Isn't the New City Everywhere? Explorations for a Methodology of the Contemporary Urban Spatial Experience

ALEXANDER D'HOOGHE
Katholieke Universiteit Leuven

The mystery of the world is the visible, not the invisible
— Oscar Wilde

A RESEARCH OF THE KUNSTBERG (BRUSSELS): NEW CITY AND OLD CITY

New City versus Old City

The dialectical opposition "New City versus Old City" is rich; it covers many layers. It seems necessary to describe two of its meanings a bit more accurately.

Ideologically, "New City versus Old City" comes down to "Planned City versus Ad-hoc City." This expression "New City' is a concept to purify and replace the unplanned, supposedly chaotic urban fabric (the Old City). Alberti's urban proposals during the Renaissance, as well as the Baroque transformation of Rome already reflect this notion of "New City". M. Berman introduces the idea of an "early modernity" to comprehend these interventions.[1]

On the other hand, one can read the opposition "New-Old" in the facts. "New" then signifies the urban realm of gated communities, hybrid containers, large-scale infrastructures etc, emerging today. "Old" is associated with historical city fragments such as the early 20th century city (modernity), the 19th century city (industrial revolution) and older/other, more vernacular urban. This text understands "New' and "Old" city in the latter sense. However, it assumes that one experiences the New City not only in the newly built urban realm. The logics of production not only influence the formation of contemporary spaces (Edge Cities, Instant Cities, etc). It also affects and transforms large fragments of an older societal and urban reality, as recent publications[2] suggest. "Globalization" and "Networking" transform meanings, uses/programs and physical form of the old city. This transformation displays the silhouette of a New City looming over the old one and radically altering its experience. Bsides calling it "Generic," is there any other understanding of its space possible?[3]

Case study: the Kunstberg (Brussels)

Historically the Kunstberg exemplifies Brussels' capital function. One discerns a clear edge between the city of the people (the actual inhabitants) and the city of powers (the administration, the representational space). In Brussels, a topographical discontinuity strengthens this edge: the city of the people lies in a valley (the Lower City) while the representational spaces of Belgian government, strategic enterprises and high-brow culture are on a hill (the Upper City). The slope between both is at a certain point called "Kunstberg."

The medieval lower part is considerably older than upper part. However, the Kunstberg contains some expansions of the upper city

Fig. 1. Aerial photograph with main functions of the Kunstberg (Brussels).

over the existing medieval city. One reads in this situation the opposition "New City" versus "Old City" in the first "ideological" sense. Shortly after the Second World War, speedways and underground railways demolished large sections of the lower city. "Belgian" programs filled the resulting void space. There are national headquarters (of airline, telephone company, banks and lottery), the Royal Library (1), an extension of the Royal Museum (2), a Congress Center (3), the Ravenstein Gallery (4) and "Train Station Central" (5) (see ill.1). However, typical of this operation is its non-completion. The Belgian government soon lost its momentum (due to internal conflicts of ideology and language); it never managed to fill the available space. Furthermore, the architecture of the inserted programs expresses goals so diverse that the buildings mutually destroy each other's intentions. Consequently, infrastructure and non-appropriated space, in which old and recent buildings appear as islands, dominate the slope.[4]

Today Belgian institutional power is fading. "Kunstberg" spaces represent a nation that is breaking down, selling its pieces to the highest bidder. The disintegration of Belgium is due to different aspects of **globalization**. It has been forced to redistribute many of its civic powers to the European Union on the one hand, and to its Regions namely Flanders and Wallonia on the other hand.[5] This process empties its symbols, such as the Royalty and cultural flag-carriers. Moreover, most of the previously nationalized enterprises, such as the Airline Company, the Telephone Company or the Belgian banks closely tied with the political establishment, have

space of representation   station space   techno-infrastructure space
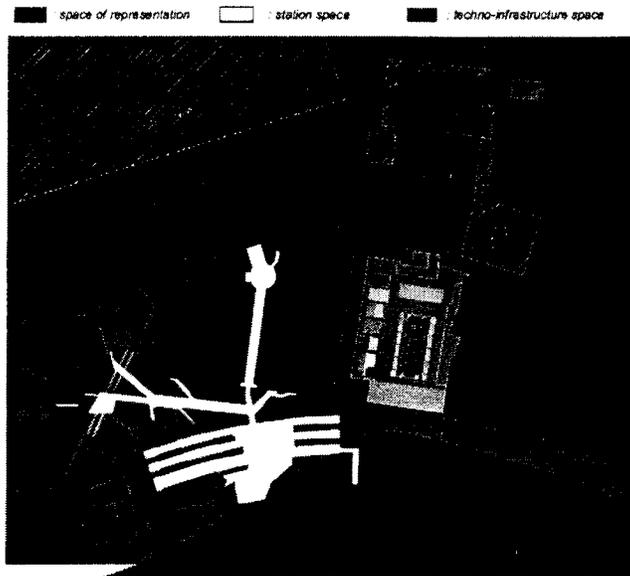
Fig. 2. First scan: Mapping of three settings at the Kunstberg (Brussels).

been privatized. This has implied their selling to larger multinational entities. Most of the programs mentioned had their headquarters at the Kunstberg until ten years ago. Globalization makes the Kunstberg suffer from an apparent loss of centrality. One reads in this situation the opposition "New City" versus "Old City" in the second "factual" sense.

When experiencing the Kunstberg today, its apparent non-intelligibility puzzles the urban observer.

Urban research methods no longer match urban reality

Experiencing the "New City" is highly confusing, and deploying traditional methods of urban analysis does not solve the problem. Not only has the panoramic overview of the city become impossible (Boyer[6], Pérez-Gómez[7]), but also the categories enabling us to understand the city may no longer provide satisfactory insights. The logic of, among others, the shopping-entertainment multiplex, the isolated office block, as well as the gated community or an urban no-go area, has invaded "traditional" urban fabric and seriously questions traditional notions of public/private and inside/outside. Therefore, a traditional method such as Giambattista Nolli"s figure-ground map[8] fails to uncover specificities of the contemporary urban field. Venturi's fascinating opening of a "space of signs"[9] supposedly complementing Nolli's' "space by mass," turns out to cover only particular aspects of the urban realm. A typological or morphological analysis (Krier, Rossi[10]...) fails to grasp the diffuse varieties of emerging urban landscapes. Urban versus rural, building versus infrastructure, public versus private, center versus periphery, street, building block: the apparatus for understanding the Industrializing European City seems to be increasingly non-applicable. In short, the categories of analysis no longer seem to match the categories of reality.

Instead of these categories, another set might emerge out of the current transformation with categories cutting crosswise through the existing ones. Recent research methods have tried to cope with this by enlarging the scope (Juel-Christiansen: views from the helicopter[11] and Boeri: satellite views[12]) and including the phenomenological (Boeri's cooperation with photographers, R. Bunschoten"s fieldwork[13]). Their results were very interesting (Boeri about larger morphological patterns) although sometimes abstract (Bunschoten, Juel-Christiansen: philosophical rather than spatial categories).

This research attempts to cope with the problem of categories by analyzing the contemporary urban **everyday experience**. From this

rather phenomenological viewpoint, one travels through the different layers of the city (history, form, semiotics, politics, etc) experiencing them all with an inevitable subjectivity. Christine Boyer quotes Henri Bergson who thus recognized two components of "experience," namely "perception" and "recollection."[14] After experiencing, one may trace factual "objective" evidence for the "subjective" experiences one went through. The "setting" (phase 1) may then serve as a tool to objectify the experience. For that, a setting map is necessary: the scene (phase 2). Juxtaposing actual urban settings the analysis may lead to alternative categories[15]: organizational metaphors (phase 3). When finished, it will try to display ways in which architecture (physical space) may influence or modify societal processes. Finally, it may lead to design tools capable of revealing "urban" experiences (modern, dialectical[16]) on the stage-set of the generic city.

EXPERIENTIAL ANALYSIS, PHASE 1: SETTINGS

Definition of "urban setting," derived from "urban experience"

The definition of the "urban setting" in which one, through participation, has an "urban experience," or "setting" as derived from "experience," is meant to replace more narrow "categories" such as site (physical), district (administrative), etc. If one can never live the same experience twice, abstraction into a setting may provide a way out: one can try to analyze a setting. *In this analysis, one considers the city as structured by experiences; one can understand these experiences by abstracting them into settings.*

The frame of a setting is often spatial (a square, a train station area, a speedway, a gallery...), but as a setting it encloses the people, uses/programs and meanings in that space.[17] It also encloses the meanings projected by others as well as by the researcher him/herself. Knowledge about a setting can be constructed by comparing it with other settings. One may call this "external differentiation." In R.Venturi, D.Scott-Brown and S.Izenour's analysis of Las Vegas, juxtaposing that setting with the 18th century Rome as analyzed by G.Nolli, has given them a strong comparative frame to understand some of the identities of Las Vegas. It is therefore a good example of the power of external differentiation and comparative urban research.

Similarly, closer investigation of the setting may reveal that one can read and interpret several "partial" settings within the first one (internal differentiation), since a setting is not defined in Cartesian scale — parameters.

Getting information

It takes fieldwork to construct the city of experiences. Frequent and long-term observations help to experience the "life" of urban fragments, more specifically the uses, programs and appropriations that relate to the architectural form.

The Situationist Movement (Jorn, Debord) has developed fieldwork. Especially the use of "drift" was important, because "... *Cutting freely across urban space, [situations, ed.] drifters would gain a revolutionary perception of the city, a rational disordering of the senses ...."*[18] Elements from this Situationist drift may serve as fieldwork technique.

In a first session, the analogy and difference between experiences enabled one to identify some primary "experiential" entities (settings) at the Kunstberg setting. Three settings were mapped (see ill.2). First, there are spaces of representation with a geometrical layout and uniform architecture. Second, large parts of the open space have become infrastructure network-space predominantly used by cars; these spaces often have curves and are mostly asphalted. Finally, the underground network of pedestrian corridors linked to the Central Station has expanded and transformed parts of the outdoor space and the Ravenstein gallery.

SPACING: LAYERING   ZOOMING
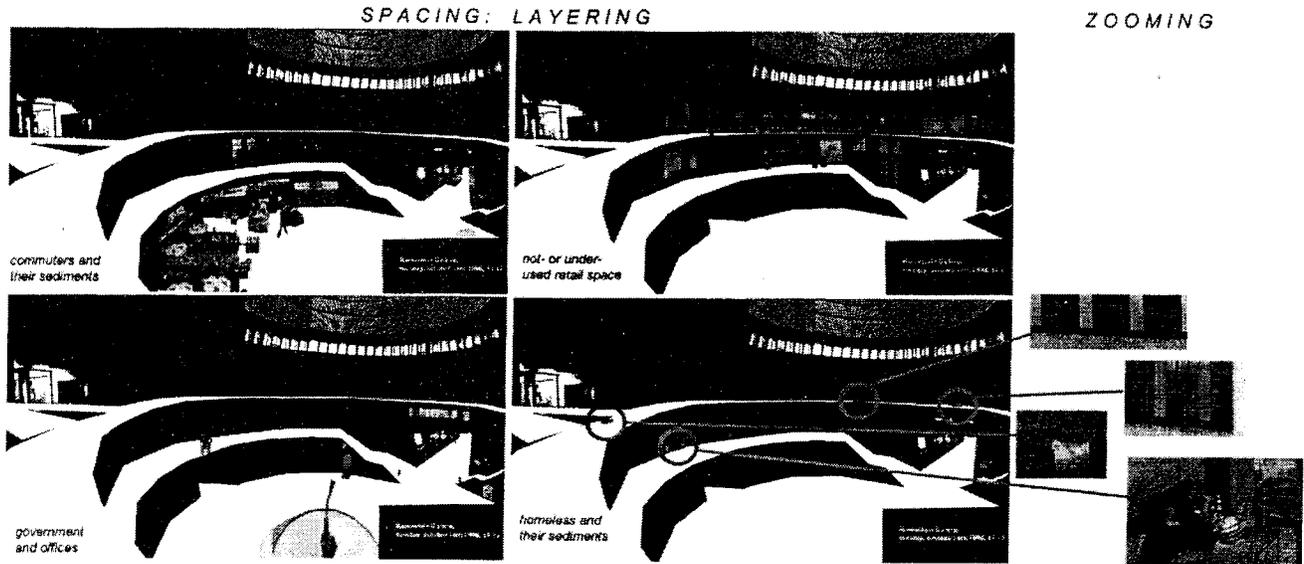

Fig. 3. The Ravenstein Gallery scene. Processes of Spacing (Layering) and Zooming.
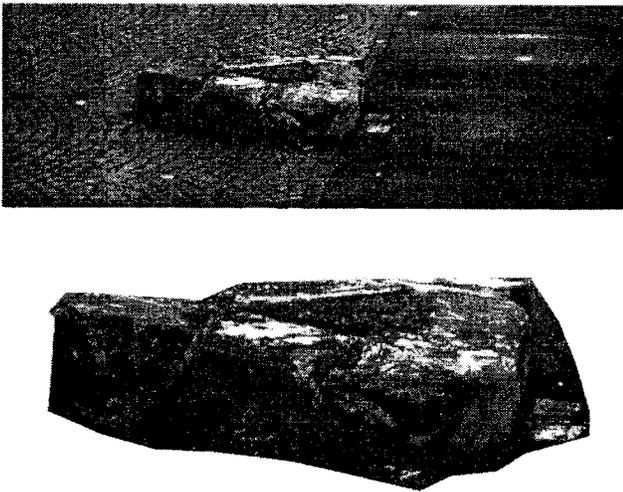
Fig. 4. A spaced emblematic fragment: traffic conductor archeology.

Fig. 5. Potential futures for the Administration Center.

EXPERIENTIAL ANALYSIS, PHASE 2: SCENES

How a scene relates to a setting

A second scan provided further insight in the behavioral patterns, uses, programs and meanings at the Kunstberg. We discovered the presence of commuters, tourists, Congress visitors and library users. In addition, break-dancers, skate-boarders, homeless (clochards) and drug-dealers use the Kunstberg's public space, often in a more "permanent" or "resident" way than the groups mentioned first.

When trying to understand the interaction of physical space with these uses, the information package grows so large that mapping becomes a problem. Therefore, an alternative photographic device called "SCENE" was developed. Scenes are panoramic fish-eye perspectives recording all perceptible things in the setting during a single, indivisible time-moment. They enable a tracing of uses, programs, semiotics, temporary artifacts (for example homeless" shelters) etc. For each of the setting categories discovered in phase I namely representation, techno-infrastructure and station, one or
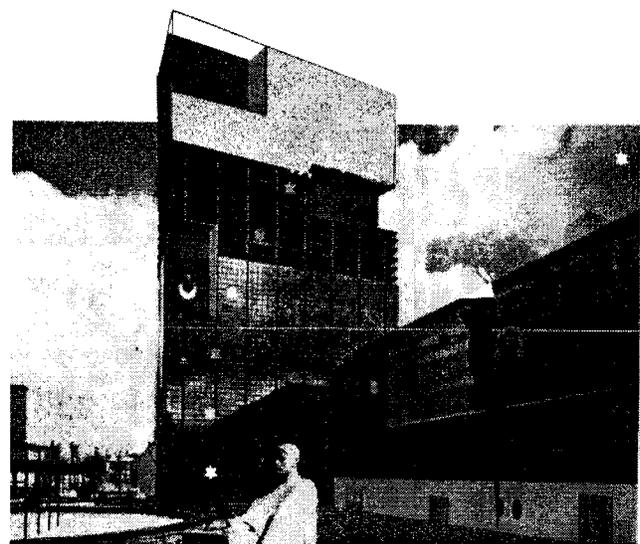
more scenes were made. The Scenes have allowed for exploration in three different ways, namely "Zooming," "Spacing," and "Speculating."

Zooming, Spacing, Speculating

Using high-resolution photographs in the scene construction makes it possible to store huge amounts of information. In the Ravenstein Gallery Scene (ill.3), some homeless and their temporary architectures, invisible at first sight, are perceptible by zooming in.

A comparison of the "Scene" with the 19th century urban panorama, as described by Boyer and Pérez-Gómez, may illustrate its meaning. Both authors argue that on the one hand, the popular desire of the late 19th century urban citizens to regain an overview of their expanding city caused that the success of the 19th-century panorama. On the other hand, they claim that its success also had to do with the disappearance of certain aspects of that city: the panorama decently concealed dark and undesired images, so as not to
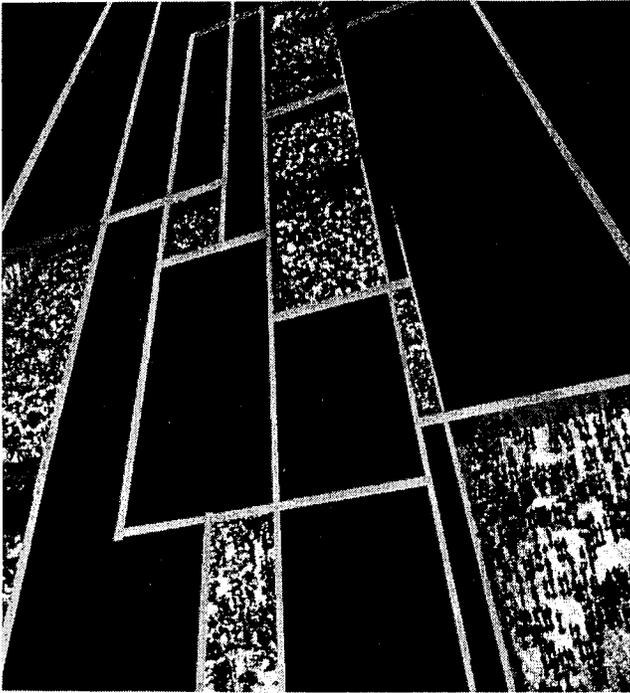
Fig. 6. Superposition of a grid of walls on the beach: the multiplication effect.

upset the bourgeois spectator. In both ways, one can interpret the scene as **inverted panorama**: it does not pretend to show an overview, on the contrary, it displays an unmistakable subjectivity (the choice of viewpoint, the moment of the snapshot). Neither does it try to hide specific aspects; on the contrary, the merciless zoom instrument shows things that remained unseen during the fieldwork itself.

One can also omit parts of the scene to isolate specific pieces. R.Krauss calls this isolation **"Spacing"** and she states that in surrealist and Dadaist photography,[19] it radically alters the nature of the photograph. Instead of a depiction of reality, the isolated objects suddenly become *signifiers*. They become constructions. "Spacing makes it clear... that we are not looking at reality, but at the world infested by interpretation or signification, which is to say, reality distended by the gaps or blanks which are the formal precondition of the sign."[20] Through spacing, one may find objects that contain in themselves the major layers of that setting's evolution. Spacing allows the discovery of different and even contradictory meanings in one physical object.

By now one such **emblematic fragment** was discovered in a representation setting (see phase 1), namely the "Koningsplein." This is a classicist square today dominated by car traffic. The fragment (ill. 4) is a more than 30 years old traffic conductor, today still organizing car and pedestrian flows. Its derelict situation contradicts the historical role of the Kunstberg as nodal point in the Brussels traffic artery and the meaning of that square as a major representational "Belgian" space. The picture summarizes quite accurately the Koningsplein"s actual meaning in Brussels/Belgium: it looks like an archeological relic.

Spacing multiple parts of a scene allows **layering** that scene. After isolating the pieces of the Gallery scene, it is possible to group them: commuters and their economy (shops, cafés), homeless and their sediments, government and offices, and parts of the space that are under-used or used in a reverse way. This provides a link between the predominant use of the Gallery and its general layout. The two upper floors are the least used by commuters while the ground level is the most used. Consequently, the retail spaces at levels one and two are under-used and the passages contain homeless" shelters (watching and being watched, yet not exposed).
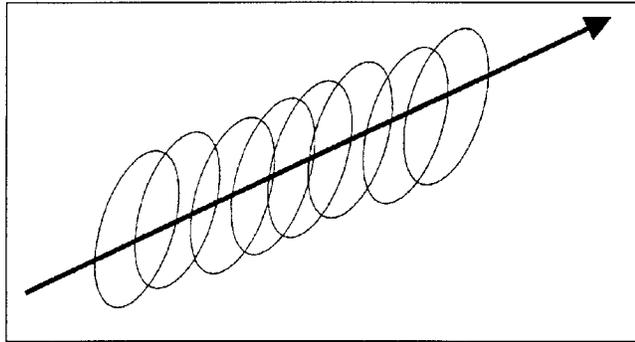

Fig. 7. The electro-mechanical Solenoid model.

Finally, instead of omitting parts of a scene one can add pieces: *Speculating*. One then makes collages to display layers of meaning that are not obviously visible, but that are potentially there. The representational squares of the Kunstberg are used not only as transit space for tourists or office clerks. Also other communities use some of this space as resident space: skaters, skate-boarders, drug-dealers, clochards...Their space can not be considered as part of the "representational space" of the Belgian government. Illustration 5 shows a transformation of one of these representation settings, namely the "Administration Center." It depicts a possible appropriation of these spaces of representation, not by any Belgian identity, but by other communities present in Brussels; one may discover the flags of Europe, Morocco and Turkey.

EXPERIENTIAL ANALYSIS, PHASE 3: ORGANIZATIONAL METAPHORS (OMS)

"Organizational metaphors" try to extract and denominate a concept of organization out of each scene. It should describe the interaction of architecture with the programs and uses in it.[21] Since this implies combining architectural thought with socio-cultural and anthropological thought, there was a problem concerning vocabularies. Lefebvre pointed out in *La révolution urbaine* that every discipline, when analyzing the city, only analyzes the piece that seems relevant for the discipline itself. He states that this makes it rather difficult to understand the "urban phenomenon" as such, because the disciplines (architecture, sociology, psychology, anthropology, economy, politics and urbanism) all develop their own language. The difference between these languages makes it improbable to construct a more comprehensive theory of the city. For that reason, a language of metaphors, as containers acquiring meaning in the intersubjective and interdisciplinary, may be helpful.

General OMs

Two sorts of metaphors can be distinguished: general metaphors and setting-bound metaphors. A general metaphor example may be the *"multiplication effect."* It means that architecture organizes the activities of people in such a way that the participants (internal) and observers (external) start recognizing that space as an entity, characterized by interaction of architecture and activities (and recollections). Recognition leads to denomination. Once participants and observers have a name for a setting, this will influence their behavior. If the denomination is positive, the setting may attract alike activities, enhancing its recognition etc... Bunschoten calls this process of mutual reinforcement "urban icon."

Exactly the recognition of this situation at the Kunstberg is problematic (see conlusions). An example of a densely crowded environment is needed. Take for instance a beach full of people (ill.6). Suppose one superposes a grid of walls (with small openings for passage) on that beach. The mass of people, at first dispersed will start to reconfigure: some quadrants will empty, others like the one

all layers

commuter sediments

moving cars

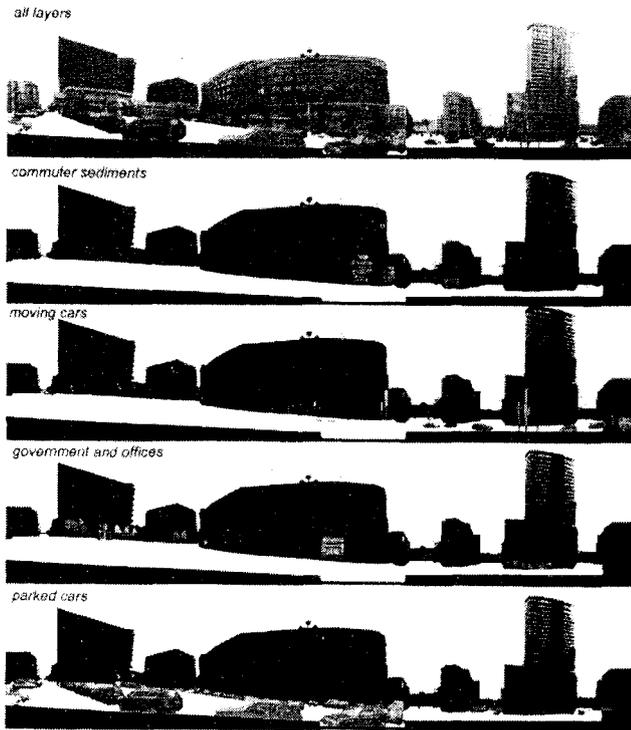government and offices

parked cars

Fig. 8. Scene of Clotting.

that contains an ice-cream stand, or the one on the actual waterline, or the one with many building entrances, will fill. The re-appropriation of the grid beach has begun. The process of denomination interacts with the movements of people choosing rectangles. After a while, some rectangles will be deserted, while others will be congested. In the latter, the *multiplication* effect has taken place.

Extracting setting-bound OMs

The Gallery scene analysis revealed a link between the daily trajectory of the commuters, mainly on the first floor, and the Gallery's layout (see: "layering"). Most shops at the second and third level are empty or under-used; some homeless find shelter in the corridor. The whole gallery, conceived as *un cadre élégant et luxueux dans le quartier des affaires* (an elegant and luxurious setting in the central business district) has thus been drastically transformed.

The "**solenoid**" metaphor summarizes the Gallery's transformation (ill.7). The solenoid is an electro-mechanical system: if there is magnetic power, then electric power will spiral around it, and the other way around. FOA-architects first proposed this notion when describing the intended organization of their competition project for the Yokohama Pier. Here the solenoid- metaphor presumes that if the spatial layout is somehow enclosing, the flow may acquire a certain density. From that point spin-off activities such as publicity and consumption start to enliven the flow (in the Gallery scene: the commuter economy). This is an actual interpretation of the multiplication effect. However, in the Gallery setting, this notion is in fact problematic. A weak solenoid prevents the Gallery to empty completely, as the two upper levels show. One can think of many quite different examples of good-working solenoids.

Illustration 8 depicts a scene belonging to the techno-infrastructure setting (see phase 1). One discerns a void space between freestanding buildings, mostly covered with asphalted roads. However, it turns out not to be a space were many automobiles are passing by. On the contrary, the flow of cars is low, compared to the size of the space. There are many cars, but most of them are actually parked

there during the office hours. The flow has come to a standstill.

We propose "**Clotting**" as a metaphor for this setting. This clotting is remarkable because the place was conceived for motion. The pedestrian flows are absent in this scene because they are all underground; above ground they would supposedly have been interfering too much with the traffic that today is absent. The road has become a parking lot. It becomes slightly active only in the morning and the evening, when the cars are arriving and leaving.

"Clotting" is quite opposed to the "solenoid." It is one of the least intensive ways to use a space which, through another previous destination (intensive car-flows) is not equipped to resuscitate urban potential (all pedestrians underground).

"**Cross-wise interruption**" describes the crossing of a pedestrian flow with an automobile flow, hindering and slowing each other. This interruption causes friction but also attracting urban advertisements and announcements. "**Theater of juxtapositions**" describes a square in front of the Royal Library, where different activities take place, without much interference. Homeless, skaters, drug-dealers, commuters and Congress- and library visitors use the same square, but each of the groups defines its own territory, and interaction seldom takes place. "**Diffusion**" describes the way in which larger programs attract smaller spin-off programs. Some programs have this spin-off generated outside their perimeter, diffused in the immediate urban surroundings. The former Sabena Headquarters building attracted many travel agencies in the neighborhood. Other programs, such as the Congress Center keep most spin-off activities in their own architectural container.

CONCLUSIONS

The weakening of Belgian institutional power and the emerging of "other" appropriations of the representational space confirms the loss of centrality of the Kunstberg due to globalization. However, not only the representational spaces have changed, but also the traffic boulevards have not been capable of supporting actual urban life. At certain points, they are no longer boulevards, just parking lots. Finally, the Station space has been transformed from a prestigious traffic terminal to a less rich space with several marginal activities such as (hidden) prostitution, and cheap bars, hosting clochards and drug-dealers. This transformation has gone hand in hand with an expansion: some of the boulevards and the nearby Ravenstein shopping Gallery now seamlessly connect with the station space and share its characteristics.

Nonetheless, there is something bizarre about this transformation. The Kunstberg never really worked according to its intentions, and even today, when the dominance of Belgian Civil Power is fading, other practices do not appropriate the space convincingly. The multiplication effect was never there and still is not there for any of the settings concerned. When comparing the Kunstberg to other parts of the city that could contain similar organizations, the Kunstberg distinguishes itself as a **space of division**. Often, several things which could be happening in the same space actually happen in several spaces, weakening and even destroying the inherent metropolitan character of the Kunstberg (for example the clotting with the pedestrians underneath). Currently, the spatial organization is fragmented. A further exploration of the ways of fragmentation may lead to suggestions for a design approach or a line of policy in this area.

Even if this research is not finished, an approach has been established. A more systematic making of "scenes" may result in a more refined set of "organizational metaphors." These may lead to a new "synthesis" of the Kunstberg, and suggest principles on which a design may rely.

Finally, the establishment of a more expanded set of "organizational metaphors," also derived from other urban fragments in other cities, may create another typology of space, not based upon formal pre-occupations, but on organizational logics.

Bruno De Meulder deserves gratitude for his historical study of the

Kunstberg. I also would like to thank Tom Avermaete for his contribution to this research.

NOTES

[1] Marshall Berman, *All That is Solid Melts Into Air* (New York: Simon and Schuster, 1982)

[2] as described by among others: Manuel Castells, *The Rise of the Network Society* (Oxford: Blackwell, 1996); David Harvey, *The Urbanization of Capital* (Baltimore: John Hopkins University, 1985); Saskia Sassen, *Cities in a World Economy* (Thousand Oaks, CA: Pine Forge / Sage Press, 1994); Frederic Jameson, "Postmodernism or the Cultural Logic of late Capitalism," *New Left Review* 146 (1985), pp. 53-92

[3] This paper is an intermediary result of an ongoing research at the Department of Architecture of the K.U.Leuven University, focusing on the experiential changes thus brought about in the existing city.

[4] Bruno De Meulder, *Analyse van de Kunstberg* ("Analysis of the Kunstberg") (Leuven, not published report 1997 for the King Boudewijn Foundation).

[5] Castells describes how "globalization" not only puts pressure on the nation-state to hand over powers to supra-national entities such as the European Union and large corporations. Growing tensions between richer and poorer regions, such as Flanders and Wallonia in Belgium threaten the nation-state from within. Manuel Castells, see footnote 2, ib.; Manuel Castells, *The Power of Identity* (Oxford: Blackwell, 1997); Manuel Castells, *End of Millennium* (Oxford: Blackwell, 1998).

[6] Christine Boyer, *The City of Collective Memory. Its Historical Imagery and Architectural Entertainments* (Cambridge, MA: MIT Press, 1994). According to Boyer, the 19th century panoramic overview has been replaced by an nevernending series of snapshots and screens without any apparent coherence.

[7] A.Peréz-Gómez, *Architectural Representation and the Perspective Hinge* (Cambridge, Ma. and London, England: MIT Press, 1998).

[8] Giambattista Nolli, Roma al tempo di Benedetto XIV. La pianta di Roma di Giambattista Nolli del 1748, in "Le piante maggiori di Roma dei sec. XVI e XVII, riprodotte in fototipia a cura della Biblioteca Vaticana 6". uitg. Biblioteca Apostolica Vaticana Citta del Vaticano, 1985.

[9] Robert Venturi, Denise Scott-Brown, Steven Izenour, *Learning from Las Vegas* (Cambridge, MA: MIT-press, 1972).

[10] Aldo Rossi, *The Architecture of the City* (Cambridge, MA: MIT Press, 1989).

[11] Carsten Juel-Christiansen, *Monument and Niche. The Architecture of the New City* (Copenhagen: Rhodos, 1985).

[12] Stefano Boeri, Arturo Lanzani, Edoardo Marini, *Il territorio che cambia, Ambienti paesaggi e Immagini delle regione milanese* (Italy: Abitare Cegesta Cataloghi, 1995) Stefano Boeri, Gabriele Basilico, Sezioni del paesaggio Italiano (Udine: Art&, 1997).

[13] Raoul Bunschoten, "Chora, institute of architecture and urbanism," 1995: (not published manuscript).

[14] p. 25 in (4), ib.

[15] R.Krauss introduces the difference between juxtapositional and sequential approach in the introductory essay of *The Originality of the Avant-Garde and other Modernist Myths*, in the field of theory and criticism of the Arts. She criticizes A.Greenberg, who tried to analyze "Painting" as an autonomous branch within the arts. When painters start producing not paintings but all sorts of "art", such as land art, "objets trouvés", text, painted animals, etc... their works exist beyond Greenberg's universe. He cannot explain them from the viewpoint of a (historic) sequential evolution in the "Painting" branch. Krauss states that another understanding of these pieces of art may be found in the juxtapositional approach. Then they acquire depth by comparing them mutually, not so much by comparing them with their (historic) sequential predecessors. She considers a belief in the autonomy of a sector (such as Painting), which makes a historic approach relevant, to be Modernist, while juxtapositional explorations would be Postmodernist.

[16] The archeology of meaning(s) of the notion "urban" is a huge undertaking. In this paper, there is only a rudimentary reference to Marshall Berman's connotation of "urban" with "modern" and Henri Lefebvre's interpretation of "urban" as "dialectical." M.Berman, *All That is Solid Melts Into Air* (New York: Simon and Schuster, 1982); H.Lefebvre, *La Révolution Urbaine* (Paris: Gallimard, 1970).

[17] The decomposition of an urban situation into physical form (1), uses / programs / appropriations (2) and meanings, stories, memories (3) is certainly not new. J.Habraken presents in *The Structure of the Ordinary* (Cambridge, MA: MIT Press, 1998) a similar decomposition.

[18] p.94 in S.Sadler, *The Situationist City* (Cambridge, MA: MIT Press, 1998).

[19] R.Krauss, "The photographic conditions of Surrealism," in *The Originality of the Avant-Gard and other Modernist Myths* (Cambridge, MA: MIT Press, 1985).

[20] p. 107 in (20), ib.

[21] Hilde Heynen and André Loeckx argue that architecture (physical form) can have three relations with society: it can function as receptacle, as instrument or as staging. Hilde Heynen, André Loeckx "Scenes of Ambivalence: Concluding Remarks on Architectural Patterns of Displacement," *Journal of Architectural Education* 52/2 (1998), pp. 100-108.