

ON CAPSULARITIES: PHYSICAL AND DIFFUSE ENVELOPES BETWEEN ACCESSIBILITY AND REPRESENTATION

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Envelopes are an important topic in the study of architecture and urbanism and have a profound impact on our daily lives. They form boundaries, edges, enclosures and joints with ecological, territorial and representational functions that have social, cultural, economic, technological, environmental and political significance. Referring to warnings about capsular civilisation, this paper promotes the metaphorically telling concept of capsularity, in order to overcome terminological inconsistency as a characteristic phenomenon that denotes enclosures at different scales. It includes both capsules as small-scale cellular units on an architectural or industrial design scale – referred to as units of individual capsularity – and extended structures and territorial enclosures as manifestations of collective capsularity. Furthermore, a typology of collective capsularity is proposed. While complete and permeable envelopes entail physical spatial demarcation, diffuse envelopes are based on a technological system of control and surveillance. However, diffuse envelopes also complement both complete envelopes and permeable envelopes, forming masked capsular hybrids. After contextualising the proposed typology according to accessibility and its representation, the ambivalences of collective capsularities are considered through the lens of three selected and distinctive co-existing effects: Freedom/Control, Reality/Simulation and Seclusion/Exclusion. These effects present the concept and associated discourse as critical, pertinent and stimulating for imagining, inventing, proposing and implementing democratic, participatory and caring urban(istic) activities. The exposed typology and narratives of antagonisms involved in the operation of capsularities propose further research, policy development and planning directed towards the decapsularisation of contemporary space and promote democratic and caring possibilities for urban living in the future.

Key words: envelopes, capsules, capsularity, enclosures, control.

INTRODUCTION

Envelopes are an important theme in studies of the built environment in general and in architecture and urbanism in particular. Possibly the oldest, most primitive, but also the most significant architectural element, envelopes are the boundaries, the edges, the enclosures and the joints that have an ecological and territorial as well as a representational function (Zaera-Polo, 2008). At different scales, their performance has been presented in the context of their social, cultural, economic, technological, environmental and political relevance, to show how they function, what their impact is, how they affect the urban environment and

our daily lives, etc. (Lee and Holzheu, 2011; Murphy, 2006; Zaborova and Musorina, 2022; Zaera-Polo, 2008, 2009; Zaera-Polo and Anderson, 2021).

As boundaries between inside and outside, private and public, natural and artificial, controlled and uncontrolled, etc., envelopes' performances relate to the way the enclosed entity – a living cell, a building or a larger spatial-territorial formation – is able to control the flows of natural and anthropogenic elements, movements, goods, people, and services, and the way they facilitate the enclosed environment's functioning. The concept and studies of the building envelope in architecture have usually been approached from either a phenomenological/aesthetic or technological perspective, and the ambition of a new ontology has been proposed (Zaera-Polo and Anderson, 2021). Moreover, in contemporary architecture various

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concepts have been used to name, describe or characterise diverse types of envelopes – or the term envelope has been used to describe a particular feature of a broader architectural or spatial concept. Pods, cells, move-net units and gaskets are just some of the recurring terms and predominantly architectural concepts; as well, for example, the terms enclaves, ghettos and enclosures are used in urban and territorial contexts, while domes, containers and capsules appear as terms on both architectural and urban scales. Although some of the terms may describe similar phenomena, each of them may pertain to specificities or characteristics of their envelopes.

In this paper, the *capsule* is used as a conceptual reference point to present contemporary extended structures and spatial or territorial envelopes and their proposed conceptualisation at different scales. Referring to Lieven De Cauter's (2004) warning about capsular civilisation, the concept of *capsularity* is promoted to overcome the terminological inconsistency in the literature, where the term 'capsule' is used to denote enclosures at different scales (Šenk, 2011, 2018). Furthermore, a typology of *collective capsularity* is proposed. While contextualising its ambivalences through representative case studies according to their characteristic accessibility and its representation, we present the concept as critical and relevant to contemporary space, with the aim of imagining, inventing, proposing and implementing possible mechanisms for its decapsularisation.

FROM CAPSULES TO CAPSULARITIES

In the development of the capsule concept and term capsule in architecture since the 1960s, its designation has been used to describe small, mobile and compact functional or living units with relative impermeability of the envelope and a comfortable interior connected to a network (Šenk, 2018). At the end of the 20th century, however, the concept of the capsule as a spatial or territorial concept took on an expanded meaning including delimited, secured and/or controlled environments. Following René Boomkens, who wrote about artificial biospheres as capsules, Lieven De Cauter (2004) referred to the concept, thereby encompassing its various derivatives, from micro-environments enabled and stimulated by devices such as television and mobile phone screens, to the extended formations of the built environment, such as gated communities, airports, shopping malls and theme parks, etc. The threat of a high-intensity capsularisation that can lead to a capsular civilization has been indicated by De Cauter (2004, pp. 76-89) through eight laws of capsularisation, depicting eight mechanisms and themes: the first three are related to technological development, especially to the advancement of physical and digital communications, socioeconomic logic which enables inclusion/exclusion enhanced by fear within a network society, and hyper individualism as a product of the suburbanisation of daily life that has set up excellent breeding conditions for capsularisation. The following two mechanisms disclose parallel conceptualisations in contemporary space that relate to capsularisation and the quality or distinctness of the capsular environments. Heterotopian urbanism is manifested in heterotopias, which, according to Michel Foucault's (1986) definition, are the

inversion of daily space, and practices and are empowered as a dominant logic in the space of flows (Castells, 2000) and non-places (Augé, 1995), along with the spectacle (Debord, 2004), hyperreality and simulation that prevail within the capsular environments, and serve as a contrast to the grim and ugly reality of the outside. The next two mechanisms are derived almost technically, namely, attributed to the rise of biopolitics (Agamben, 1998) – the rise of legal and illegal migration that results in a means of inclusion and exclusion, and a clear observation that the increase of capsularisation is proportional to the expansion of networks, since networks need capsules as hubs, terminals, etc. The last mechanism entails a concluding warning, which characterises control as a crucial characteristic of capsular environments. According to his derived criteria, exposing the "technological logic of capsularisation" and the "logic of exclusion in a polarized society", De Cauter (2004, pp. 85, 86) defines the capsule "as the designation for all closed-off and plugged-in entities, which, as a sum, make networks what they are".

In contemporary discourse, the terms capsule, capsularisation and the threat of capsular civilisation, with denotations of architectural, urban and spatial features at different scales and of their performances, have been attributed to their social, cultural, economic, technological and environmental relevance. Theory-based approaches include the philosophy-inflicted architectural and urban theory (Frichot, 2009), as well as urban geography and visual culture (Jansson and Lagerkvist, 2009). The focus of more detailed studies ranges from the analysis of cultural buildings, campuses and leisure environments (Austin and Sharr, 2021; Boer and Dijkstra, 2003; Buchanan, 2006) to the transformation of urban public space (Avermaete, 2001; Mela, 2014) including its normalisation of surveillance, 'securisation' and exclusion, enabled by physical and electronic means on land (Graham, 2005; Graham and Marvin, 2001, 2022; Klausner, 2013; Murakami Wood and Webster, 2009; Schuilenburg, 2008, 2015), in the sky (Shaw, 2016, 2017) and underground (Garrett, 2021). Furthermore, these analyses encompass studies of introverted common areas within buildings that have also proven vulnerable in crisis times like the COVID pandemic (March and Lehrer, 2022), as well as challenges inflicted by differences in global contexts (Shannon, 2001; Smith, 2017).

Based on the definition of the capsule that derives from the pioneering architectural experiments of the 1960s, a conflict in the use of the term was identified and exposed. Considering the rich metaphorical message of the word, the more general term 'capsularity' was proposed and contextualised to overcome the terminological inconsistency. It encompasses both capsules as small architectural, compact, cellular units on the scale of architecture or industrial design, which can be referred to as units of *individual capsularity*, and extended structures and territorial enclosures as manifestations of *collective capsularity* (Šenk, 2011, 2018). This dichotomy of spatial concepts is inherent in the duality of individual and collective capsularity at different scales and provides, according to Peter Sloterdijk (2010, p. 89), the "two most successful architectural innovations of the 20th century – the apartment and the sports stadium," which refer to the two socio-psychological tendencies that enabled the

freedom of an individualised home for a solitary individual who gathers in mass structures at public events. As with the capsule units of individual capsularity, there are various related concepts similar to the environments of collective capsularity. By expanding the semantic framework with the concept of collective capsularity, we direct attention to sealed structures and extensive enclosed environments, such as neighbourhoods, functional enclaves, parts of cities and even entire cities, which, with the help of the most advanced technology, could become completely controlled.

COLLECTIVE CAPSULARITY: THREE TYPES OF ENVELOPES AND THEIR AGENCIES

Given the increasing pressure on architecture and the building sector, especially due to environmental and ecological concerns, such a redefinition of the approach to the building envelope was recently described as crucial by Alejandro Zaera-Polo (2008, 2009, 2021). Nevertheless, the transformation of the concept of the ‘envelope’ in the leap from the scale of the capsule or individual capsularity to the extended scale of structures and spatial phenomena designated with collective capsularity calls for its further elaboration.

Following De Cauter’s laws of capsularisation and examples, the two most exposed conditions that define capsularity have been deduced: the character of the envelope and the regime of control. In spatial situations regarding the structures and environments of collective capsularity, they both condition their public accessibility and its representation. The accessibility concept has been defined as opportunities, possibilities or ease of interaction, which in urban planning in general refers to many fields, primarily transportation planning and consequently land use, economic development, demography, etc. (Handy, 2020; Levine, 2020). Indeed, accessibility is a decisive factor in enabling or disabling random social encounters, which has been regarded as a characteristic of a good city (Dovey, 2008). While understanding that there have always been mechanisms of control in public spaces by public authorities, and the ‘right of access’ has been subject to ‘reasonableness’ in both a legal and political sense (Bottomley and Moore, 2007), in our use, accessibility is related to the ease of general public access that serves as an indicator of relative freedom, in terms of openness of space on one hand and the trend of capsular civilisation on the other.

For the purpose of typological analysis, we will conceptually rely on the analytic technique employed by Gianbattista Nolli in his famous 1748 map of Rome, in which publicly accessible spaces were mapped, and in which, alongside streets, paths and squares, he included publicly accessible buildings.

The map itself does not disclose possible conditionalities of access, as the mapping technique used is a ground plan map in which non-accessible buildings are presented in dark hatch while accessible urban space is depicted in white and it includes accessible parts of public and private buildings. These spaces are therefore considered as spaces of social encounter. Nolli’s map has been presented in various studies and has served also as a method for studying the characteristics of and changes in contemporary urban spaces (Barbera, 2017; Ji and Ding, 2021). Nevertheless, the aim of this paper is also to present the conceptual connection between this technique of mapping of public accessibility and the concept of capsularity, consequently providing tools to study, recognise, comprehend, plan and design in contemporary spatial conditions.

Technically, there are three main types of collective capsularity, distinguished by the character of their envelopes and the regime of control, and characterised by the condition of accessibility. Free accessibility allows anyone to enter the exterior or interior without any particular restrictions, while there are many structures or territories of collective capsularity with the restriction of conditional accessibility, such as: conditional access only for owners, employees, members or invited persons, access only upon presentation of identification documents, payment of an entrance fee or presentation of a ticket, conditional access only within opening hours and more subtle, self-imposed conditions of economic or social status, e.g., in gentrified city centres.

While there is a tight, sealed technological physical envelope that is characteristic of the small-scale capsule or individual capsularity, in the structures and environment of collective capsularity, we can distinguish three predominant types of envelopes according to the criteria of access: the physical, *complete envelope* and the physical but *permeable envelope*, both of which can be either sealed or enclosing (with walls or fences), and the non-existent ‘skin’ of the territorial, *diffuse envelope*. Making contemporary hybrids, the first two may include elements or an entirety of the diffuse envelope based on the technological system of control and surveillance, in addition to the physical boundary or demarcation (Table 1). Further on, each type is presented with relevant historical examples from after the Second World War that have contributed to the further development of the concept and its present-day operativity.

Complete envelopes

Among the complete envelopes, we distinguish two types of enclosed environments of collective capsularity: the first type is defined by its physical envelope that completely separates the outside from the inside and creates a physical,

Table 1. Typology of collective capsularity according to accessibility and its representation

Envelope type	Public accessibility	Representation of access
Complete envelope	No	Sealed, enclosed
Permeable envelope	Free/conditional	Sealed, enclosed
Diffuse envelope	Free/controlled	Open
Hybrid (complete + diffuse)	No	Sealed, enclosed
Hybrid (permeable + diffuse)	Free/conditional + controlled	Sealed, enclosed

thermal and acoustic protection against external influences as well as uniform, controlled climatic conditions in the interior; the second type includes physical, walled or fenced enclosures on an urban scale. Their physical boundaries can be natural, infrastructural or related to property or urban form (Bene and Benkó, 2022). Supported by representation of the envelopes, according to the accessibility criteria, they are not publicly accessible, since this is conditional, allowed only for owners, staff, members, invited guests or clients, etc.

Sealed complete envelopes

The trend of controlled environments with microclimatic enclosures enabling food production, ecological protection and human occupation has become an important topic also in contemporary urbanism as a response to changing climate conditions (Marvin and Rutherford, 2018). Being understood as urban infrastructure, these air-conditioned envelopes of collective capsularity are the potential forms of imagining urban future in the Anthropocene (Marvin, 2016; Marvin and Rutherford, 2018). This understanding reflects Kisho Kurokawa's (1977, p. 76) prediction in the Capsule Declaration in which the capsule is "a device which has become a living space itself in the sense that a man cannot hope to live elsewhere". Despite being sealed and compact structures, the above-mentioned envelopes can be either complete or permeable according to our distinctive criteria of accessibility.

A renowned built example of the introverted sealed complete envelope, with a rather playful but no less problematic spatial contextualisation is the Willis Faber & Dumas Ipswich Centre, designed by Foster Associates and built in 1975. The seemingly mono-functional mass of an insurance building covered an area of one hectare and offered programmes for an all-day stay in the building as a work-and-play space for up to 1,300 people on its three floors and the roofscape ('Foster Associates', 1977; 'Ipswich Centre', 1975). The idea was already present in Norman Foster's Climatroffice project, which he designed in 1971 in collaboration with Buckminster Fuller and which explored the possibilities of future office space in a multi-storey and multifunctional space in a large envelope. The introverted programmatic and spatial variety within the sealed envelope that is located in the Ipswich centre of the city can be an enhancement or at least an enrichment of the working process. Meanwhile, the building reacts to its immediate surroundings at the level of its mirror images and represents an inaccessible enclave of a sealed, complete envelope, due to its pronounced physical uncommunicativeness. The general description characteristic of this type of complete envelope can be applied to almost any contemporary office, or other building where access is limited to the owners, staff and invited guests or clients.

In a strict application of Noll's technique, we can recognise that a number of contemporary 'complete envelopes' incorporate parts with the complete or conditional public accessibility of their permeable envelopes, enhanced by diffuse capsularity. These programmes are the entrance areas, lobbies, and collective functions that are best described through the phenomena of the postmodern atrium, a prototype of simulated (evacuated) urban publicness (De Cauter, 2004; Jameson, 1991; Koolhaas, 1995).

Enclosed complete envelopes

The second type of complete envelopes of collective capsularity also includes bordered, walled and fenced-off areas which are also not publicly accessible. In these urban enclosures the flow of people in and out is highly controlled and selective. Next to the need for conducting introverted processes within the enclosure, capsularisation of this type is, in many cases, also driven by the 'fear' of 'others' who are deemed threatening (Hodkinson, 2012). Among the programmes included in such realms are club areas, gated communities, research and production complexes, military complexes, etc.

Although gated communities and resorts have existed in the US since the mid-nineteenth century, planned retirement communities in the 1960s and 1970s were the first enclosed, walled or fenced residential areas where middle-class Americans secluded themselves from their surroundings (Blakely and Snyder, 1997; Low, 2008). Protected homes, streets and facilities are accessible only through gates operated by a security guard or electronic device, while the neighbourhood is controlled by professional security personnel and equipped with surveillance systems similar to those found in military security complexes (Frantz, 2000; Low, 2008). The main drivers that attract the residents of gated communities, besides security, are lifestyle and prestige, which in reality often function as hybrids (Blakely and Snyder, 1997). For example, certain condominiums in Singapore, with their clearly defined boundary between private and public, and the isolation offered to residents in the 'green bubble' with its 'specific ambience' are not the product of the desire for security but of the desire for social distinction, comfort and prestige (Guillot, 2008). It should be noted that simple informal settlements, although they do not have walls and gates, have a similar structure to gated communities (Dovey, 2008).

The environments of collective capsularity in the space of flows are represented as nodes, points of arrival and departure. However, a distinction must be made between highly enclosed spaces of complete envelopes that constitute a spatially stable 'fortified' refuge, and more open, passable or traversable instances of collective capsularity designated as permeable envelopes.

Permeable envelopes

Like complete envelopes, the permeable envelopes of collective capsularity can be either sealed structures or enclosed, walled or fenced territories with the crucial difference of enabled public access. Their envelopes' representation of closedness does not correspond to their accessibility. Accessibility can be completely free, or subject to identification, time based according to opening hours, purchased entrance tickets, etc. In terms of programmes, they include theme parks, transport hubs, and shopping environments (shopping malls, shopping villages).

Sealed permeable envelopes

Whereas railway stations, for example, are highly traversable but territorially controlled environments (Dovey, 2008), with possible 'isolated pockets' for international transport by high-speed trains, airports have a more strict physical

multi-level control. The perimeter of the airport area is fenced, which prevents physical access except at the entrance to the area. The second level is the (curtain) wall of the airport building, with restrictions, followed by checkpoints, up to the 'captivity' area (Leong, 2001), where the passenger is subjected to the seduction of the consumer spectacle.

The representation of these levels or thresholds changes outside, from a transparent fence enclosing the airport's territory to a fascinatingly inviting or completely indifferent image of the entrance ports of the airport's building envelope. Further inside, it changes from a functional, disciplining representation of the security-conferring power of the checkpoints, to the most sealed area of the departure lounges, with a possible view outside and a pronounced focus on the glittering shop windows that encourage leisure shopping. Security control and CCTV are normalised instruments of safety. The hierarchy of access is represented by the access points, the only permeable points of the capsular structure of an envelope.

Enclosed permeable envelopes

The case of Disneyland is a paradigmatic example of a theme park which served as a role model for the design and organisation of others and which has had a reverberating effect on the development of urban planning and even the design and redevelopment of city centres. From the beginning of its construction in 1954, this fairy tale world of the simulated environment has been completely enclosed by a six-metre-high embankment, which has isolated the area from unwanted disturbances or influences, as well as from views from the outside, while at the same time obscuring the view outwards towards motorways, power lines and high-rise buildings (Chung, 2001). The capsularity of a Disneyland-style theme park therefore consists of a physically enclosed perimeter, and the territory of simulated public space immersed in a fairy tale world with visitors who want to experience the 'safe' space of daydreaming.

There is a parallel to the envelope structure of shopping villages. The main attraction of introverted programme(s) is that they are surrounded by extensive areas of car parking, which ensures the separation of motor traffic from pedestrian areas. Within the physical boundary there is an artificial environment – a simulated space of 'public' life that takes place according to a staged scenario of consumption. The everydayness inside the envelope is saturated with images of a dreamworld, whether in the form of consumer goods promising a more comfortable tomorrow or fairy tale events experienced live. It is therefore not unusual for some to argue in good faith that Disneyland was the greatest achievement of urban design at the time, and that as such it had a profound influence on the development of other spaces of consumption, including contemporary city centres (Chung, 2001). Meanwhile, there were already critical responses and polemics in the 1970s, revealing Disney's controlled systems, and labelling Disneyland and Walt Disney World theme parks as "the most meticulously regulated man-made environments the world has ever seen" (Landau 1973, p. 591).

Diffuse envelopes

Following an analogy of the geopolitical 'smart border', which diffuses territorially and is designated by Karine Côté-Boucher (2008) as the 'diffuse border', a "nebulous entity for monitoring of mobilities, as well as management of perceived threat, outside, inside and on the geopolitical border", we can call the third type of collective capsularity a *diffuse envelope*. While the boundary of complete and permeable envelopes is a distinctly physical demarcation between outside and inside, the diffuse envelope is immaterial, based on information technologies, and the dispersed, controlling and surveilling apparatus of the 'enclosed' territory. Its representation of accessibility is reduced to the signage on the edges and within the controlled area. This spatialisation of the envelope enables a variety of checkpoints controlling and collecting information about movement, activity, consumer behaviour, etc., via technological means. In addition to face-recognition closed circuit television (CCTV), they include urban surveillant-simulations by geographic information systems (GIS) (Graham, 2005) incorporated in contemporary Smart City approaches and Platform Urbanism (Kitchin, 2014; Mela, 2014; Mörtenböck and Mooshammer, 2021; Sadowski, 2021; Trencher, 2019; Vanolo, 2014; Winkowska *et al.*, 2019). The programmes they include are complex compositions of cities in miniature, equipped with simulation devices that create artificial environments, 'surrounded' by and networked with cybernetic high-tech surveillance systems. Diffuse envelopes enable maximum mobility which relates to consumption and to the temporality of their settings. They are an apotheosis of neoliberal capitalist spatial commodification. The loss of the physical boundary coincides with the loss or dispersion of perceptual boundaries (Jerković-Babović *et al.*, 2020). While static in themselves, albeit subject to the space of flows with minimal necessary attachments to the physical and social context, diffuse envelopes are constituted through the instruments of privatisation and security, producing territorialised introverted environments. Temporality in the service of consumption is manifested in the flexibility of interior layouts built by prefabricated partitioning systems and in the constantly changing scenography. The desired experience of commodified timelessness beyond the spontaneous event, with the suppression of the awareness that nothing in this world is eternal, distracts the gaze to the 'looming' danger and the exciting variety of the everyday – outside.

Hybrid envelopes

In contemporary capsularised space, diffuse envelopes complement both complete envelopes and permeable envelopes, forming capsular hybrids. In addition to the physical properties of territorial demarcation, these envelopes are defined by a degree of surveillance and control. Depending on the individual case, any of the above programmes can fit into this category.

CAPSULARITIES AND THEIR DISCONTENTS

The threefold typology of collective capsularity reveals three main types of envelopes and their hybrids that are the product of and a response to contemporary spatial-political

and socio-economic conditions. These spatial formations incorporate an extended set of antagonisms that transcend an either/or dualism and favour a normalised both/and thinking, the coexistence of differences, and even opposites enforced within the society of control. This irresolvable dialectic was well expressed in Rem Koolhaas and Elia Zenghelis' famous 1972 project *Exodus, or the Voluntary Prisoners of Architecture*. Here, Lieven De Cauter (2004, p. 77) locates architecture in the dialectic of human existence and its physical limitations, stating that "we are, and have been for the last 3000 years, 'voluntary prisoners of architecture'". However, conditions in contemporary space have made this voluntary confinement even more complex, rendering the concept of intensified capsularity a socially problematic, if not negative, urban phenomenon.

The ambivalences of collective capsularities will be considered through the optics of three selected co-existing effects, the opposites that appear as crucial forces in contemporary spatial formations of collective capsularity.

Freedom/Control

That freedom of access and movement in publicly accessible spaces seemed to be taken for granted can be illustrated by the example of Disneyland. Before the obsession with control was implemented in the Walt Disney World, the site was granted 'special arrangements', authorising the Disney organisation to possess complete private control over zoning, building, development and utility services (Landau, 1973). Indeed, the initial perception of this accessible private space as truly 'public' left many visitors wondering why they should actually pay admission for a public life, as Disneyland, while not the first, was perhaps the most perfect example of the delegation of civic responsibility to a private project (Chung, 2001; Landau, 1973).

Furthermore, the 'publicness' of a theme park has always been programmed and regulated to entertain the passive fun-loving audience, similar to the 'cinema industry model' (Landau, 1973). This having been mentioned, it can be emphasised that more proactive approaches to leisure time have been imagined by then contemporary neo-avantgarde protagonists, like Cedric Price or Constant (Mathews, 2007; Pinder, 2005). If a closed system of a controlled theme park could still be understood as a heterotopian environment, the model becomes even more problematic when transferred to the everyday living environment. Walt Disney took the same approach as with the theme parks in designing residential communities, such as the non-realised EPCOT (Experimental Prototype Community of Tomorrow) and the later implemented Celebration in Florida, for which centralised control ensured a calm environment with predefined entertainment and with the least possible opportunity for (unpleasant) surprises (Chung, 2001; Landau, 1973).

In contemporary capsular spatial formations, the physical capsular envelope characteristic of the disciplinary societies of enclosed spaces analysed by Michel Foucault is extended by a spatial paradigm of soft and covert control in the service of the capitalist system, resulting in exclusionary mechanisms that underlie Gilles Deleuze's society of control (De Cauter, 2004; Deleuze, 1992; Foucault, 1995).

In the typology of collective capsularity, a fundamental change takes place with the expansion of the concept of the envelope from a clear dividing line between inside and outside, between the private interior and the public exterior, etc., to the concept of collective diffuse capsularity, a spatial or territorial concept, either inside or outside, which is not necessarily delimited but has a collective function and is controlled externally. From the industrial revolution and the first machine age to the second machine age, in which Foucault locates the disciplinary societies of self-control that reached their peak at the beginning of the 20th century, the contemporary age of ICTs is the one that, according to Deleuze, enables externalised or technology-based control.

Control mechanisms which provide for the comfort of the capsular space, beyond the risk of the 'wilderness' of the outside environment, make its interior particularly desired. The attractiveness of isolation leads to a paradox of voluntary subjugation to totalitarian forms of social control of the wealthiest strata of society, which hides behind the promise of personal freedom and an orderly community, achieved through the renunciation of the public sphere and the establishment of a simulated ideal 'community' (Dovey, 2008). In this context Kim Dovey cites an advertisement for a gated community that, unwittingly, reproduces Kurokawa's thesis about the capsule as "a highly independent shelter where the inhabitant can fully develop his individuality" (Kurokawa 1977, p. 79), an environment of self-realisation: "When people escape the ordinary, personal growth can happen at an amazing rate..." (Dovey 2008, p. 170). In this unfathomable ease of submission to the spectacle of domestic desires, freedom in such places is a dubious concept to achieve.

Reality/Simulation

The environment of collective capsularity is an inward-directed artificial environment, markedly unattached to a place and its physical, social and cultural context. Jean Baudrillard (1994, pp. 75-76) describes the flatness of the image of the capsularised interior of the hypermarket as a "total screen where, in their uninterrupted display, the billboards and the products themselves act as equivalent and successive signs... Even repression is integrated as a sign in this universe of simulation..., as surveillance cameras are themselves part of the decor of simulacra". The perfection of the inviting commodified interior works as a medium of seduction, comfort and control all at once. In addition to the surveillance cameras that have become part of the interior, control in the shopping environment is also carried out by toxic discipline, which reduces the individual's freedom to the level of 'freedom' to choose a product. Baudrillard warns that the apparent hypermarket is a model for future forms of controlled socialisation.

The simulacrum area that defines the theme park functions similarly to how a shopping environment functions. Animation, cinematography and stage design techniques are used to create the park's fantastic environments, which amplify the intensity of the experience. Its distinctly physical collective capsularity is enacted by the multiple envelopes which preserve the isolated and concentrated spectacular impulses of the park's simulated interiority

that contrasts to the reality outside, or, to use Baudrillard's (1994, p. 12) words: "... inside, a whole panoply of gadgets magnetises the crowd in directed flows – outside, solitude is directed at a single gadget: the automobile". When the dreamworld vanishes, the excitement is compressed in a microenvironment of individual capsularity through which one perceives the 'reality' of the outside.

In the conditions of Michael Sorkin's (1992) ageographical city, Castells' (2000) space of flows, or Koolhaas' (1995) generic city, the theme park's spatial reproduction takes place within the distinct territory of collective capsularity. The envelope sequence of generic space, which could be described as follows: outer generic space – envelope – inner generic space, is increasingly fused, hybridised. Next to the openness of the generic hyperreality and seductive simulations, there is a qualitative difference between the external and internal space, which is usually reflected in the type of envelope and degree of surveillance/control related to 'publicness', affecting the degree of possible spontaneity and reality of the interior and surrounding territory.

Seclusion/Exclusion

The key possibility that the architectural, small-scale capsule offers is the opportunity to withdraw, the ability to control the flow of information, and the possibility to individually regulate partial or complete isolation with the idea of complete freedom. Ulrich Beck and Elisabeth Beck-Gernsheim warn that individualisation is subject to 'precarious freedoms' while the integration of individualised society is potentially possible, but it may be "an inwardly heterogeneous society, outwardly consolidated into a fortress" (Beck and Beck-Gernsheim 2002, p. 17). The seclusion of the individual or of a group is directly related to the exclusion of others, which entails a duality that belongs to the realm of the concept of collective capsularity, which is actually the antithesis of enabling the potential freedom of the theoretical goal of individual capsularity-isolation. The mechanism of seclusion/exclusion is activated by all three types of envelopes, which are either sealed, physical but permeable, partial, diffuse but always restrictive as well as discriminatory.

The model of the transfer from theme parks to residential communities discussed above is applied also to the regeneration processes in Europe's historic city centres, which are gentrified by the processes of disneyfication, mediterraneanisation, and others, making them unwelcoming to many local inhabitants.

As a node in a network in a mobility-governed space, the gated community is just an example of collective capsularity in which different forms of seclusion/exclusion dialectics coincide. From the seclusion of a house in a gated community – an excluding environment of collective capsularity – we start a journey by means of a secluded individual capsularity, i.e., a private car. We reach and get out at the next capsular structure – in the car park of a shopping mall, an airport, a campus, an industrial area, a hotel, or right inside of it, in the garage. Finally, we find ourselves in the contemporary capsular environment par excellence, in a hermetically sealed postmodern atrium of evacuated urban publicness, a space disconnected from external reality that is located at

the heart of most of the above-mentioned environments and that encapsulates the excluding and essential features of the interior of collective capsularity. Collective capsularity and individual capsularity are complementary twins.

In a documented history of enclosures, Hodkinson (2012, p. 509) outlined a theory of neoliberal 'new enclosures', according to which they consist of three main acts: privatisation as a process that enables spatial enclosure, the dispossession or exclusion of others, and capitalist subjectification, where enclosure means "the encapturing of people, place, space and culture within the commodifying and alienating logic of capital accumulation and the competitive, marketising logic of neoliberal rationality". In a globalised world, the concept of capsularity has global political consequences that are expressed at a very local level, in the physical reality, usually of excluded others, of people without rights (of access, which can indicate rights in general), and the potential transformation of capsular enclosures into spatialities empowered by biopolitical capture (Jeffrey, McFarlane, and Vasudevan, 2012) – or even camps (Agamben, 1998; De Cauter, 2004).

CONCLUSION

Since Lieven De Cauter published his articles and compiled the book *The Capsular Civilization: On the City in the Age of Fear* at the beginning of the millennium, the threat of a high-intensity capsularisation and its consequences in capsular civilisation has not diminished. In this paper we intended to bring the theoretical discourse on capsularisation closer to everyday experience, by showing the concept of collective capsularity in its manifold manifestations, effects and affects.

A critical understanding of the state of affairs and supporting the research provided is a necessary prerequisite for democratic, participatory and caring urban(istic) activities. Insisting on Lefebvre's (1996) 'right to the city', these activities should emphasise the resistant capacities in the production and reproduction of urban commons (Filipcevic Cordes, 2017; Hodkinson, 2012; Jeffrey *et al.*, 2012), in order to manage future spatial development and avoid the state of intensified capsularity that leads to a capsular civilisation. De Cauter (2004, p. 49) warned us that the answer "we didn't know" will not suffice for a historian of the future, as "he will condemn us".

The concepts and findings presented in the paper can help designers, architects, planners, investors and authorities understand the phenomenon of capsularities and be inspired to imagine, invent, propose and implement possible mechanisms of decapsularisation. Further studies should be conducted with at least three different approaches. First, studies and research of the concept and modes of capsularity serve at the acknowledging level, supported by theoretical contextualisations such as those presented in this paper and its references. Second, future qualitative and quantitative studies of capsular envelopes are needed to map and evaluate the localities and specificities of the modes of capsularity, in order to tackle the conditions of spatial capsularisations related to the specific types of capsularity. Third is the policy and planning approach, which should go hand in hand

with and provide mutual feedback, to consolidate working strategies. Attempts to structure possible responses, such as 'solutions for an integral capsule' that include physical, programmatic, social-participatory, economic, and cultural mechanisms of decapsularisation, proposed for the leisure resorts in Zeeland in the Netherlands (Boer and Dijkstra, 2003), are needed for different urban settings and different types of capsularity.

Complying with an urge to clearly define phenomena in the contemporary urban environment with the concept of capsularities, we attempted to show the framework of its multiplicity. Specifically, when characterising an urban programme according to criteria of general public accessibility and its representation, different observed cases may have different capsular structures, as we have presented in the proposed extended threefold typology of collective capsularity. Namely, diffuse envelopes complement complete envelopes and permeable envelopes according to the criterion of accessibility forming capsular hybrids, whereby their representation does not change. While the accessibility and representation of complete envelopes and diffuse envelopes are linked, in the case of permeable envelopes the representation does not correspond to their accessibility. Nevertheless, some of the urban programmes analysed above are more inclined towards high-intensity capsularisation, while others, such as some non-commodified public parks, squares and streets, seem to show a certain degree of true publicness, if such publicness is still possible at all in the presence of advanced surveillance and control mechanisms and privatisation of public space. With increasing control and hybridisation of the envelopes, capsularities are considered masked environments. The exposed typology and the narratives of antagonisms involved in the operation of capsularities, reveal the cracks in the mask that can and should be addressed through further qualitative and quantitative research, policy development and planning. The findings presented are seen as a step towards a progressive and proactive approach to the decapsularisation of contemporary space, promoting the democratic and caring possibilities of urban living in the future.

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