Fluidity in Urban Planning

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Abstract: Due to the complexities and imbrication of the forces that have taken place in the city and the rapid development of the components of their emergence, the intellectual level appeared concepts and proposals tried to process the problem of uncontrolled acceleration in those values and elements, in order to achieve appropriate between the performance of the city and its functions. Fluid planning, which aims to consider urban planning as a process that must be treated with sufficient fluidity to realize any sudden change to any of the components of the city, whether social, environmental, physical, economic, etc. Hence, the research problem has revealed the "ambiguity of the concept of fluidity in urban planning in the twenty-first century both intellectually and practically. "The aim of the research is to clarify the concept of fluidity in urban planning and then to reach the components of this concept at the intellectual level and the mechanism of its practical application in the stages of urban planning. The research assumes that the concept of fluidity in urban planning responds positively to the rapid and surprising reflection of the numerous and interrelated elements of the city’s urban spaces.

Keywords: Fluidity, Urban planning, Urban space, Architectural space

1. Introduction

Other synonyms have emerged with the concept of Fluiding, Such as flow, movement, connectivity, turbulence, uncertainty, flexibility, etc. fluidity is sometimes an urban social flow and sometimes economic fluidity and other information, and contextual spatial, and sometimes we see it at the process of planning and design process, so we must be aware of this concept and its manifestations in the different branches of knowledge and imbrication in the planning process so that we can understand at the intellectual level first and then invest in its physical form in the practical reality of the city and its urban spaces.

2. Liquidity in Sociology

Fluidity and flow have captured the attention of social theorists in recent times, Castells spoke about "Space of Flow." Urry talked about Global Fluids, "Zygmunt Bauman spoke about liquid modernity, he suggested that there are several reasons to consider "Fluidity" or "Liquidity" as an appropriate metaphor when we try to understand the nature of the current phase [1]. In order to understand new mobility, we need metaphors that look at social life as river waves, the concept of liquidity is necessary to capture multiple transformations [2]. Fluidity as a particular form of practice, fluidity in the case of ontology is related to the post-structural perspective of a world of flows; the reality is fluid, temporary, Genesis. In fluid etiology the world and the city are seen through potential and ontological processes, through the formation of networks, and flows like fluids [3]. Fluidity in the case of knowledge theory points to uncertainty in a world that has become very complex but there is still something that can be controlled and managed, fluidity as a particular form of practice can be understood as empirical practices because it is more open and transparent towards future prospects [4]. The concept of fluidity is a completely new concept [5]. He appeared in social sciences and was used to describe uncertainties, turbulence, and instability [6].

We find that fluidity in sociology is necessary to understand the multiple transformations of the current stage. The fluid city is a network and its fluidity indicates the uncertainty that can be controlled by planning, as a practice of transparency and openness towards the future.

3. Fluidity in Urban Planning

Many contemporary writers and contemporaries have addressed the concept of Fluidity to capture the different aspects of social life, Flows and Fluidity are recent concepts in urban social, cultural and urban thought that are used as building blocks for contemporary endoscopy by focusing on connectivity, mobility, suitability, effectiveness, and flexibility, in contrast to concepts (limitation, hierarchy, fixed form) that were used in the past [7]. Fluidity in planning is primarily a concept of uncertainties, turbulent confusion that involves the development of new policies in planning and emphasizing the importance of differentiation, and suggests that boundaries between organizations are blurred and the importance of interdependence increases [8]. The planning that addresses some of these challenges is collaborative planning, which represents an institution that takes many forms and practices and has the characteristics of openness, transparency, discourse, and performance compatibility, fluid, sophisticated, networked, and includes dialogues, information exchange and distribution, the fluidity for planning, as Miraftab2009 puts it, in his article "Rebellious Citizenship Practices" responds to neo-liberalism, is something that involves entanglement and resistance as it moves through the space of citizenship [9]. The old strategies of spatial planning failed to deal with emergencies and unknown things, liquidity invites a new form of planning, and uncertainties that require a form of planning are open to change, a journey of discovery instead of a roadmap [10]. We need to rethink the discovery of a new planning style, see the future and calculate the consideration of the unknown, and look for new possibilities that become a substitute for static planning [11]. A method that proposes redefining the theoretical framework of spatial planning in a way that suits the dynamic complexities and emergencies of the modern world [12].

From the above, liquidity can be defined in urban planning: it is a new form of planning characterized by flexibility and openness to change. It calculates the
unknown and the future and looks for new possibilities that are a substitute for constant planning. It responds to the dynamic complexities and emergency situations in the world. The development of new policies emphasizes the importance of difference and interdependence and responds economically to the neo-liberal system.

Torill Nyseth, 2012 mentions four forms of liquidity in urban planning: private space liquidity, liquidity as a decision, liquidity as a concept, liquidity as a decisive force [13].

3. 1 Fluidity as a concept in urban planning

Open ends of operations, continuous transformation, planning by guessing, abandoning routine frameworks in discourse, searching for dynamic forces in the context of urban planning by destabilize offering new opportunities and new communication rather than stable and fixed, putting the flexibility factor in the mainstream of planning processes [14]. Fluidity is understood on the basis of the dynamics of form, spatial and temporal flows, material flow, where stability and liquidity are understood as a continuum and there is no complete fluidity and there is no complete stability [15].

We find that fluidity here is socially and physically and based on (flow of form, material, place, time).

3. 2. Fluidity as a force as amomentum

It refers to the situation in which it calls for a lack of consistency in formal planning processes and calls for the development of alternative strategies [16]. It focuses particularly on the unknown, openness, possibilities [17].

We find that liquidity in planning is politically viable and is considered as a force that can nothold the traditional planning processes and can develop alternative strategies that focus on the unknown.

3. 3 Fluidity as a condition

Liquidity here is dealing with complex situations, adopting new ways of thinking about spatial strategies in planning, and dealing with unexpected things which raises the question of what kind of knowledge is relevant to society, and In case of continuous change, liquidity deals with unforeseen circumstances [18].

We find that liquidity in planning is socially feasible is to find new ways of thinking to deal with emergencies and complex.

3. 4 Fluidity as special space

This is the most obvious type in the context of planning by Kim Dovey in his book "Fluid City" in 2005 The fluid space here represents the waterfront of the Melbourne Docklands, which focused on transforming industrial spaces into pleasure space, the conversion of fixed, fixed places with a clear identity to something else after being directed to the water [19]. Fluids space means space defined by its changing boundaries, or which disappear completely [20]. It is also known for its ambiguous limits and is defined by fluid continuity, and through gradients, another form of fluid space is temporary urban space: defined as spaces that are no longer for a particular function, but for more than one use: for recreational, cultural and political purposes [21]. Fluid space is understood as a free-zones, a liminal space, border areas (a region on either side of which has a region or national boundaries separating it from another country) characterized by a lack of clarity of cultural identities, some space boundaries are fluid, multiple, intersecting, not fixed, while spaces are controlled [22]. Smooth space is a space without borders characterized by smoothness, slippage and motion, where it is easily moved from one location to another, against a striated space known as a space of a rigid space and a fixed point in a system. Real space is a space that combines smooth space and planned space [23].

We find that the planning of the fluidity is a physical component of space, which included several types: including the waterfront space, temporary urban space, free urban space, border space, smooth space.

4. At the Level of Urban Design

Many cities have opened the entry to a new social consciousness for the development and organization of the city after the failure of classical and rational planning; in recent years it has become increasingly important for cities to be open to multiple lifestyles, diverse interests and ethnic differences. To the public and stakeholders in new ways [24]. Nyseth (2012) states that planning becomes fluid when there are no solutions to problems, or when the problem itself is complex or ambiguous [25]. Cities, in particular, are spaces of flows, dynamics and multiple relationships, and are increasingly organized around people's flows, images, information, money moving within and across national boundaries. Networks and flows are defined as "a set of interconnected nodes" that are considered as global organizing principles, which are either infrastructure, companies, finance, Information or media [26]. Graham and Marvin 2001 discussed the urban network as one of the expressions of the societal dynamics of the city, and the space itself, and especially the urban space, is complex, fluid, fragmented, this refers to the fragmentation of the urban environment liquefaction of the urban structure that produces unstable fluid structures [27]. Amin and Thrift (2003) say that movement is one of the city's main characteristics using fluid ontologies, the goal is to visualize the world through ontology through "process", "potential", and through the work of networks and fluid-like flows fluids, multiple meeting., Cities are considered fields of movements and moments of the meeting [28]. The talk of fluid cities means that they deal with the confluence of different power flows [29].

The liquidity here is based on the physical aspect of the fluid and its characteristics, including movement, which operates on the basis of networks and flows. It deals with the convergence of different flows of forces: physical, social, economic, etc., which work together to achieve liquidity in urban planning. Urban, social, physical,
economic, and political factors that flow together to respond to emergency and complex situations.

Table 1 shows the liquidity components of urban planning:

Table (1) shows the liquidity components of urban planning. Source: Prepared by the researcher

<table>
<thead>
<tr>
<th>Social aspect:</th>
</tr>
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<tbody>
<tr>
<td>• Fluidity is considered as a decision dealing with emergency and unexpected circumstances.</td>
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<tr>
<td>• Fluidity refers to uncertainty, instability.</td>
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<tr>
<td>• Fluidity is regarded as a trial practice characterized by transparency and openness towards the future.</td>
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<tr>
<td>• Participation of the ordinary citizen in the decision-making.</td>
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<tr>
<td>• Fluidity as a social concept is the new speech that gives up routine frameworks.</td>
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<table>
<thead>
<tr>
<th>Physical aspect</th>
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<tbody>
<tr>
<td>• Fluidity deals with the world and the city through networks and flows like fluids.</td>
</tr>
<tr>
<td>• Fluidity borrowed the concept of fluid from physics and its characteristics of flow, non-determination, turmoil, flexibility, change and other.</td>
</tr>
<tr>
<td>• Fluidity as a physical concept that expresses the flow of form, materials, place, time.</td>
</tr>
<tr>
<td>• Fluidity creates new spaces such as urban space with a river front, temporary urban space, smooth space, space - a border area, free urban space.</td>
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<tr>
<th>Political aspect</th>
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<tr>
<td>• Increased interdependence and blurring of boundaries between government institutions and other sectors.</td>
</tr>
<tr>
<td>• Fluidity is seen as a force that is unable to maintain formal planning processes and find alternative strategies.</td>
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<tr>
<th>Economic aspect:</th>
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<tr>
<td>Fluidity refers to neo-liberalism through a space that encourages citizenship.</td>
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Now, the example will be analyzed based on the factors derived from the above:

5) Applying liquidity to urban planning:

To illustrate how liquidity works in practice in the context of urban planning, we will present the Tromso Experiment as in Figure 1. This is a schematic experiment conducted in this relatively small city in northern Norway in 2005-2006.

![Figure 1: shows Tromso the northern city of, Norway](https://www.reddit.com)

The Tromso city was planned as an open and fluid process in response to complex and multiple situations. This provided a general area for mobilizing new energies and developing new trends. [30].

- Planning process became one of the fluid fluids this experiment has allowed a new opportunity to occur where the city was discovered and sensed with the citizens, where the social importance of urban space in the past and present is explored and the future is imagined. The city is analyzed by highlighting the type of dynamics and driving forces that operate on certain areas and the rhythms of change. Areas where some areas were expanding, questions were asked every quarter of the history of this space, what is the future? What are the stories and emotions? What is the relationship of the streets with the surrounding neighborhoods and what are the possibilities? People were invited to consider strategies for the formulation of regeneration and transformation in the neighborhood. All these social and space analyzes were put together and linked to maps and eventually presented as City Reader, which provides citizens with a new way of reading about the city or giving them a chance to discover new aspects of the city. Through different concepts and perspectives [31].

- The openness of planners to ordinary citizens through new ways to analyze the city using a different speech from official plans [32].

The city became a space for exploration by the citizens through the idea of walking and through an exhibition called Tromsø X-files and city walk, the ambition was to give a unique opportunity for citizens to get to know their city in a new way, that is to take a sensory journey through the city's past and present and its future architectural and material. Where the city was discovered to be flows of people, information and others. A concrete model was created for the present city and the exhibition allowed the vision of all projects and its benefits to the city as a whole if they were realized. Therefore, everyone could judge its potential impacts on the city. Or planning office On a daily basis, this exhibition was the essence of the experience, expressed by one of the members of the network as follows: "The exhibition is openness. " This logo became a trademark of the ideology that CDY wanted to represent. It refers to the methods used to reveal the hidden future of the city. Also to important dialogues between project management and citizens, which is one of the goals of the project, which was previously planning plans closed to the public, the new openness created new solutions and possible possibilities for conflicts and problems [33].

2) Physical aspect

The fluid situation has created new urban and spatial life links, as well as disseminating public ideas about the need for greater cooperation in the city. Through conferences and meetings, relations have been established with other cities facing similar problems [34].

Table (2) shows cases and forms of fluidity in urban planning by source Nyseth, Torill (2012)
<table>
<thead>
<tr>
<th>Year</th>
<th>Form of fluidity</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>Experience new forms of spatial planning</td>
<td>Develop a model for the Tromso Game, considering Tromso as an experimental architectural area.</td>
</tr>
<tr>
<td>1999</td>
<td>The normal planning process</td>
<td>Planning Department begins the process of developing a new plan for the city.</td>
</tr>
<tr>
<td>2000-2005</td>
<td>Disagreement and relationships</td>
<td>The City Forum brings together a number of audiences and meetings on issues related to urban planning and development.</td>
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<tr>
<td>February 2005</td>
<td>The formal planning process has been discontinued</td>
<td>Final decision by the Planning Committee to propose a new city plan.</td>
</tr>
<tr>
<td>March 2005</td>
<td>Fluid state occurs</td>
<td>Hold the last plenary session on the city proposal and submit a deadline</td>
</tr>
<tr>
<td>March 2005-March 2006</td>
<td>Various experiences of public participation, dialogues, speeches about planning, analyzes.</td>
<td>Planning Department has been excluded from the completion of the City Plan and CDY Annual Development Committee, and the introduction of a range of activities: Tromso X-File, City walk, Articles, General Meetings and Seminars, University Conference, Interactive Web Page.</td>
</tr>
<tr>
<td>April 2006</td>
<td>CDY finished its work</td>
<td>Presenting the Tromso Experience at Venice's Great Exhibition Venice Biennale</td>
</tr>
<tr>
<td>to 2007</td>
<td>The normal planning process</td>
<td>The new city plan has been terminated</td>
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</tbody>
</table>

Political aspect

The official planning process for the city center has been discontinued for one year.
- The city has been unexpectedly open through multilateral cooperation between city planning authorities, citizens, local companies, civil society and professionals.
- The Tromso Experiment (CDY) experiment tested and developed alternative ideas and methods for the redeveloped city center plan. The following table summarizes the main events and the fluid experience [35].
- The experience deviated from the traditional focus on space and governance. The planning discourse came from the Center for Democratic Development, which focused narrowly on planning, architectural programs and urbanization, transforming the city into a complex embodiment of everyday life and practices. The best example of networks, flows and emergencies between formal and informal spaces. At the central level of the Government has become linked to planners and other sectors and key participants in urban planning networks [36].

Economic aspect:
Fluidity refers to neo-liberalism through a space that encourages citizenship.

6. Conclusions

1) Fluidity in urban planning is a new form of planning characterized by flexibility and openness to change, the production of new ideas and calculating the account of the unknown and the future and looking for new possibilities that substitute for fixed planning, they respond to the dynamic complex and emergencies in the world, which deals with things that are not expected. New policies emphasize the importance of difference and interdependence and respond economically to the neoliberal system.

2) There are several elements that contribute to each other in order to achieve liquidity in urban planning, including: social value, political aspect, physical aspect, economic aspect. The concept of fluidity in urban planning responds positively to the accelerated and surprising reflection of the numerous and elements of the city's emergence and urban space.

3) Fluidity makes it possible to move from focus to fixed, system, to explore operations, flows, movement, open borders, informal relationships, etc. Fluidity is flexibility and change and seeks to explore the unknown.

4) Fluidity is a feature that must be distinguished by all cities.

5) Fluidity is a state of instability so there must be limits to liquidity through liquidity management by an institution that transforms the fluid plan into a strategy without loss of control, and it handles the control process.

6) Fluidity is used to illustrate or demonstrate instability, motion, uncertainty, complexity, and uncontrollable things, which are in contrast to static, ordered, controlled, etc. The planning is to control uncertainty and instability.

7) Citizen participation in the planning and decision-making process is essential to achieving the city's liquidity, while previous plans are far from the public.

References

[34] Nyseth, 2012, Ibid, p. 40