

The Oblique Function Theory in search of a dynamic and fluid urban morphology

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Abstract

Today's cities are dynamic nodes where copious urban flows intersect. These flows have distinguished characteristics: the flow of money, the flow of vehicles, the flow of people who migrate, and the flow of information. The flows' amalgamation, intersection, and conflict form contemporary urban configuration and space. Many methods, such as historico-geographical, process typological, and space syntax in urban morphology studies, aspire to analyze, discuss, and design these flows. These, which have been practiced in English, Italian and French schools in Europe since the 1960s, have allowed the development of different research methodologies in the search for urban form. The article examines the postmodernist urban topo-morphological approaches, which developed in parallel with the French typo-morphological method influenced by the Italian school and the urban space perception studies of Gordon Cullen and Kevin Lynch through the Oblique Function Theory. In order to go beyond the Cartesian urban plan analysis of typomorphological methodologies, topo-morphological approaches reexamine flows with paradigms of urban topological surface, fluid and dynamic morphologies, and architecturelandscape-infrastructure integrity. The Oblique Function Theory was theorized by architect Claude Parent and philosopher and urban theorist Paul Virilio in 1963 under the Architecture Principe group as an example of these approaches. Parent and Virilio use and utilize inclined surfaces, rejecting archetypal spatial components such as columns, walls, and roofs. The duo with inclined surfaces extrapolates the concepts of habitable circulation, mediated structure, fluid, and dynamic form in their projects with a topological perspective. Through urban sections rather than urban plans, form a topological and oblique urban order dominated and ushered by flows. The paper discusses Parent's oblique projects: Les Inclisites in 1968; Les Ponts Urbains in 1971; and Incision Urbaine in the 2000s, obtained from slightly researched archival materials and drawings to argue whether contemporary urban dynamics and flows would possibly create a contemporary urban morphology methodology and sui generis tropes with topo-morphological approaches.

Keywords: dynamic form, fluid morphology, the oblique function theory, topology, urban section

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1. Introduction

Architect Michael Weinstock (2013) denotes today's cities as living organisms having metabolism. Every living organism needs circulatory systems with different functions and is structured due to their relationships with each other. The primary factor that defines circulatory systems is their unceasing flows. In urban discourse, these are; the flow of money due to the emanation of economic models to the globalized world, the flow of vehicles with the developments in transportation infrastructures, the flow of people who have migrated due to war, education, hunger, and financial difficulties to reach a better life, and the flow of information with the proliferation of mass media. In urban space, these flows establish social, cultural, political, and economic linkages between the city's actors by perpetually colliding, overlapping, and intersecting. Urban space not solely contains these flows within itself but also creates itself with their interweaved and connected nexus. It is possible to underline a reciprocal interaction here. Flows constantly alter, develop, and perhaps even destroy spaces; meanwhile, spaces do the same to flows. Sociologist Manuel Castells (1996) defines this process as the emergence of the space of flows and states that they substitute traditional spaces. One can incorporate continuity, density, stratification, and complexity among the concepts that space of flows introduces to the urban discourse and practice. Space of flows has led to changes in urban morphological and typomorphological studies and quintessential urban form generation practices. The morphogenetic, historico-geographical approach and process typological approach developed in the British, Italian, and French schools in Europe from the 1960s onwards aimed to investigate, predict and design the traces of different flow qualities in urban morphology, rendering that rationalist planning and modernist architectural practices were insufficient to understand the living fabric, context, and circulation systems of the urban and to offer new proposals against this (Moudon, 1997; Ünlü & Baş, 2015; Oliveira, 2016; Bilsel, 2018).

The paper aims to unveil, analyze and discuss the potentials of the postmodernist urban topological approaches (Busbea, 2007), which were developed and theorized in parallel to the new typo-morphological movement foregrounded by the Versailles School of Architecture in France in the 1960s, a paradigm influenced by the typo-morphological studies of Italian architects Saverio Muratori, Carlo Aymonino, and Aldo Rossi, and the studies of urban designers Gordon Cullen and Kevin Lynch in the perception of urban space, in producing dynamic and fluid urban forms through the Oblique Function Theory (La Théorie de la Fonction Oblique). Topological approaches, as an understudied aspect of the French school, engages with the effects of multilayered flows on the urban space and the formal proposals that urban architecture can produce against the 1960s context in modern French cities, notably in Paris, characterized by social upheavals such as the 1968 student movements, overpopulation, post-industrial restructurings, post-war ideological interventions in-between Communism and Capitalism, and technological developments. Unlike the typo-morphological understanding, the 'topo-morphological' approaches support that the flows per se create a topological urban form rather than being constructed and configured around type and typology. Lefebvre (1991, p.93) demystifies the differentiation of conventional building types and urban forms under urban flows through the house analogy. According to him, due to different flows and infrastructures - electricity, water, natural gas, telecommunications, and the like - the house dissolves and instantiates a nodal crux that hosts complex mobilities instead of static imagery. In this context, the topological approach aims to design contemporary cities by concretizing flows by analyzing and referring to existing ones in cities rather than urban typological compositions brought by horizontal and vertical architectures. The article examines the Oblique Function Theory and its suggested urban morphology, which was one of the topological approaches in France in the 1960s, theorized by architect Claude Parent and philosopher and urban theorist Paul Virilio under the Architecture Principe group between 1963-1968 and then developed by Parent until he died in 2016. While doing so, it perlustrates the new urban order offered with the inclined planes by examining the archival drawings of Parent's projects; Les Inclisites, 1968; Les Ponts Urbains, 1971; and Incision Urbaine, produced in the 2000s. The paper will critically and

interpretively scrutinize the urban potential of this scantly studied and published urban layout to bring contemporary methods and design proposals to urban morphology studies.

2. Methodology

The paper adopts a qualitative historical approach, critically analyzing and engaging with archival materials on the Oblique Function Theory and Parent's oblique projects to propose a novel topomorphological framework for the present and future urban morphological studies configured by urban flows. By examining distinguished oblique outputs from different periods through diagrammatic abstractions and textual interpretations, the paper aspires to elucidate how the urban proposals against the urban transformations that unfolded during the 1960s have formulated and materialized underlying concepts such as topology, space of flows, connectivity, fluidity, and flexibility, are still vital and valid for the contemporary urban context. Rather than solely relying on the Oblique Function Theory's extrapolations on these phenomena, the paper cross-pollinates them with other tropes of paradigms, such as landscape urbanism, to offer a more comprehensive, responsive, adaptive approach and yet more connected to the current urban morphological discussions. Ultimately, it aspires to constitute a topo-morphological alternative trajectory for urban studies, requiring elaborate research to redefine urban morphology's scope and objectives under further perlustrations.

3. The Oblique Function Theory: Proposing a Third Urban Morphology

The Oblique Function Theory began to be developed in 1963 under the Architecture Principe group, founded by the French architect Claude Parent and the philosopher and urban theorist Paul Virilio. The group explicates the theory's starting point, scope, and objectives in the eponymous manifesto magazine in 1966, with nine issues addressing and tackling specific subjects. The issues correlate with Parent's 'critical modernity' and Virilio's 'bunker archaeology' to form the basis of the Oblique Function Theory (Lucan, 1996; Redhead, 2011; Giovannini, 2021). Parent formulates the former by criticizing Rationalism at the *École des Beaux-Arts*, the school where he studied before forming the group, and the Modernism of Le Corbusier, under whom he worked as an architect in his office. Meanwhile, Virilio extrapolates upon the latter by scrutinizing the bunker ruins from World War II along Atlantic Wall. In the manifesto magazine, Parent and Virilio (1997) argue that the epoch's pre-industrial horizontal and industrial vertical cities are ineffective against the contemporary configurations, necessities, and transformations defined by flows, suggesting that a 'third urban order' on oblique is urgently needed. Horizontal cities, which existed before vertical cities, were insufficient to respond to the complexity of urban flows, and this has been known for decades since many urban and architectural projects were proposed to save the day, according to Parent (2023b, p.13). He states that the urban interventions within the scope of the Renovation de Paris project, implemented by Haussmann in the pre-industrial city of Paris between 1853-1870, temporarily shelved the problems of the urban arising from the flows. However, the horizontal urban form ultimately failed in the end. Against the failure of horizontality, Parent and Virilio (1996, p.65) underline that the vertical architecture that came with industrialization emerged as a solution. As seen in the examples of Chicago and New York dating from the 1880s to the present, and in Le Corbusier's (1987) projects in The City of To-morrow and Its Planning, these approaches, according to them, instead of actualizing around the flows on the urban surface and integrating them with the habitation, draws a definite barrier between urban circulation and dwelling, inevitably creating 'microghettos.' Parent (2023a), by defining these barriers with the analogies of 'wall' (*le mur*) and the spaces they make with 'enclave' (*l'enclos*), criticizes the paradox that this obsolete urban approach brings, contradicting the novel urban order delineated with concepts such as fluidity, continuity, mobility, and dynamism.

According to Parent and Virilio (1996), as seen in the topological approaches of the period, flows should be considered in the context of 'Structuralism' and seek a flexible, variable, evolutionary, and open built environment (Armand & Drancourt, 1961, p.20, cited in Busbea,2007). However, Parent and Virilio (1996, p.69) also state that while shaping with this understanding, urban

architecture can become excessively 'neutral and undetermined,' leading to dissolution within flows and, at the denouement, losing its autonomous form (Busbea, 2007, p.153). Instead of considering this contradictory situation as a dialectic, Parent and Virilio take the issue similar to the 'diptych' theory, a topological approach of architects Peter Eisenman and Miroslava Brooks (2015). By reformulating the contemporary condition around circulation and habitation, which can be integrative while remaining autonomous, the duo describes and engages with the contemporary encounter between flows and the built environment by amalgamating these topologically. With the conceptual proposal called 'habitable circulation' (circulation habitable), their theory embraces an active and mobile understanding that breaks the strict barriers and directionalities created by Euclidean urban and architectural forms, blending the static and neutral state of habitation with the circulatory flows of urban dynamics. Architectural theorist Lee Stickells (2010, p.47) claims this intervention encourages the flows, establishing an 'activated surface' that 'promotes productive, informal interactions and events.' Parent and Virilio utilize ramps, or inclined surfaces, as they put forward, that act as a connector between horizontal and vertical forms to achieve habitable circulation and a living ground. Doing so, they reinvent the means of creating urban and architectural form – the urban tissue on a smaller scale and the archetypal elements such as floors, columns, and walls on a larger scale – with 'inclined topotonic surfaces' (Migayrou, 1996, p.59; Parent & Virilio, 1996, p.71). These surfaces come together and form 'mediated structures,' aiming 'to multiply the usable surface' radically (Lucan, 1996, p.5), providing interaction, integration, and exchange between the habitation and circulation. According to Parent and Virilio (1996), the urban form and its spaces of flow should be organized with these structures, producing new urbanization and urban morphology practices. Inclined surfaces and their mediator role make it impossible for the user to remain neutral as they fall between the horizontal and vertical directions. Parent (2023b) demonstrates that people walking on an inclined surface must choose between descending or ascending; therefore, they are always in a decisive state of conscious thinking. They cannot remain static, inert, and passive. With this feature, dubbed as *potentialisme*, 'potential change,' people are perpetually in motion, changing their position and perspective, meanwhile transforming the space they are in with their perception (Parent, 2023b, p.23). The perception also triggers resistance and prevents the urban and architectural form from being lost in indecision and uncertainty in urban flows, inhibiting the person from being indifferent to these forms (Parent & Virilio, 1996, p.67). Gestalt psychology and Merleau Ponty's (1962) paradigms of the phenomenology of perception explain this approach (Parent & Virilio, 1996). The Oblique Function Theory exemplifies the immanence of urban perception on morphology from a different perspective through building forms, referencing Cullen and Lynch and the typo-morphological approaches in France in 1960.

In 1968, the Architecture Principe group disbanded due to political and social dissidence among the actors caused by the student movements; in the aftermath, Virilio ended his study and interest in the Oblique Function Theory. Parent, however, continued to develop the theory and produce new oblique projects until he died in 2016. In his works such as 'Living Obliquely' (Vivre à l'oblique, 1970), 'Interlacing of the Oblique' (Entrelacs de l'oblique, 1981), 'Wandering in Illusion' (Errer dans l'illusion, 2003) and many others, he further explores the theoretical development and design process of the fluid and dynamic forms that the Oblique Function Theory brings to urban and architectural morphology through diagrammatic and conceptual drawings. Architectural theorist André Bideau (2002, p.70) points out that Parent reformulates the flows between 'housing, city, infrastructure, and territory,' demonstrating how a topological approach can be applied to new cities. Parallel to the manifesto of oblique function developed by Architecture Principe between 1963 and 1968, Parent (2023a, p.95) proposes that twelve topological and subversive actions can dodge the problematic order imposed by contemporary urban systems. These are, respectively: 'to open the imaginary; to operate in illusion; to dislodge the immobile; to think continuity; to surf on the surface; to live in obliqueness; to destabilize; to use the fall; to fracture; to practice inversion; to orchestrate conflict and to limit without closing.' The Oblique Function Theory has influenced many contemporary urban and architectural spheres with its proposals in this context. The tropes

of 'hybrid and fluid morphologies' and 'variable and flexible programming of the urban surface' (Angélil & Klingmann, 1999; Wall, 1999), which landscape urbanism emphasized in the early 21st century, stand out as contemporary and advanced examples of the morphological approach that the Oblique Function Theory tries to achieve. In addition, Deleuze's (1993) topological and the fold concepts, predominantly used within the scope of parametric urbanism in the search for urban and architectural form with the development of digital tools, are also reflections of the Oblique Function Theory.

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4. The Oblique Interpretation of Urban Form: *Les Inclisites* (1968), *Les Ponts Urbains* (1971) and, *Incision Urbaine* (2000s) Projects

One can imply that Parent redesigns the fluid and dynamic urban form of the Oblique Function Theory with project drawings by considering and predicting the transformations of 'urban tissue, natural context, street system, plot system, and building system,' which urban researcher Vitor Oliveira (2016) defines as the fundamental urban components with 'different resolution' (Kropf, 1996). Instead of bringing niche oblique designs to existing cities that burgeon from the context, the projects use the urban flows as a design input to propose a new city. Parent's intention with these proposals resembles influential topological approaches of the epoch, such as Archigram's *Plug-in City* (Busbea, 2007). *Les Inclisites*, 1968; *Les Ponts Urbains*, 1971; and *Incision Urbaine*, 2000s, projects primarily configured by the principle of 'habitable circulation' can be examined with a morphological framework through the morphological evolutionary change of the aforementioned urban components.

Firstly, in the archival drawings of Les Inclisites, 1968 (Figure 1), which was unrealized, Parent, with the contribution of Virilio, reproduces an 'oblique dwelling module' in different variations and sizes to obtain an adaptive urban tissue and interaction network (FRAC Center Archives). Indeed, this application is similar to the typo-morphological approaches of the period. Modules are hexagonal, and their derivatives, allowing different inclinations on both sides. The top of the hexagon is a horizontal surface connecting the two inclined surfaces, described by Parent and Virilio as the 'recovery threshold' (FRAC Center Archives). The topological urban form generated by the amalgamation of these surfaces aspires for continuity, connectedness, and fluidity. Parent and Virilio (1996, p.67) emphasize that 'existing modern cities fail to accommodate any flows including migration, energy, and industrial, even the forces of nature' since they do not encourage flow and as an ineluctable result: 'the movement becomes an agent of our cities destruction.' The fluid form obtained with Les Inclisites is therefore applied as an extension of topologically active landforms such as mountains and valleys, where the flow of the natural context is felt most intensely. As mentioned earlier, creating a 'mediated structure' is one of the most critical concerns of the inclined surface. The 'mediated structure' approach is achieved by leaving the upper surface of the modules and resulting urban tissue as a 'free circulation area' to integrate the street, that is, the circulation system of the Les Inclisites project, with the dwellings. Parent (2023b, p.47) illuminates this upper surface as 'a living surface that contains elements that provide light and ventilation, along with public usages where meeting, social cohesion, and community life will continue by fostering activities,' while the bottom of this surface works as a 'lower surface,' ensuring the 'isolation of private spaces.' This open and flexible approach, which architect Esen Gökçe Özdamar (2022, p.50) associates with 'polyvalent spatiality,' -a concept first theorized by Herman Hertzbergeremphasizes that form can fulfill the most optimal functional requirements with minimum change. However, Parent (2023a, p.35) underlines that open form is not extrapolated enough in cities due to the 'right to ownership' in urban practices prevailing from the past to the present, and thus, there is an intuitive need to limit the land with walls to define the plot, permanently disrupting the continuity and fluidity in recent urban proposals. These boundaries become hierarchical structures that restrictively form plots and building systems in urban layouts. With Les Inclisites, Parent and Virilio espouse that these boundaries can be established not as barriers but as fractures in the urban form, differentiating the upper surface from the lower surface with a diptych execution. In that Page | 153



sense, a continuous but heterogeneous set of systems is conceived, paralleling topological approaches.

Figure 1 Les Inclisites, 1968, urban form diagram; created by authors from Claude Parent's archival drawings

In Les Ponts Urbains, 1971 (Figure 2), meaning the 'Urban Bridge,' Parent, with a different starting point from Les Inclisites, transforms the bridge itself, one of the distinctive morphological infrastructure elements of urban flow, into an urban tissue with inclined surfaces. In many of his oblique urban proposals, Parent (2023b, p.57) designs enormous artificial reliefs and proposes mega-structures that resemble topographic and topological formations, such as hills that exist in nature. The bridge is favored because it is a fluid mega-structure typology and does not interfere with the natural ground (FRAC Centre Archives). Offering a similar conception of urban morphology to Les Inclisites, the project focuses on the versatility of flows, their traces, and interconnections to form urban tissue. The neighboring relationships of inclined surfaces in the third dimension shape the macrostructure. What distinguishes *Les Ponts Urbains* from *Les Inclisites* is its axial composition. With this understanding, an inclined central alley is obtained in the project's direction, and the other circulation axes are positioned parallel. The axes form the street system, and the oblique dwellings dissolve within this system. Sections are more critical than plans in the design of the structural tissue. In the 1960s, architects Yona Friedmann, Paul Maymont, and David Georges Emmerich, pioneers of French topological approaches, designed urban projects that allowed individuals to shape their environments through free use. The proposed city provides a physical infrastructure for this. Busbea (2007, p.156) defines this dialectic as 'the coexistence of a physical and a conceptual, syntactic structure, ensuring dialectical configurations that assume the role of combinatory, giving both order and freedom of movement to any type of element in the configuration.' Parent (2023b, p.67) states that oblique cities like the Les Ponts Urbains project encourage the individual's personal intervention and design contribution in a participatory manner by creating a flexible structural nexus, which he defines as 'individualization in planned constructions.' Therefore, Les Ponts Urbains has no system of plots and buildings but only defined open surfaces, areas, and fields. The design of these would later inspire many influential approaches in contemporary architecture. The urban design proposed by architect Rem Koolhaas for the Parc De Villette competition with his architectural office OMA (1982) and the 'field conditions' described in a series of diagrams by architect Stan Allen (1997) are examples of field design in contemporary architecture.



Figure 2 Les Ponts Urbains, 1971, 3D Model; created by authors from Claude Parent's archival drawings and architectural models.

Finally, Parent's Incision Urbaine (Figure 3), 'Urban Incisions' projects of the 2000s, are crucial as they instantiate an attempt to create urban form from another perspective of the Oblique Function Theory. The initiating point of the projects, the issues they criticize, and their aims are presented in the article Urbanisme Principe -derived from the name of their former group Architecture Principewritten by Parent and Virilio in 2010 in the 'A'A' magazine's 'Connexions' (Connections) series. In the publication, the duo discusses the notion of 'habitable circulation' in the context of the problems of contemporary urbanization. Parent and Virilio (2010) argue that compared to the 1970s, urban flows in the 2000s become considerably more complicated by geopolitical restructurings, mass migrations, and climate change brought about by globalization, while urban form and morphology have not taken any measures to counteract these flows, even create more obstacles to them startlingly. In the drawings of the Incision Urbaine projects, Parent demonstrates that the way to deal with these flows, especially waves of migration, is to open urban incisions and fissures in the natural surface. In this way, waves of migration will flow across the surface, unimpeded by the urban system of plots and buildings. Parent develops a new understanding of oblique urban order within the incisions, making increasingly invisible flows 'visible through urban systems,' as architectural theorist Mark Wigley (2001, p.111) propounds in his work on urban networks and their spatial reflections. According to Parent (2023a), in this context, the role of the urban designer and architect must change. For him, the design of urban weaving is now more essential than the urban form. The complex urban tissue demonstrated by the Incision Urbaine drawings as well, according to Parent (2023a, p.69), is likened to an 'ever-shrinking forest' studied by the painter Michel Carrade. According to them, this forest becomes so compressed and entangled at some level that it is no longer possible to pass through it. The urban designer and architect must create urban form and morphology by opening up new spaces in this densification and reconnecting flows with these spaces. In the drawings of the Incision Urbaine projects, Parent tries to design these relationships through multidimensional cross-sections, just like the relations of solid and void in figure-ground plans. In these projects, it is possible to observe the application of the twelve principles presented by Parent (2023a), which are necessary to reinterpret the aforementioned urban system.



Figure 3 *Incision Urbaine*, the 2000s, urban network, and habitable circulation diagram; red-hatched areas present private spaces, while grey-hatched topography; created by authors from Claude Parent's archival drawings.

5. New Paradigms in Urban Morphology Research: From Urban Plan to Urban Section

Architect Marianna Charitonidou (2022) examines the changing and evolving experience of the urban dweller towards the city through the urban and architectural representations of architects Le Corbusier, Team X, Aldo Rossi, Constantinos Doxiadis, Giancarlo De Carlo, Denise Scott Brown, and Bernard Tschumi in different historical periods. In these drawings, Charitonidou (2022) underlines that the interaction between 'designer, observer and user' is constantly redefined by historical, cultural, political, economic, and social phenomena and that the means of urban and architectural representation need to be reinterpreted, developed, and modified. Therefore, it is clear that the representations of new urban morphology and form research defined by flows also need to be differentiated. When analyzed from this perspective, Parent's Les Inclisites, Les Ponts Urbains, and Incision Urbaine project drawings, which he realized within the scope of the Oblique Function Theory, involve the re-representation of the city as a result of flows. Accordingly, how flows can be understood and investigated and, as an output of this, the urban form can be designed through drawing techniques such as sections and perspective sections instead of the twodimensional plan representations of the Cartesian approach. The transmission of a world dominated by flows can only be possible through sections illustrating multidirectional topological relationships and the holism they reveal. The Oblique Function Theory regenerates the transformation of urban tissue, natural context, street system, plot system, and building system through urban section drawings. Bideau (2002, p.70) underlines that sections frequently used within the theory to create their own 'series of narratives.' Parent, especially in the Incision Urbaine project drawings, expresses the multilayered structure of the city by bringing multiple sections onto each other. This approach, which Bideau (2002, p.70) delineates as 'tomography,' illuminates how overlapping, interweaving, and intersecting flows create a complex yet relational urban narrative. It should be noted that applying the 'tomography' approach, which has been utilized many times based on urban plans within the scope of urban morphology research, on urban sections can entail many fruitful potentials.

It is also possible to discuss the concept of the urban section as put forward by the Oblique Function Theory through the contemporary examples it influenced subsequently. In particular, the landscape urbanism literature discusses terminologies and phenomena such as 'urban topological surface,' 'architecture-landscape-infrastructure integration,' and 'hybrid and fluid morphologies' that Parent envisions for oblique cities similarly (Koolhaas & Mau, 1995; Angélil & Klingmann, 1999; Wall, 1999; Mostafavi & Najle, 2004; Waldheim, 2016). Architects Marc Angélil and Anna Klingmann (1999, p.24) argue that hybrid and fluid morphologies can no longer be analyzed regarding figure-ground relations, which have played an essential role in urban planning research. According to them, it is no longer possible to identify what is figure and what is ground since the urban surface

and the built environment are so interwoven, and the boundaries between architecture-landscapeinfrastructure are blurred and dissolved (Angélil & Klingmann, 1999, p.24). In this context, Parent's urban section approach is also used in landscape urbanism research and design. Besides landscape urbanism, parametric urbanism also cogently avails urban sections through computational tools and scripting parameters for generating multidirectional urban tissue and its iterations. One of the pioneers of parametric urbanism, architect Patrik Schumacher (2013, p.243), delineates it as a process of 'the creative exploitation of parametric design systems in the course of articulating increasingly complex social processes and institutions.' In a sense, Schumacher embodies parameters to design and foresee uncertainties and multilayeredness of urban flows, reconfiguring urban not just with the urban plan but the urban section, even going beyond them using the versatility of parameters to configure the whole urban setting simultaneously and congruently. Yokohama International Airport by FOA Architects, 2002; Kartal Masterplan by Zaha Hadid Architects, 2006; Seattle Art Museum: Olympic Sculpture Park by Weiss Manfredi Architects, 2007; Izmir University of Economics Campus designed by Plasma Architecture Studio, 2016- and many more projects classified under landscape and parametric urbanisms, design by understanding flows through urban sections, producing a novel urban form. However, instead of a new urban order proposed by Parent, these projects are stuck in the plot systems he refused, leading to the inability to examine this understanding at the scale of urban morphology since considering only the flows in a limited land configuring the projects.

Architect Mario Gandelsonas (1995), studying the borough of Red Bank, New Jersey, claims that the influence of the urban planner and the architect in the city is not visible in the site plan anymore and that the site plan is even used as a tool to conceal plurality of voices, including the architect. He emphasizes that the urban form and systems presented in the site plan have lost their inclusiveness in the wheel of dominant urban, architectural, and economic ideologies and therefore fail to understand the contemporary city. Since this restrictive uniformity, which Parent and Virilio criticize through horizontal and vertical urban constructs, still defines today's cities, the continuity of flows between above and below ground cannot be adequately understood. Moreover, these constructions trigger a paradoxical contradiction that leads to the dominance of either the urban plan above ground or the urban section below. Philosophers Gilles Deleuze and Felix Guattari (2005) describe this dichotomy as striated and smooth spaces. In today's urban practices, the urban environment is examined based on plan points to striated spaces. In contrast, the topological and fluid context explored through the urban sections in which it is located is expressed in smooth spaces. Parent's objective, like Deleuze and Guattari, is to advocate for a contemporary urban order and morphology by juxtaposing these two phenomena with mediated inclined surfaces. Architect and landscape architect Christophe Girot (2019) emphasizes the topological ground, highlighting its potential to address the heterogeneous actors on the urban surface in a 'continuous, fluid and inclusive' way in an 'interrelated and cohesive' manner. Girot (2019), like Parent's project drawings, remarks that the relationship between below and above ground can be analyzed and designed with a topological approach through multifarious sectional narratives.

Architect David J. Lewis et al. (2016, p.14) propound that '[the] urban section has been interpreted as an outcome of [urban] planning and therefore ineffective as a mandatory drawing required in [urban] formative and design processes.' Lewis et al. (2016, p.14), underlining the lack of 'critical discourse and writing on the [urban] section,' postulates that the section reveals the 'invisible' processes and qualities that constitute the built environment and its relationships to the topological surface, such as extrusion, stacking, shape, shear, hole, incline, and nesting. With the urban sections produced within the scope of the Oblique Function Theory, Parent introduces a new method for understanding urban flows in urban morphology research, especially by examining and designing the processes of stacking, shaping, holing, inclining, and nesting. The multidimensional research and design methods of urban morphology research, such as morphogenetics, historico-geographical approach, process typological approach, space syntax, fractal analysis, and agent-based modeling, have primarily been developed to understand, critically interpret, and design the urban plan. Parent's methods of understanding and designing the urban section, such as the

methods above of stacking, shaping, holing, inclining, and nesting, may allow these techniques to be reformulated in different spheres to develop a series of new frameworks.

6. Conclusion

Parent's and Virilio's goal with the Oblique Function Theory was to criticize the ineffectiveness of quintessential urban planning and architectural practices, underscoring that modern and Page | 157 Cartesian urban form and site planning are too uniform and flattened to adequately respond to contemporary requirements and expectations. By advocating a 'third urban order' on inclined planes against vertical and horizontal architectures, they have embraced dynamism, fluidity, continuity, and mobility to highlight and engage the urban flows. Many contemporary urban design and architecture practices pursuing this line of thought, such as landscape urbanism, parametric urbanism, and topological architecture, develop dynamic forms and methodologies related to the topological context of flows through urban sections. Parent's oblique proposals are salient as they form the basis of these approaches. The mutual crux of today's multilayered, complex, continuous, and agglomerated cities is their topological grounds that harbor flows. These for different urban forms within the tenets of the Oblique Function Theory can lead to the development of many research methods to study and design topological grounds. The understanding of the urban section, which has developed along with the urban and architectural plans that have been intensively studied in urban morphology research, but has been emphasized scantly, may enable a more inclusive approach to modern cities to solve and portend the problems that urban flows may cause and to engender adaptive, responsive, and mediative mechanisms to meet the new needs brought by flows. The concepts of 'habitable circulation' and 'mediated structure,' which aim to open the urban form as an extension of dynamic interrelationships on the urban ground, may be exhausted not just as means for defining the Oblique Function Theory but also to research existing urban patterns meanwhile projecting what their established effects on multilayeredness through urban sections are. Nowadays, digital modeling tools incorporating various techniques, like point cloud, can easily be implemented within morphological processes by constructing abounding urban sections and tomography extracted from the real-time urban condition, proposing new ones. Therefore, the challenge of creating many urban sections is now obsolete. However, since these tools have a short history, their theoretical, epistemological, and ontological implications have yet to be entirely ascertained. With the Oblique Function Theory, as the paper's findings put forward, one may bridge the gap between these tools and their digital morphologies by constructing a methodological and theoretical framework revolving around 'habitable circulation' and 'mediated structure' meantime also touching upon topology, connectedness, fluidity, and flexibility. Utilizing and amalgamating these concepts with contemporary techniques would further consolidate the topo-morphological approach in urban morphological studies, opening new horizons under the investigations of urban flows and resulting urban form and morphology.

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Resume

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