Open up the capsule...

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The contemporary interchange without evident typology or civic meaning

The title of this conference, "the urban form of mobility", indirectly addresses the fact that mobility—in general- doesn't create or isn't associated with urban form. On the whole, it is mostly viewed as a technical requirement, whose repercussions on urban form are either not acknowledged or not fully taken into account.

This situation makes one wonder why. In past eras, the figure ground of cities followed down from the sort of vehicle the urban society used for its transportation. Medieval society produced the market and the shopping street, and had cards and pedestrians intermingle. Modern society created the boulevard, with thoroughfares for cards and trams to link the major railway stations. Post-modern sub-urbanisation gave way to the commercial strip and the mall. It combined the sprawl generated by individual car use with the collective attraction of pedestrian gathering. Such evident typology or urban consideration is lacking with relation to the most emblematic traffic infrastructure of today: the interchange between different modes of transportation, These obvious places of 'new centrality' profit of a maximum accessibility however, and would seem destined to become the privileged loci of multi-focused development in the contemporary city.

All these points of interchange however, get to look alike. Whether we have to with airports (the interchanges between air, car and train traffic), railway stations (the interchanges between rail, car, pedestrian and bike traffic), or ship piers (the interchanges between sea, rail and car traffic); they all increasingly appear like shopping malls with diversified fast-food assortment. What it really means is that the most important places of today's centralized development are essentially characterized by their traffic performance and retail value. Hardly ever are they considered in terms of civic meaning.

In search of at least some design elements that might help us to readdress that civic value/connotation, I entitled this lecture: "Open up the capsule". Today, the capsule is indeed the prevailing attitude of addressing mobility in general, and conceiving interchanges between traffic modes in particular. For that reason, the only means of achieving urban form through this program is to break down this capsular thinking mode, and view mobility as part of a larger urban design.

Let me first try to explain why I use the term capsule, what meaning I give to the word and why we witness a seemingly unavoidable evolution towards capsular treatment. After that, I aim to show how one might attempt to break it down, release its content and use its civic potential to transform the surrounding piece of the city.

The obvious road towards encapsulation

In its literal sense, the capsule is a self-contained (and self-providing) unit, organized to render human inhabitation possible in an inhospitable environment. Of course, the "space capsule" is the archetype that emblematises this meaning. The airplane, the high-speed train,

or the passenger ship, are close to it, because the person using them is unable to get off while they are in motion. They also construct an artificial climate, provide for food and drink, and offer sleeping and sanitary equipment that allows the traveller to cover the preset distance with a certain comfort. By extension, the interchanges between these transportation modes are considered in a similar manner. They are conceived off as an apparatus in themselves, governed by norms, reasons, regulations of their own.

Control and security become more and more prevalent in all categories of passenger transhipment /interchange. In order to prevent terrorism (or simple vandalism), everyone that is not absolutely necessary gets to be excluded from the boarding platforms or voyager area in general. Besides the passengers, only personnel with security badges are allowed. Such imperative, which has been relatively common in airports for a while, is now systematically extended to cruise terminals and high-speed train stations. These safety regulations do not only affect the informal gathering, the casual chitchat and the habit of waving farewell. They also lead to condensing the extent of the boarding area as such. Ticketing on the other hand, is getting more and more decentralised, while check-in is being linked to security inspection at the entrance of the boarding area. All these evolutions clearly make space available in the extensive halls and meeting spaces that emblematised the civic meaning of former railway stations and ferry terminals.

It is precisely these spaces that are being commercialised and transformed for other purposes. In that sense, the stereotype solutions invigorated by flow or transhipment requirements no longer give way to the constituent form of the interchange facility. Even if the recurrent dimensions of train, plane, car, the persistent logics of ramps, platforms, fire regulations, construction and maintenance norms, or the standardized solutions of meeting the flow requirements, often lead to reoccurring design options, these generally become part of an overall inquiry for scenery and decorum. The monumental backdrop then, is primarily intended to highlight (and give character to) the commercial activity, to underline the quality of the historical heritage, or to stress the eminence of the eye-catching construction.

The so-called "privatisation" of public transport agencies (the railroad companies, airport and port authorities) has only augmented to the trend of exploiting the surplus value generated by infrastructure at its maximum level. For the company that provides the infrastructure, the real estate profits are of course an easy way to win back part of the initial investment. In view of balancing their budget (the most important challenge the so-called "privatisation" amounts to), these public transport companies therefore stimulate the rise of land value in any way they can. In the main, they lobby for maximum density and commercial attraction. Without shame, they play all the tricks: from political intimidation to promotional campaigns and design competitions, to have the new activities around the railway stations fit within the boundary of the railway company. Within this logic of speculative development, it helps to reduce the prevalence of the traffic function. The modal interchange is no longer dominant in the overall image of the station. Like the North American airport terminals, the important German railway stations are being transformed into vast shopping malls. Among all the shops and fast food restaurants, it becomes increasingly difficult to find the entry to the platforms. Any ambition of becoming part of the city or creating an urban form has gone. All remaining animosity gets concealed into the capsular entity, a mega structure with mixed program that tries to reproduce the city within a private compound. The most common way of development is thus reduced to bubble: A capsule with separate climate, lighting and security regulations, in the midst of a deprived area, downgraded and unsafe at its immediate borders.

Reversing the capsular treatment into urban form

So, the first step towards initiating an urban form of mobility implies the reversal of this capsular mode of inter-modal exchange. Using a medical analogy, we could say we need to give the chemist back his work again. In the pharmaceutical industry, the capsule is indeed used to swallow the medicine. It is meant to keep away the bad taste of the chemical substances inside. But it mostly serves to permit a full-control of the composition, and construct a standardized basis to allow industrial production. What I'm pleading for is to open up the capsule, spread its content on the table and see what is really inside. In most cases, we will notice that the composition is relatively trivial, and that it can be easily, and in a certain sense more effectively be produced with a prescription in a local drug store.

In other words, we need to study carefully how we can reduce the transport facility to its bare essential, in order to hand back to the city all the superfluous activities that the interchange has silently engulfed. Instead of having the airport or railway station constantly expanding into self-sustained compounds that abandon the real city to its ongoing deprivation, I plead for transforming and adapting the existing city, by means of creating the conditions to make it more of an airport or a railway station. In more concrete terms, this means that I would like to use the Sheratons, Novotels, etc. in order to re-qualify outworn districts, and install shuttle services to reach them, instead of having them mushroom in the non-descript areas around the airports.

It is the great merit of the Leuven Railway area project, to extend, from the very beginning, beyond the property of the railway as such. The overall concept addresses just as much the requalification of the peripheral area around the brewery site, as the traffic organisation at the verge of the historic town, as the public walk and the connection with the Administrative buildings of the Province and the Flemish Government. It combines the link between the suburb of Kessel-Lo and the central city with the passage under the rails, and identifies the new Station Square as the core of the new economic dynamism around it.

By keeping transport facilities reduced to their very essence, one succeeds in recovering the idea of exemplifying movement as the 'rational' basis of form. Not only can we "show" the movement, and make it apparent instead of hiding or masking it. But also can we achieve to have the idea of movement act as the backbone of the urban form, and particularize the specific character of the area by stressing the emblematic nature of the flow. So, when breaking up the capsule, the first stepping stone for a meaningful urban form is to recognize the main vocation that characterizes the area and address the multi-facetted flows to and fro the multi- modal interchange.

In the Leuven project, this objective appears on all scale levels. It emerges in the accentuation of the linear strip that stresses the tangent of the rail along the circular city. It is made visible in the Y-form of the triangular block north of the Station, which gives evidence to the new position of the service street. It shows in the incorporation of bus and train in one singular architectonic space, and in the large opening in the façade of the bus company building, that leads the trains visually into the station square. It materialises in the diagonal shift in the pavement of the square, in line with the prevalent flow towards the underpass. It is made evident by the showing the cars that cross the tunnel from the parking, and vice versa. It is finally demonstrated in the extrusion of the ramp that marks the pedestrians crossing the parking space.

Apart from highlighting the movement, spreading the capsule's content generally increases the transport amenity's specificity, merely by its successive interaction with the surrounding urban morphology. If the design takes place within the capsule, there is not much to go on, except traffic and flow requirements. This monotony of normative repetition is often masked by a sophisticated and stylish design of construction or furniture, with the ambition to escape the inherent anonymity of the buildings by the creation of a lavishing interior or the setting of an architectural sign. In many of these cases, high tech appeals to easy symbols and operates in the way of publicity rather than architecture.

If one opens up the capsule though, this urge of self-created singularity automatically disappears. Singularity then results from the immersion of all the various pieces of the program in the surrounding context. The multi-modal infrastructure then starts to resemble the chameleon: it takes on the colour (and by extension, the shape, form or texture) of the landscape it covers. In the case of road design, this formation of identity through the characteristics of the surrounding landscape is clear. The road as such is basically always the same. It only changes its form or appearance by the alteration of the territory it crosses. In fact, this observation is still valid for the design of air or rail infrastructure, even if the scale at which it operates is of course dependent on the speed with which one travels. When we regularly fly for instance, we start noticing that the form of the airport does not make the identity of landing places. Their particular character rather stems from the weird and wonderful texture of the lagoon's vegetation in the case of Venice, the constituent form of the bay in Boston, or the shape of the coast in Nice, or the gigantic greenhouses that light up like magical lanterns in the early morning close to Schiphol airport.

This idea of deducting urban form from its implantation or position with regard to topography and existing morphological features is certainly one of the major concerns of the Leuven project. It runs as a guiding principle through all scale levels of the design process. It appears in the global urban insertion as well as in the detail of the construction. Too many design elements refer to this objective to try and give an exhaustive enumeration. Just by way of example, one can mention: The choice for the underpass /overpass, marking the changing conditions of access from the natural level of the city along the longitudinal section. The proposed section of the infill along the Tiensevest, which enhances an awareness of the topography by its difference in inclination with the main artery road. The socle of the building for the Provincial administration, which materialises the different levels of the excavated rail tracks and the natural land. The distinction in length between the northern and southern ramp descending to the tunnel, which visualises the slope of the natural soil. The longitudinal inclination of the bus station's floor, in contrast with the horizontality of the overarching building or the platforms for the regional express trains. The stairs in front of the railway station, making the slight north south gradient of the square perceptible. The inclined ceiling of the southern tunnel ramp finally, which follows the natural section of the land and amplifies the effect of the tunnel mouth because it combines the heightening of the ceiling with the lowering of the road deck.

Identity does not only originate in accentuating topography. It is also linked to existing figure grounds, which can be put in evidence and made more easily understood by completing the internal coherence of their spatial aggregation. Likewise, new programmatic elements can be utilized to mark openings, create view-troughs, and define perspectives or panoramas. These insertions thus become recognisable landscape components of the new architectural scenery. Both the triangular block between Diestsevest and Vuurkruisenlaan, and the implantation of the administration building of "De Lijn", are clear examples of such completion. The first

articulates the differentiation between the 19^{th} century boulevard on the front and the new urban landscape of the 21^{st} century urban connector at the back. The second divides the former undetermined void in front of the Leuven rail station into three clearly defined subspaces that incorporate the urban fragments at their circumference.

The permeability of the proposed building front along Tiensevest on the other hand, is intended to make the historic city part of the panorama from the Bellevue Park at the side of Kessel-Lo. The transversal orientation of the landing platforms of the bus station then again, incorporates the perception of the housing front on the city side into the outlook from underneath the porticos along Diestsevest. The canopy over the bus station finally, combines great height and small depth to integrate the sky and the housing on the Kessel-Lo side in the roof enclosure.

By breaking down the capsule, one may therefore also break away from the habitual way of considering design of infrastructure. The exclusive impact of security norms, fire hazard and traffic regulations then indeed gets pushed back by the inevitable competition of requirements that spring from the need to optimise urban activities. The mere design of circulation flows gets to be balanced by design performances that relate to connections, continuities, articulations, views, sequences, enclosures, etc. Precisely by addressing these, the civic quality of the transportation or circulation space starts to emerge again.

To succeed in this mission, one has to be ready to investigate solutions that meet all the technical and security requirements, yet find a way to exceed the uni-dimensional approach of the norm. Only in this manner, may one hope to tackle the missing qualities that should make circulation and traffic spaces into the prime places of collective gathering today. If the Leuven project has one merit, it is to try and address this question, thus engaging in a multi-layered reflection on the meaning of public space today.