

House as a *Relational Potential* for Home
The Case of Isolated Modernist Collective Housing in Brussels.
Gérald Ledent, Olivier Masson

'Habitation consists first of objects, by the products of practical activity: moveable or immovable property. They form a characteristic ensemble, or ensembles, within societies. They exist objectively, or if you will, "objectally", before they signify; but they do not exist without signifying. The word "before" indicates a kind of logical priority rather than previousness in time. We ought to posit habitation as an inherent function of every society, every social organism; but a signifying function is straightaway added to this practical function. Moveable and immovable property constitutes habitation, embracing and signifying social relations.' LEFEBVRE, Henri¹

1_1_Posture

The core of habitation lies in the relationships that bind the individual human subject with others. It goes largely beyond matters such as style, form or aesthetics. It is thus primarily a social² issue. In addition to creating a technically efficient milieu and establishing an orderly centre in the surrounding universe, it defines the framework for a social system³. The social nature of the abode of man is our starting position.

In order to accommodate and sustain social relationships, man combines a series of artefacts that can be defined as *house*. Additionally, *house* is complemented by the idea of *home*, embodying the ineffable and subjective qualities of those relationships. Together, *house* and *home* form an indissoluble whole within the concept of dwelling.



Furthermore, dwelling, as the combination of *house* and *home*, is an intricate product of cultural models - *habitus* - that evolve slowly. Those *habitus* are cultural by essence, depending on the commonly recognized cultural models. Yet, we believe that, while every *house* is produced culturally with physical artefacts that differ from one place to another, those physical artefacts sustain a common and limited number of potentialities concerning social interactions. In turn, there is a limited, yet necessary, number of social operations common to all men to achieve a sense of *home*. They can be considered as fundamental infra-cultural anthropological operations. They are the necessary and sufficient social interactions for any human subject to dwell.

¹Preface to the study of the *Habitat of the 'Pavillon'*, in ELDEN, S., KOFMAN, E. & LEBAS, E. 2006. Henri Lefebvre: Key Writings, Bloomsbury. pp. 124-125

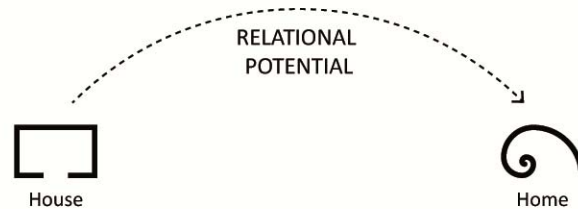
²According to Max Weber, '*Action is "social" insofar as its subjective meaning takes account of the behaviour of others and is thereby oriented in its course*' in WEBER, M. 1921/1968. Economy and Society, New York, Bedminster Press. p.4

³Leroy-Gourhan defines habitat in this three directions, technical, social, cosmic, in LEROI-GOURHAN, H. 1965. Le geste et la parole, Paris, A. Michel. p.150

1_2_Relational potential

It is only natural, from an architectural point of view, to study the physical features of habitat, *house*. Our ambition is to analyse a selection of housing artefacts to distinguish their qualities, conditions, recurrences and potentials. Once listed and classified, their recurring potentials provide us with a better understanding of the social operations they cater for.

In order to deduct the fundamental anthropological dwelling operations from physical elements, a new concept is needed. *Relational Potential* is defined as the specific qualities of an artefact - *house* - to foster *home* values, that is, to sustain social relationships with others.



2_ Case study: Isolated Modernist Collective Housing in Brussels

2_1_Building location

Isolated modernist collective housing in post-war Brussels is explored in the light of their *relational potentials*. This type of building, constructed essentially from 1945 to 1980 has been largely stigmatised. Yet, it is a very important share of today's dwelling in Brussels but also, more generally, in Western countries. Many buildings, both in the private and public sectors come under fierce criticism with regard to the quality of their dwelling. Yet, caused by the urge to save energy and the almighty dogma of sustainability, many buildings are being technically renovated or even destroyed without any substantive reflection on their initial dwelling qualities or faults.

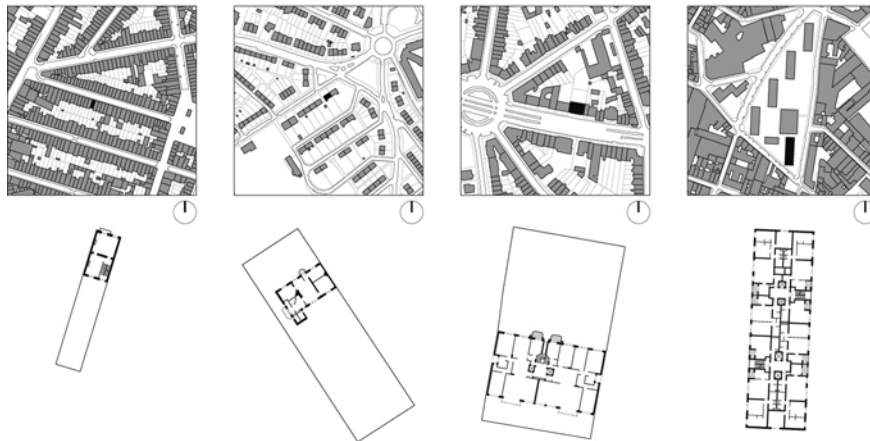
By multiplying examples, synchronically as well as diachronically, one can create a dense *corpus* and avoid leaving out any *relational potential* in one building or another. A corpus of more than a hundred buildings has therefore been analysed, chosen in the public and private sectors. While the chosen buildings of the *corpus* originate in the same period of time (1945-1980), their qualities are also put into perspective by former types of housing in Brussels.

The city's housing typologies can be summarized roughly in four categories based on their role in the constitution of public space and their direct relation to the ground. Firstly, individual row houses constitute the main urban fabric⁴. They are the traditional form of housing by which all others are assessed. Secondly, isolated or semi isolated housing is found mainly in the *second crown* of the city. Thirdly, collective housing is found within the traditional city fabric (streets, city blocks, party walls). Our corpus⁵, isolated modernist collective

⁴Out of 546 118 housing units, 195 831 are located in row houses (approximately 140 000 houses built before 1918).

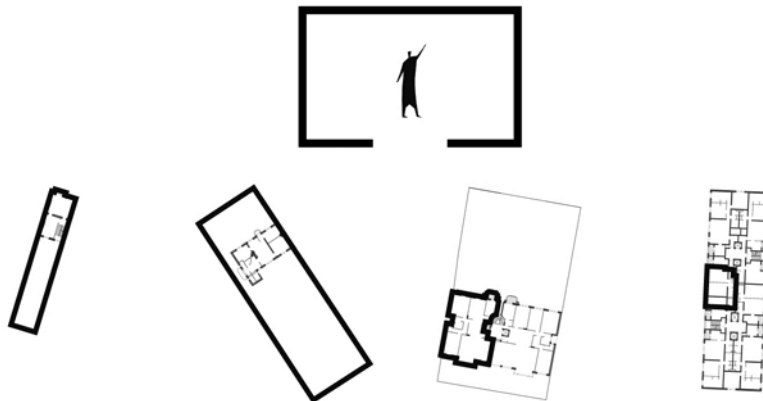
⁵15% of the Brussels dwellings are built according to this housing solution and it represents 7% of the residential ground occupancy.

housing, composes the fourth category. While the largest operations are found in the outskirts of the 19th century city, some can be found within the heart of the ancient city fabric.



2_2_Enclosure and topological relations

A closer look at Brussels housing typologies reveals a common and undisputed physical feature: the boundary or enclosure. It isolates and preserves an individual territory - domain - from the public realm. 'A *boundary is not that at which something stops but, as the Greeks recognized, the boundary is that from which something begins its presencing*⁶. Different forms of enclosures are encountered, from the basic housing envelope to low walls or hedges defining private gardens. Juridically speaking, in Brussels, housing enclosures strictly follow the boundaries of private properties.

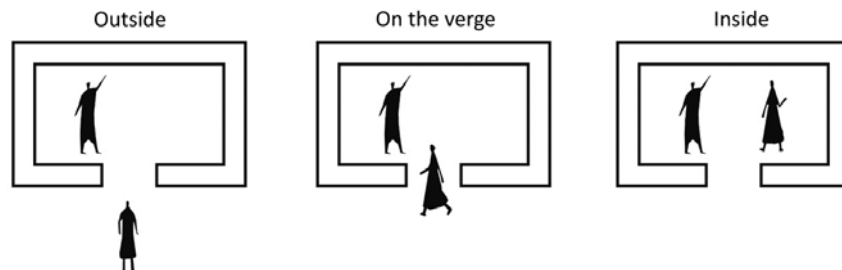


A physical enclosure is essential for dwelling in order to adjust oneself socially to others. Indeed, enclosures delineate a specific place in space. In this way, architecture generates a safe, technical and effective environment. But much more significantly, it establishes difference and thus uniqueness. Thus

⁶ HEIDEGGER, M. 1971. *Poetry, Language, Thought*, Toronto, Harper. p. 154

enclosures allow human subjects to assert their distinctiveness; they engender an individual place where one can dwell, that is, detain a particular position on Earth among others. Moreover, from this position each individual is given the valuable choice to either meet or prescind others. Consequently, only once this position has been granted by *house* can one exist for himself and relate to others by developing social skills.

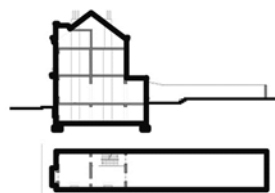
When an enclosure is implemented, three topological positions are created regarding others. Others can be outside, on the verge (math. in the neighbourhood), or inside the physical enclosure.



2_3_Relating to others, outside

Alienation can be created by various means (hedges, distance to the building, position of the building in the city...). Within buildings, two distinct relations with others outside of the enclosure are encountered. On the one hand, impermeable party walls hamper any relationships. On the other hand, wall openings allow interactions with others on the outside. In addition to providing air and light (to housing), those openings - windows - are largely meant to relate to the outside. They cannot be considered a disruption but on the contrary, they constitute the substance (or the structure) of the enclosure, allowing its permeability. It is the physical definition of this permeability that modulates the possible relationship with others. In architectural terms, a (vertical) permeable enclosure is called a *façade*.

Before advancing further, an initial observation must be made. Whereas individual devices and buildings coincide with the enclosures in the case of individual housing, it is not the case with collective housing. Individual housing produces a straightforward relation between the private and the public along with an immediate relation to the earth and the sky⁷.



Rue Vandermeersch. Arch. Unknown



⁷The earth and the sky are part of Martin Heidegger's fourfold along with the divinities and other humans.

Contrarily, collective housing does not engage any immediate relationships. Where collective buildings create a limit from the public realm, a secondary enclosure is needed to secure individual spaces to residents. In between those two perimeters a new kind of space emerges, collective space. Collective spaces, even though they are part of the inhabitant's domain, lie outside their control. In the case of isolated modernist collective housing, collective spaces can take different forms, from circulation spaces⁸, exterior⁹ and interior¹⁰ collective spaces to the façade of the building itself.



Rue du grand serment, Arch. Structures

Façades of collective housing are thus primarily collective. They do not directly reflect the inhabitant's personality or choices but those of a community¹¹. This has two major consequences. On the one hand, inhabitants may not modify the façade to make it relate to their individual interiors¹². On the other hand, everyone within the community presents the same appearance to the exterior. Everyone is given the same image, *à la même enseigne*, with regards to the exterior. This has a dramatic effect on the perception and representation of the façade. The (re)presenting relationship with others is dealt with by a physical means over which individuals have no leverage. In addition, the image of oneself, provided by the façade, is shared by several individuals. The relationship with others is shared and not univocal.

Another specific feature of isolated collective housing is its isotropic character. There are no more front/rear positions following the disappearance of relations to the traditional features of the urban fabric (streets, blocks, parcel division). Contrarily, the traditional row house provided two distinctive positions for the dweller. The front façade ensured a relationship with the

⁸ Henri Raymond depicts staircases as an essential representation space.

Therefore, within collective housing, they are frustrating since inhabitants have no grip on them. In many cases, that explains the proximity with the concierge.

⁹ Green spaces, often undefined or overridden, can generally not be appropriated.

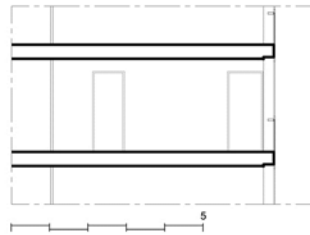
¹⁰ Annexes such as porches, solaria, vestibules, drying rooms...

¹¹ It is also the case of urban compositions where the street façades respond primarily to urban compositions rather than to interior layouts.

¹² Henri Raymond and Nicole Haumont speak then of the impossible '*relation parfaite*' of the collective façade.

unknown, while the rear façade provided a relationship with better-known others, the inhabitants of the city block. In the case of isolated collective housing, all façades relate equally to the outside¹³. In other words, the posture regarding exteriority is identical within all housing positions.

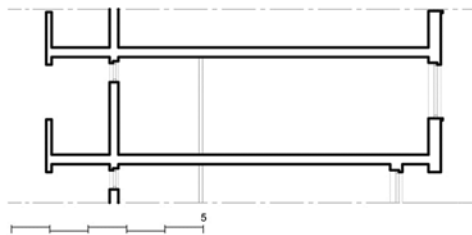
Isolated collective modernist housing typologies show a wide range of physical features sustaining relationships with exteriority. A first observation can be made regarding the thickness of the enclosure. A series of buildings display plain and smooth-surfaced façades with almost no thickness at all. The façades are entirely glazed. The only distinction made is a non-transparent sill separated by a horizontal window frame providing a narrow ledge to lean on. Physically speaking, the thickness of the enclosure is minimal, no thicker than the double glazing. The relationship towards the exterior is plain and straightforward. No hideaway position is possible.



Rue Brunfaut, Arch. Roggen



A second range of buildings display thicker façades. Contrary to the first series, the façade reveals an actual physical depth. The thickness of the façade provides the enclosure with a genuine window ledge. The ledge - *appui* - allows the inhabitant to lean - *s'appuyer* - outwards but also to arrange various objects in order to mark his own place. Moreover, the façade is not, in this case, entirely transparent, allowing for more privacy.



Parc du Peterbos 18, Arch. Kell-Vander Elst

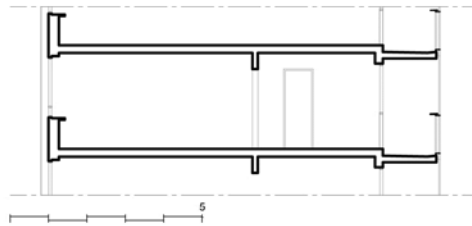


A third series of buildings is typically collective. In addition to the enclosure, exterior access galleries¹⁴, even though they do not belong to the dwelling,

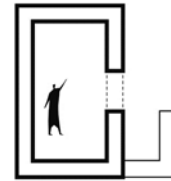
¹³ Nonetheless, some projects try to reintroduce at an urban scale the notions of front/rear (e.g. Avenue de Roovere, Arch. Van Damme).

¹⁴ The width and number of accesses onto galleries is very meaningful regarding the settling of relationships with others within collective housing. While narrow and single access galleries force encountering (e.g. Cité modèle 3, Arch. Braem) others are wide enough or provide sufficient accesses to avoid meeting others

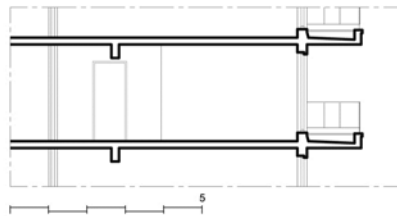
physically increase the depth of the façade by creating a visual setback. Yet, their width and layout can also have a tremendous impact on the inhabitants' sense of intimacy. While some access galleries force neighbours to walk in front of individual windows, others offer a physical set back (a level difference¹⁵, cut-out elements in the galleries¹⁶...) to prevent those annoyances.



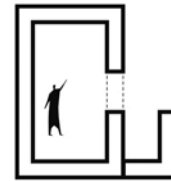
Square de la Cité Modèle 3, Arch. Braem



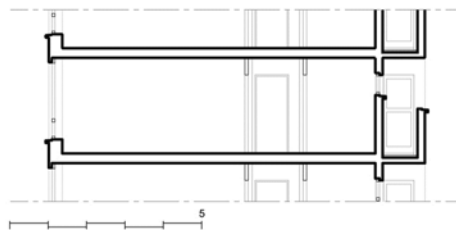
A fourth series displays private exterior balconies. These balconies, whether continuous or not allow a greater distancing from the outdoor. Unlike access galleries, those balconies are private and can therefore be invested by inhabitants. Even though they are outside, they are part of the housing interior.



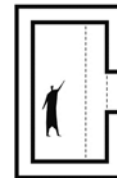
Parc Albert, Arch. Groupe Urbanisme



A final typology displays loggias as private outdoor spaces. While their private nature allows personal marking just like exterior balconies, loggias reside within the limits of the enclosure unlike cantilevered balconies. Therefore, they create a much lower sense of exposure.



Avenue de Roovere, Arch. Van Damme



(e.g. Avenue Cicéron, Arch. Vander Meeren). Sometimes, adjacent private exterior spaces tone down the impersonal character of galleries (e.g. Housing for elderly people, Ieder zijn Huis, Arch. Vander Meeren).

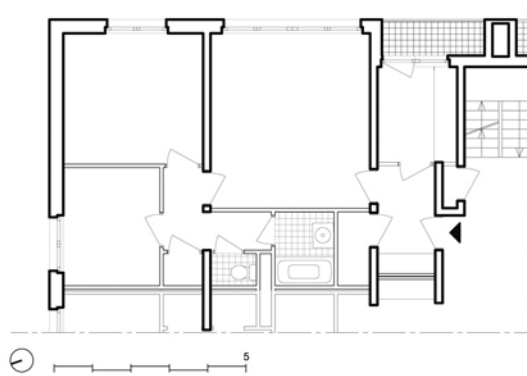
¹⁵ Kiel Housing (in Antwerpen), Arch. Braem.

¹⁶ Housing for elderly people in Evere, Ieder Zijn Huis, Arch. Vander Meeren.

One can note that all typologies allow minor personal markings of the collective enclosure via louvers, curtains, window sills, or private exterior spaces. In addition, while the depth of the enclosure is largely thought of as that of the façade itself, it is often 'thickened' by the surrounding exterior collective spaces and their specific limits.

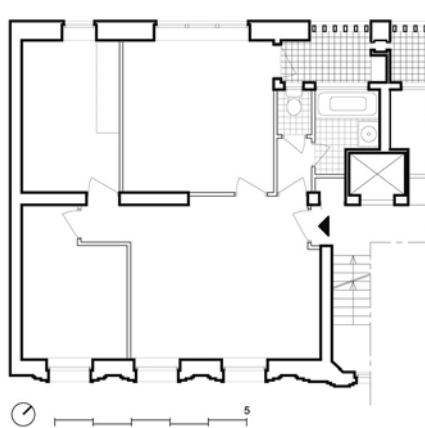
A second set of observations can be made regarding the number of exterior spaces and the rooms that physically relate to them. It gives an entirely different understanding of the exterior spaces and their *relational potentials*.

A first series of spaces relate directly to the kitchen. They are usually narrow. The access from the interior is small-scale. Their dimensions are limited curtailing permanent stays. In addition, they are usually hidden from the exterior by permanent shutters and screens.



Avenue Van Hoorenbeek, Arch. Berlaimont

A second series of exterior spaces relate to the bathrooms, toilets or even the sleeping rooms. They display the same features as the first series even though they are more remote.

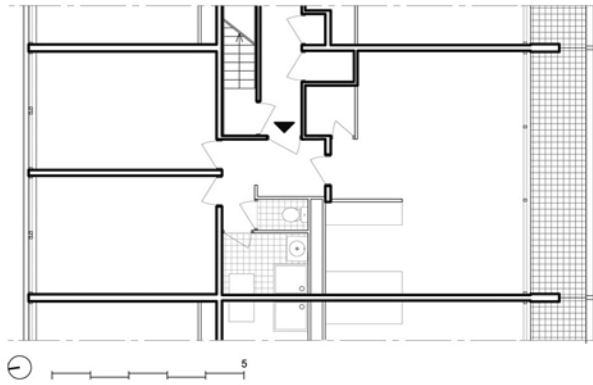


Rue de la philanthropie, Arch. Van Nueten

In those first two cases, the exterior space is remote and often partially hidden

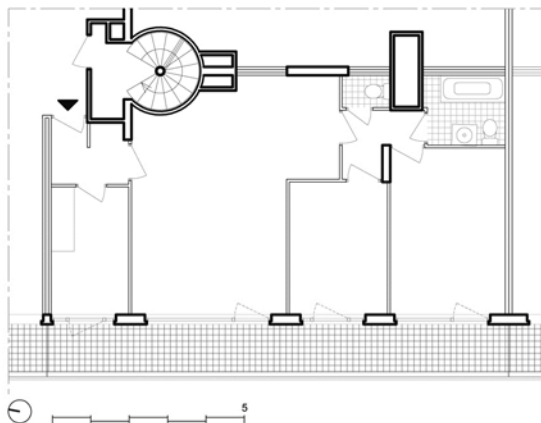
from outdoor views. It recalls the traditional Belgian cultural model depicted in the individual house and its front/rear opposition that provides places that need to be hidden from the casual viewer. A noticeable sign of this connection is the mention '*courette*' in many drawings that literally refers to the rear courtyards of traditional housing.

A third category of exterior spaces relate to the living room. Their dimensions are usually much larger and so are their openings to both the exterior and the interior. They allow longer stays but also a more straightforward relation with the outside.



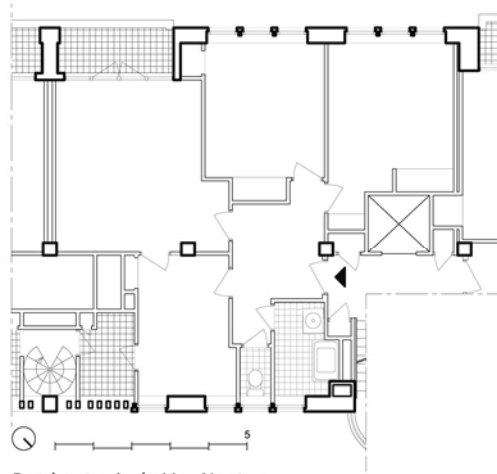
Chaussée d'Anvers, Arch. Brunfaut-Lacroix-Pepermans

A fourth group displays continuous balconies. Their constituting parts (width, transparency, accesses) are usually constant and they are only distinguished functionally by the rooms in front of which they span.



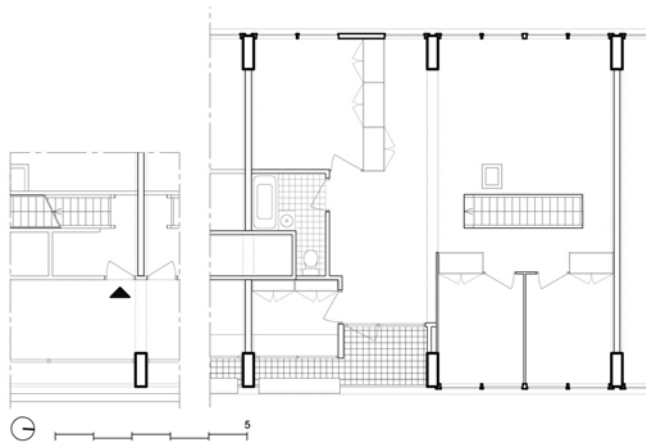
Parc Albert, Arch. Groupe Urbanisme

A fifth series displays the two different kinds of exterior spaces shown in the first and third categories. Those dwellings combine the two kinds of *relational potentials* described above.



Rue haute, Arch. Van Nueten

Finally a last group of buildings brings together within a sole exterior space two different zones. Those are generally distinguished by a difference of width but also, in some cases, by variations in the porosity of the balustrade.



Avenue Cicéron, Arch. Vander Meeren

To conclude, the critical condition for any *relational potential* with exteriority is the porosity of the enclosure. Two observations have been made in the case of isolated collective housing. First, no articulation is provided by a specific urban orientation. Second, the collective character of the enclosure hinders individual (re)presentation or clear distinctiveness. Therefore, since neither urban position nor any singular character can sustain any individual relationship with the exterior, all attention can be focused on the *relational potentials* of the composition of the enclosure itself. Depth, transparency and the differential significances given by interior spaces (allowing orientation) to the enclosure are physical features provided by housing to adjust itself with exteriority.

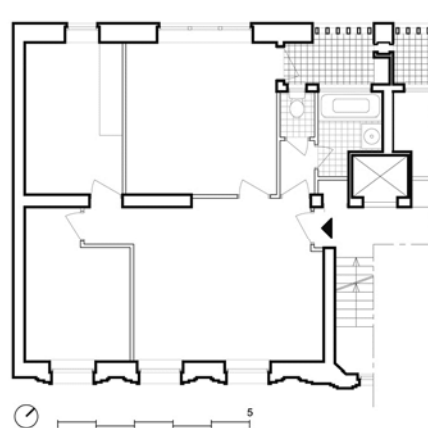
2_4_Relating to others, thresholds

A threshold allows and indicates at the same time the crossing of an enclosure. It is a break in the enclosure and it operates as a hinge between the inside and the outside. The position of others regarding one's *house* can indeed be recorded within the depth of the enclosure, whether one is coming in or going out of the *house*. Thresholds allow one to greet others. Architecturally speaking, the elemental artefact sustaining thresholds are doors and no longer windows as in the case of relations with exteriority.

A first observation pertains once again to the collective nature of our corpus. As mentioned above, two different enclosures are needed in this particular case, one defining collective spaces and the other one delineating private spaces. Therefore, two kinds of thresholds disrupting those enclosures take place between the private and public realm. This study focuses on private enclosures.

The break in the enclosure is experienced very differently from one building to another. The presence of a private entrance door is systematic but, from there, various artefacts are encountered that create together with the entrance door various sequences of thresholds. These sequences of artefacts enable inhabitants to welcome, slow or prevent the physical or visual progression of a guest into their dwellings.

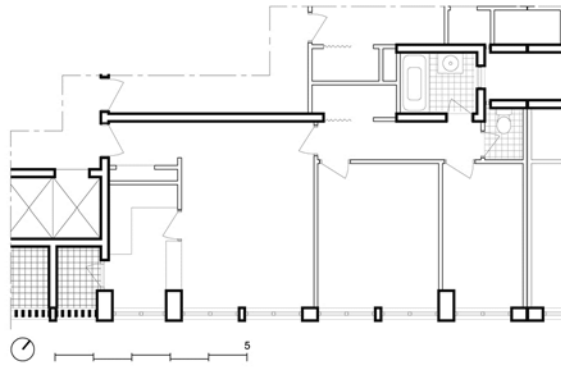
A first series of buildings show no sign of transition apart from the entrance door itself. Once the entrance door is open, the dwelling opens up bluntly to the exterior. Yet, in this particular case, it never directly opens up to the public realm but rather to collective spaces: landings. In addition, it usually opens into the lesser private space of the dwelling, the living and dining rooms. This category of apartments is rather rare in our corpus but was quite common in pre-World War I public housing¹⁷.



Rue de la philanthropie, Arch. Van Nueten

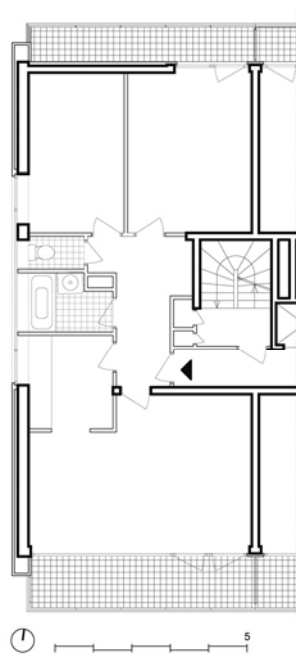
¹⁷ Cité Reine Astrid, Arch. Hellemans; Ilot Louvain, Arch. Unknown; Cité Melckmans, Arch. Brunfaut...

To offset this bluntness, a second series of buildings present a genuine transition space - vestibule - yet without any *sas*, or "double door entrance"¹⁸. Sometimes, a level difference¹⁹ is added enhancing the level of privacy within the *house*. In this latter case, no direct view is permitted into the dwelling.

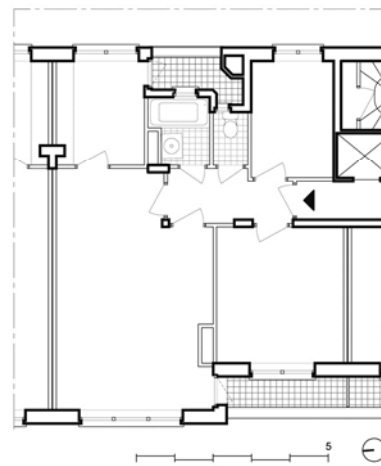


Rue des potiers, Arch. Structures

All other typologies display a proper vestibule with double doors. Yet again major differences can be found, that create dissimilar *relational potentials*.



Parc du Peterbos 7, Arch. Boelens - Wasterlain



Avenue de Roovere, Arch. Van Damme

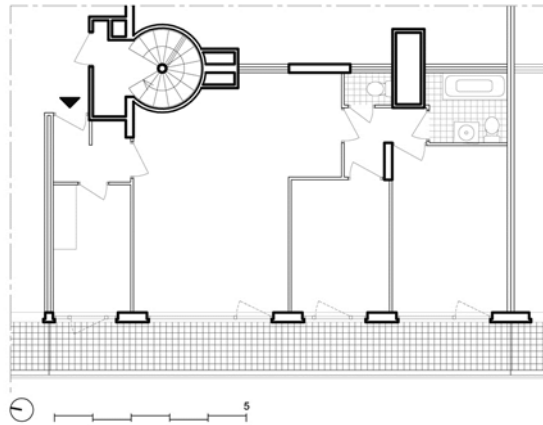
¹⁸ Along with being a social hinge, *sas* create a physical buffer between the exterior and interior climates.

¹⁹ Avenue Cicéron, Arch. Vander Meeren; Peterbos 6, Arch. Structures.

The major distinction that can be made is whether or not this hallway serves other functions than the public or semi-public rooms (living and dining room, kitchen, public toilet ...)

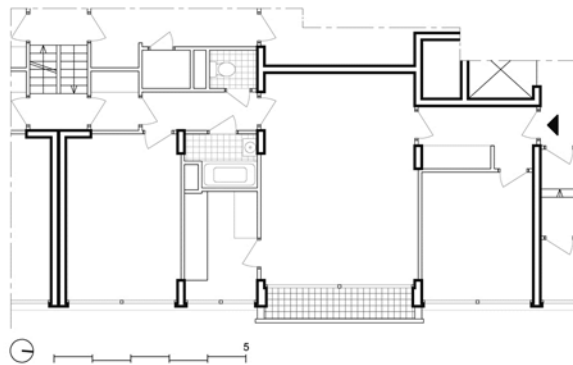
A third category of buildings feature a single hallway serving all the apartment rooms. In this case, a secondary distinction can be made on the basis of the natural circulation leading from the entrance door to the living room. In some cases, guests move directly to the public spaces of the apartments. In other cases however, they need to walk by the more private rooms of the apartment (bed- and bathrooms), creating the potential for unwelcome encounters.

A clearer distinction is perceived in a last category of buildings where one can find two separate hallways. In this scheme, the entrance sequence gives access only to public and semi-public spaces.



Parc Albert, Arch. Groupe Urbanisme

A noticeable exception is displayed in some buildings, when a single bedroom is located next to the entrance hall. While this creates a less welcoming potential, it allows a greater autonomy within the apartment.



Rue des fleuristes, Arch. Huyghebaert - van der Looven

To conclude, three elements tend to disturb this general classification of housing thresholds. The first one is sight. The question of greeting others inside our *house* raises the issue of what is made available to one's sight. On this matter, the positioning of the dwelling's physical components is essential, offering views deep into intimate spaces or instead blocking them out. The second feature is the position of the lavatory. This down to earth issue is essential when receiving people inside one's *house*. Indeed, when there is only one lavatory in an apartment, its position is strategic. If it is placed in the entrance hall, separated from the bedrooms, it might mean children crossing the living room in the middle of the evening, possibly encountering their parents' guests. On the contrary, positioning lavatories in the private antechamber of the bedrooms would allow a guest to enter an intimate zone. More critically, in some cases²⁰, lavatories are only accessed through a bedroom, diminishing its private character regarding guests. Finally, the size of the vestibule itself can dictate how inhabitants behave towards their guests. While some vestibules are large enough for a social gathering, some are no wider than the entrance door. In this latter case, they are not meant for two people to stand, let alone interact with one another. It forces inhabitants to either let their guest directly into their living room or greet them on the exterior collective landing.

2_5_Relating to others, inside

Once someone is let inside the enclosure of the *house*, various artefactual features are set forth to engage in or duck social interaction. To organise relationships, differential zones are created within the dwelling. The physical or visual access to those zones depends on the connection between the inhabitants and their guest and the nature of their interaction. Within the dwelling, three kinds of natural social relations can take place, depending on the connection between the persons. Edward T. Hall²¹ refers to four kinds of possible connections: intimate, personal, social and public. Public interaction is consciously left aside in this case study since it would imply intruding into one's *house*. Social interactions can occur in what Henri Raymond²² calls the public rooms (dining and living rooms). It allows social meetings. Personal interaction – family and close friends – occurs at yet another level, the semi-public rooms. Finally, intimate interaction occurs in the private spaces. Establishing a relationship with others depends essentially on the definition and organisation of those spaces against each other. In architectural terms, those relationships are defined as plan composition. It enables (or not) one to choose to engage in a specific (intimate – personal – social) relationship with others or instead, retire to one's own space.

An essential feature of the studied corpus is its functional defining of space. Each room is designed in terms of size, light and layout in order to fulfil a

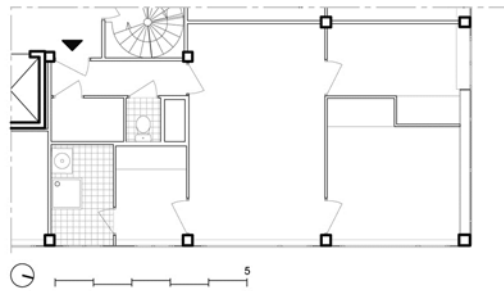
²⁰ Rue Haute, bloc 4, Arch. Van Nueten.

²¹ HALL, E. T. 1966. *The Hidden Dimension*, Anchor Books Editions.

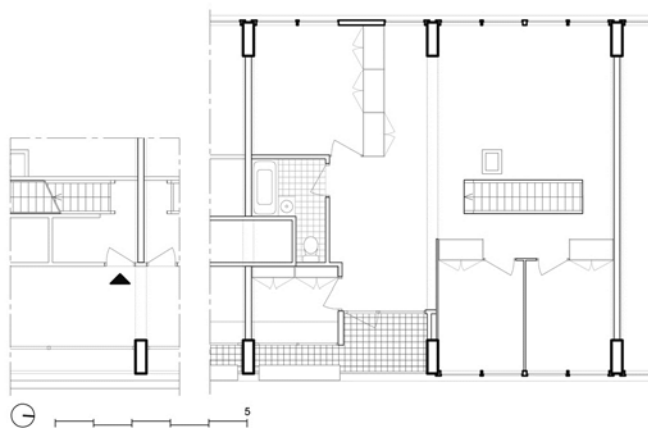
²² HAUMONT, N. & RAYMOND, H. 1971. *L'habitat pavillonnaire*, Paris, Centre de recherche d'urbanisme.

specific function. This approach goes counter to what was designed a couple of decades earlier, when all the major rooms were multi-functional²³. The functional definition of the rooms has a dramatic effect on the definition of the character of space. Indeed, they can no longer be interchangeable, since a bedroom cannot be turned into a living room and vice versa²⁴. Once again, various typologies are encountered, bringing to light very distinct *relational potentials*.

In a first series of buildings, there is barely anything separating the public rooms from the most private ones. They are only separated by a single door²⁵. In some cases, not only is this division very thin, but in addition, the main constituents (sleep/wash) of the private zone are split in two different parts of the apartment. Inhabitants need to cross the public zone when going from their bedroom to the bathroom.



Rue Brunfaut, Arch. Roggen



Avenue Ciceron, Arch. Vander Meeren

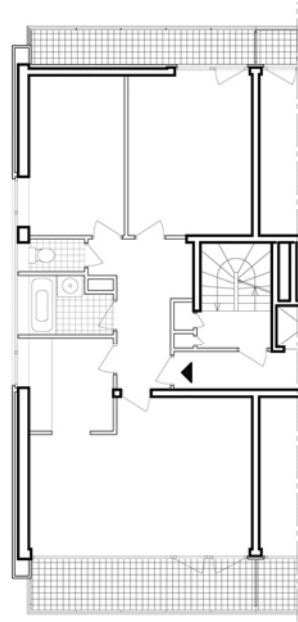
²³ The traditional 19th century row house is arranged that way, but also early 20th century collective housing such as Cité de l'Olivier, Arch. Jacobs.

²⁴ LEDENT, G. & MASSON, O. 2011. Model versus Type, the Shift of Modernism. In: DAKAM (ed.) *Theory for the Sake of Theory*. Istanbul: Dakam.

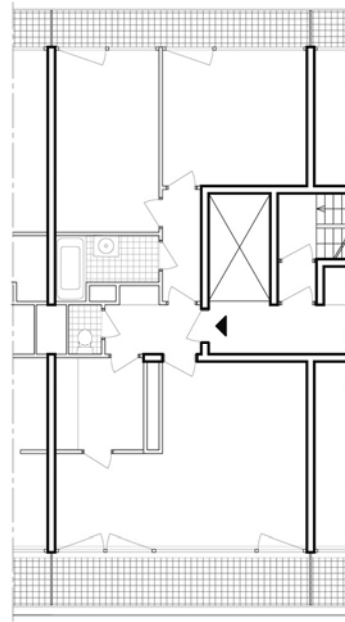
²⁵ In this respect, Le Corbusier goes even further. He does not physically close off the parents' bedroom from the living room in the *Unité d'Habitation* of Marseille, producing visual and acoustic conflicts between the two spaces. In this way, he suggests that parents have no intimate life, hidden from the rest of the family.

Yet, within this category, while some layouts are very blunt regarding the relation between private and public zones, some actually provide well-thought out transitional spaces (space contractions, indirect views...) to soften the transition between the two kinds of spaces. All the other typologies display a genuine night hall, buffering the bedrooms from the rest of the apartment.

A second series of buildings displays a shared entrance vestibule serving at the same time the public and private spaces. Sometimes, a door separates the entrance foyer from the night hall, enhancing the privacy of the bedroom zone.

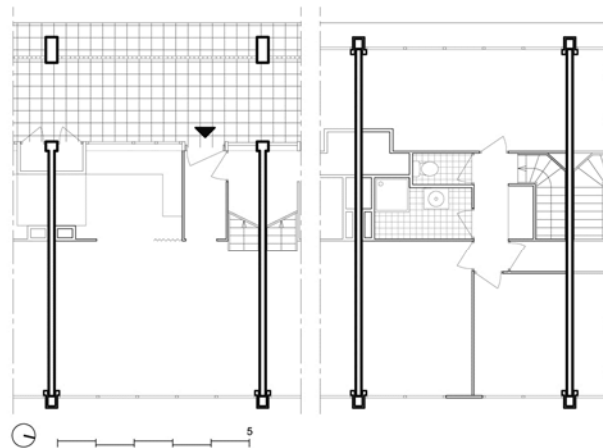


Parc du Peterbos 7, Arch. Boelens - Wasterlain



Rue Ghandi, Arch. Van den Houte

A third category makes a clear spatial distinction between the entrance vestibule and the night hall. In this case, the latter is usually accessed through the living room. A further refinement occurs in some cases, when a change of level reinforces the buffer of the night hall. It provides inhabitants with a genuine sense of retreat from the public spaces. The staircase recalls the experience of the Brussels individual row houses where the bedrooms are traditionally situated on the upper floors.



Rue de l'améthyste, Arch. Braem

To conclude, one can note the importance of separating public and intimate zones. It is a standard that can be verified in every plan composition. Separating public and intimate zones needs to be acknowledged in order to secure a healthy relation with others. Moreover, passing from one zone to the other must be settled in such a way as to avoid unwanted meetings. Once again transitional spaces are essential. Finally the issue of intimacy can be raised within a zone itself. Indeed, it is not obvious that the children and parents' bedrooms should be adjacent. A few cases show how this unwanted proximity could be eluded, giving the rooms greater autonomy²⁶.

3_Conclusion

3_1_Appropriation

A series of *relational potentials* have been proposed, allowing the inhabitant to interact with others according to those others' topological position. Yet, once an enclosure has been defined, each inhabitant needs to acknowledge and expose the bounded space as his own in order for social interactions to take place effectively. Any enclosure thus requires appropriation as a key element to ensure the marking of one's own place. Appropriation can occur on each and every topological position that has been previously presented.

Regarding relations with the exterior, architectural artefacts can secure the marking out of a specific position. Those artefacts help defining a specific position with (arranging flower pots...) or without (distinctive or protruding façade elements...) the inhabitant's intervention. Yet, as mentioned regarding collective housing, individual appropriation can be hindered by the collective nature of the building and the façade.

With regards to thresholds, several architectural markers contribute to define the particular character of the break in the enclosure. Once again, physical

²⁶ Avenue Cicéron, Arch. Vander Meeren; Rue des fleuristes, Arch. Van Der Looven.

elements vary, either enabling inhabitants to mark the threshold themselves (plants, light furniture...) or to do so beforehand (individual porches, doorbells, doormats ...). It provides guests with information on the tenant of the housing enclosure they are about to go across.

Finally, interior layouts can arrange very different potentials for appropriation. As mentioned, the majority of our corpus' buildings present functional apartments, that is: with rooms dedicated to a sole function. In this case, inhabitants are forced to use rooms according to their dedicated function unless they invest in an expensive remodelling of their living space. Within the rooms themselves, furnishing plays a major role allowing either a wide range of options or just a unique arrangement. In this regard, earlier plan compositions in Brussels allowed a greater variety of appropriations. Modernism favours modularity, but it is seldom effective. Indeed, there is always a price for moving interior walls however light they might be. Instead of modularity, earlier schemes, found in the traditional 19th century urban house or public housing of the turn of the century, provided flexible rooms. In such layouts, all major rooms are of approximately the same size. This flexible layout is particularly interesting and inspiring as it allows differential allocations but also social and technical evolutions in time.

3_2_ Four Operations

Through this analysis, the *relational potentials* of housing brought to light give us a better understanding of the dwelling interactions they cater for. Within the studied artefacts, the prime physical means is the enclosure, the physical isolation of a territory. The enclosure generates a distinctive domain - a place - for the human subject. In doing so, architecture differentiates one human subject from others. But also, it gives him the choice to interact with others or ignore them. Relating with others can only occur once this primal difference is made. Physically speaking, enclosure provides humans with this difference.

Once this main limit - the prime *relational potential* - has established a sense of place, others can physically take three distinctive positions. *Relational potentials* have been highlighted within those three positions. They support diverse social interactions. The simplest form of those interactions are the necessary and sufficient conditions for one to establish a sense of home, that is to dwell, socially speaking.

The first kind of *relational potential* has just been mentioned. It is the physical potential of appropriation, namely: how architecture provides or enables individual marking. It allows inhabitants to master the space which they have been allotted. It gives them a sense of owning a place.

The second potential is articulation. Articulation is provided by physical elements to let oneself be seen or not by others. Dwelling can thus become the intimate place of secrets. Articulation allows concealment and restraint. It provides humans with a way of receiving others (with all senses).

The third potential is representation. Architecture is inevitably the bearer of a specific image. Moreover, it provides inhabitants with a specific position

towards others. This position can be common, exceptional, depreciated... Whatever position is granted, it will affect and drive the relations with others.

3_3_ From shelter to dwelling

*'Spatial relations are not only determining conditions of relationships among people, but are also symbolic of those relationships.'*²⁷ Through the study of artefacts, *relational potentials* enabled by housing permit an understanding of the social interactions needed to create a sense of *home*. Yet, housing needs to remain a potential and not an obligation as enforced social relations are contradictory by nature.

Eventually, *relational potentials* help understanding which features are essential and operative for *house* to overcome its plain meaning of shelter and become *dwelling*.

References

- BARTHES, R. 2002. *Comment vivre ensemble?*, Seuil.
- DE CERTEAU, M., GIARD, L. & MAYOL, P. 1994. *L'invention du quotidien. Habiter, Cuisiner*, Saint-Amand, Gallimard.
- ELDEN, S., KOFMAN, E. & LEBAS, E. 2006. *Henri Lefebvre: Key Writings*, Bloomsbury.
- GRAFMEYER, Y. & JOSEPH, I. 1979. *L'école de Chicago: naissance de l'écologie urbaine*, Malesherbes, Flammarion.
- HALL, E. T. 1966. *The Hidden Dimension*, Anchor Books Editions.
- HAUMONT, N. & RAYMOND, H. 1971. *L'habitat pavillonnaire*, Paris, Centre de recherche d'urbanisme.
- HAUMONT, N. & RAYMOND, H. 1972. *Habitat et pratique de l'espace: étude des relations entre l'intérieur et l'extérieur du logement*, s. n.
- HEIDEGGER, M. 1971. *Poetry, Language, Thought*, Toronto, Harper & Row.
- HEYMANS, V. 1998. *Les dimensions de l'ordinaire: la maison particulière entre mitoyens à Bruxelles*, L'Harmattan.
- LEDENT, G. & MASSON, O. 2011. Model versus Type, the Shift of Modernism. In: DAKAM (ed.) *Theory for the Sake of Theory*. Istanbul: Dakam.
- LEDENT, G. & MASSON, O. 2012. Living Utopia – Leaving Utopia
Brussels: Modernist Urban Forms Evaluated against Pre-Existing Row Houses.
Cities in Transformation - Research & Design. Milan: Politecnico di Milano.
- LEFEBVRE, H. 2000. *La production de l'espace*, Mayenne, Anthropos.
- LUSSAULT, M. 2007. *L'homme spatial: la construction sociale de l'espace humain*, Condé-sur-Noireau, Seuil.
- LEROI-GOURHAN, H. 1965. *Le geste et la parole*, Paris, A. Michel.
- PAUL-LÉVY, F. & SEGAUD, M. 1983. *Anthropologie de l'espace*, Poitiers, Centre Georges Pompidou, Centre de création industrielle.
- RAPOPORT, A. 1969. *House form and culture*, Englewood Cliff, Prentice-Hall.

²⁷ Georg Simmel, author's translation, from GRAFMEYER, Y. & JOSEPH, I. 1979. *L'école de Chicago: naissance de l'écologie urbaine*, Malesherbes, Flammarion. p.53

- RAYMOND, H. 1984. *L'architecture, les aventures spatiales de la raison*, Centre Georges Pompidou, Centre de création industrielle.
- SERFATY-GARZON, P. 1985. Expérience et pratiques de la maison. *Home Environment. Human Behavior and Environment. Advances in Theory and Research.*, 8, 65-86.
- SIMMEL, G. 2007. *Les grandes villes et la vie de l'esprit*, Paris, L'Herne.
- WAJCMAN, G. 2004. *Fenêtre. Chroniques du regard et de l'intime*, Lonrai, Verdier.
- WEBER, M. 1921/1968. *Economy and Society*, New York, Bedminster Press.