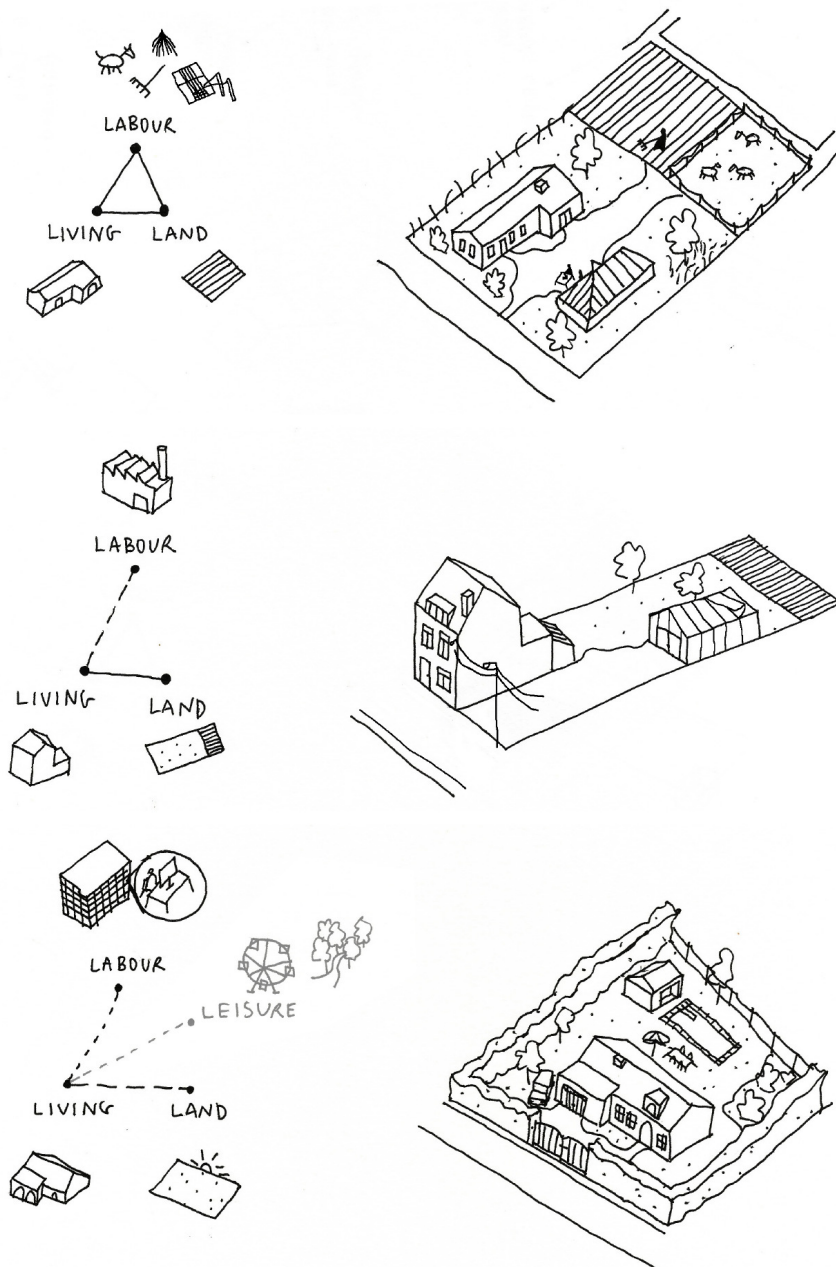
**Figure 7.** The moated farmstead Goed te Mouden in Moen, South-West Flanders can be considered an architectural typology, a typical expression of a socio-economic and political system, and a typology of ecological land management. Source: Sophie Leemans' based on de Ferraris' 1771 map (Geopunt Vlaanderen, n.d.-a).

### 5. Discussion: Towards Contemporary Prototypes

During the second half of the twentieth century, over a third of the original 800 moated farmsteads were demolished, due to increasing urbanisation and infrastructure construction (Despriet, 1978). While the moated farmstead once was a typology of a reciprocal living/labour/land configuration, it has nowadays become a shadow of its full potential. The moated farmstead no longer forms the centre of social logic, no longer acts as a farm, no longer organises the spatial layout of its sur-

roundings, nor controls or regulates the water regime. And yet, there is a necessity for these kinds of prototypes.

While the in-situ urbanisation of the rural continued over the past decades, the rural substrate is no longer capable of supporting this continuous urbanisation (Dehaene, 2018). Mobility congestion, flooding, loss of biodiversity, and so on can be interpreted as the outcome of an unadopted common. While individual urbanisation grew, the rural substrate with its agricultural logic of water management, accessibility, and so on was never adapted in a collective way. While "problems" increase



**Figure 8.** Different architectural typologies expressed different societal shifts: The farm (top), the semi-detached dwelling (middle), and the *fermette* (bottom). Source: Figure elaborated by Sophie Leemans, 2022.

year after year, the urge to intervene grows as well. Rethinking the relationship between the way people live on, work in, and co-exist with the land will lead to a new form of this territory (Gheysen, 2020). Just as the moated farmstead once defined and represented a specific arrangement of living, labour, and land, one could wonder what a contemporary interpretation of this triad would look like.

Although urgent, this moment is not unique in our Western history. Throughout architectural history, one can witness several similar critical moments. The housing crisis of the eighteenth century, the sanitary crisis of the nineteenth century, or more recently, the rise and failure of the welfare state, in the end, all resulted in a

radically altered the form of the territory. During these moments of crisis, architects and urban designers experimented with new forms of arrangement for the triad living/labour/land with new *prototypes* in search of new dialogues. The collective ensembles of the Familistère (Jean-Baptiste André Godin; Techno-Science.net, n.d.) or the house or palace Villa Cavrois (Robert Mallet-Stevens) were at the time highly experimental and reflect a particular answer towards a changed society. Similar to the Usonian houses of Frank Lloyd Wright, these are designs that explore a new way of living together and question society through the architectural prototype.

While the moated farmstead is a historical typology in its architectural, socio-economic, political, and

ecological relationships, one could wonder how contemporary prototypes can redefine our relationship with the dispersed territory. Can we imagine new forms of moated farmsteads that answer the contemporary challenges of the territory with a particular architectural project? In South-West Flanders, we do witness the first germs of this new articulation. The Heerlijkheid van Heule is a clear example of a re-interpretation of the moated farmstead. A small scaled organic farm combines food production with youth care. Through the fields, meadows, and water management, the nearby surroundings are organised. This project reinterprets the historical moated farmstead to a contemporary co-existence of living/labour/land in a sustainable way.

## 6. Conclusion

The moated farmstead historically acted as a typology and made it possible to inhabit the territory beyond an urban/rural dichotomy. In its interpretation of living together in a specific architectural form, its definition of work in the combination of agriculture and proto-industrial production, and its relationship with the land through water management lies an enormous lesson. This particular typology was one of the drivers of the dispersed territory of Flanders.

As the territory is at present challenged by the co-existence of urbanisation and land, the typology holds substantial potential to reinterpret the land/living/labour triad into new prototypes and ultimately define a new future and form for the territory. Whereas the scale of the territory relates to the theoretical construct, the prototype can serve as a testing ground, a controlled experiment, as shown in the current redevelopment of the Heerlijkheid in Heule as a care farm and community project. The imaginary of a sustainable inhabited dispersed territory can be explored through a re-interpretation of the moated farmstead. But where the historical moated farmstead was a complex typology with interwoven relations between architecture, production, land management, etc., the contemporary Heerlijkheid is a pale shadow of what could be. As the prototype touches on the idea of constant adapting, it plays a role in exploring ways to deal with contingencies and the unprecedented that is linked with the new urban question for this territory.

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## Conflict of Interests

The authors declare no conflict of interests.

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