

Presenting a Design Method that Begins with Space and Ends with Building

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Abstract

Buildings in their fundamental being, are space-enclosing structures where space is a manifestation of human activity which in turn is exceptionally diverse and multifaceted and yet is always limited to a set of standard spaces. The spaces of buildings are designed to meet functional requirements or the needs of occupants, but rarely address the diversity of their activities in specific terms. The standard space has overridden a layer of spatial specificity and contextuality that could be part of any kind of building. By looking at human activity as a generator of program, this paper proposes a design approach that begins with the design of space through presenting two examples of spaces designed for a youth center in Amman, Jordan. The premise is derived from ideas related to contextualism in architecture, space making approaches and definitions of program.

Keywords: Architectural Design, Architectural Space, Design Methodology, Spatial Activity, Building Program.

1. Introduction

Space has become central to the creation of architecture with architects crossing disciplines to explore new ways to address space, man, and architecture. With the “textual turn” in architecture, architectural theory absorbed ideas from different fields of knowledge, mainly the humanities such as philosophy, literary theory and the social sciences (Topolovská, 2022). Moving away from architecture as an object and towards architecture as a spatial phenomenon permeated with idea and meaning. One notable discussion is that of Michel Foucault of the Panopticon where he presented the structure as architecture “pervaded by discourses and pursuant of strategy- as form of power, rather than in terms of style,” (Hirst, 1993) where the structure could take the form of a large shed as long as it maintains the sole idea or “strategy” of surveillance. Bentham’s panopticon could be seen as a distinctive elegant rationalization of the whole structure so that it corresponds to a specific use (Hirst, 1993) or a space that accommodates use via a singular, clear idea. This is not architecture’s function defining the form. Instead, it is the idea or spatial strategy that defines the form. Space is understood as a flexible domain that could be moulded to deliver meaning, perform a use, or manifest an idea.

1.1. Premise

Buildings are often designed to meet basic user requirements using institutionalized types of spaces. The opportunities present in spatializing different human actions or activities were lost to the standard space. A residential building for example would house bedrooms, bathrooms, a kitchen, and a living room as opposed to sleeping spaces, reading spaces, or playing spaces that attempt to rethink, restructure or redesign the typical experience of space or the different programs in a building. There is great potential for variation, invention, specificity and relevance in starting the design process by addressing human action as a possible generator of program. If almost every human action comprises a spatial aspect (Norberg-Schulz, 1971), then the library of space types would be infinite.

Moreover, buildings have become devoid of any spatial or experiential relevance to context due to dependence on the standard space and related standard organization of spaces. Most spaces have become the same worldwide. Starting the design process by studying context, and most importantly the socio-cultural context, reveals specificities that could be integrated into the design of space (Abrar, 2021). Kenneth Frampton (2019) contends that architecture that is critical needs to “mediate the impact of universal civilization with elements derived indirectly from the peculiarities of a particular place”. In other words, architecture that is responsive to culture, society, site, or history while simultaneously that is contemporary. Contextualism in architecture was addressed from a formal/visual perspective and a more social/cultural one (Al-Hammadi & Grchev, 2023). With buildings responding to context stylistically, formally or through materiality, however, this paper proposes a contextual response focused on the quality and type of spaces within a building. Therefore, a building may exhibit contemporary building techniques, materials, form, and even style but is responsive to context spatially. A building is a technological prosthetic extension of the human body, as Mark Wigley (1991) described it that nevertheless must function or perform in relation to the human body. Therefore, a building is also a prosthetic to the social and cultural layers of its context (Komez-Daglioglu, 2017).

In describing “the quality without a name” which makes buildings alive and their experience worthwhile, Christopher Alexander (1979) explains how its existence is strongly related to our own existence in the world, where activities, happenings, events, or general forces act. The character of a place is given to it by the episodes which happen there. A building with a character would house a pattern of events particular to it. This could be understood as a proposed

method to designing buildings; to make them particular, specific, and have a life of their own – pattern of events. If a building looks outward to incorporate the pattern of events that exist in a place, then that building would respond to context- spatially and experientially. “Pattern of events” is understood as common happenings, actions, or interactions performed by the people in a city or place. On the scale of everyday life, Ballestrem, & Simon-Meyer (2022) refer to these happenings or interactions as “rituals” expressing implicit knowledge and a repeated set of actions that constitute the practices of our everyday life.

Ventzislavov (2023) discusses performance art as a spatial affair that interrogates the nature of art both conceptually and physically and is therefore the closest to the core concern of architecture. In 1959, performance artist Allan Kaprow presented what he called “happenings” at the Reuben Gallery in New York which consisted of 18 performances or events that brought out ideas of chance encounters and gave significance to everyday events. *Happenings* shifted the focus away from the audience and towards the actions of the artists. In listing the 11 rules for creating a happening, Kaprow states that “the situations for a happening should come from what you see in the real world, from real places and people rather from the head” (Graf, 2021). The core idea of the *Happenings* is understood as a celebration, often an exaggeration or perhaps a twist on everyday events that simultaneously maintain and embrace their rawness. Space-making needs to be a process similar to that of creating a happening, one that is based on existing conditions to create others.

The premise of this paper is also derived from Tschumi’s (1994) definition of event in architecture as synonymous to “use,” “function,” “activity,” or “program.” Events are what happen in architecture, whose social relevance and formal invention cannot be dissociated from these events. Mainly in *The Manhattan Transcripts*, Tschumi (1981) goes beyond the conventional definition of function to “address the notion of program and explore unlikely confrontations.” In the transcripts, architecture’s components are defined as event (1), space (2) and movement (3), where event is a happening or occurrence, space could be a witness of that event, and movement is the act of moving (Figure 1). Using a very particular system of notation, Tschumi presents a narrative, or an experience of the city of Manhattan. Each transcript whether it is the park, the street, the tower or the block, tells a story of bodies in space, invents new spaces, and pushes the limits of architectural drawing to the scale of the city.

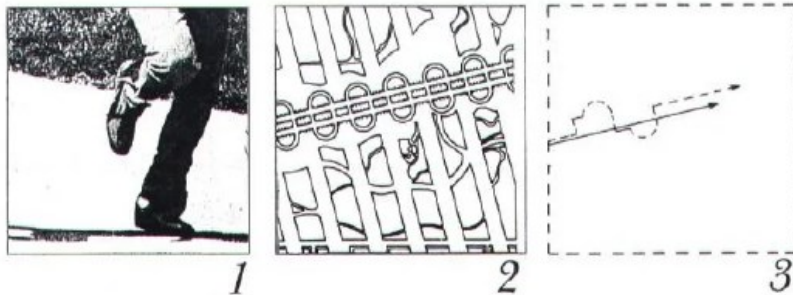


Figure 1. Example of the tripartite mode, The Park. *The Manhattan Transcripts* (Bernard Tschumi, 1981).

Based on these ideas the design approach presented in this paper looks at the pattern of “events”, or activities specific to the city of Amman as generator of program. In designing a youth center, the approach more specifically addresses the events or activities of the youth in the city. This strategy aims at creating new spaces that are specific, varied and relevant. Tschumi’s tripartite mode was adopted in laying out event, space and movement. However, in this context, event is a moment of interaction between the youth and the city, space is a spatial condition that accommodates that activity and movement is that of users in the proposed space.

2. Youth and the City

The youth (persons between the age of 15 and 24) constitute a large portion of the population in Jordan, where according to a live census, the median age in Jordan is 24 years old (Worldometers, 2023) and is 25 years old in the city of Amman. With several entertainment outlets such as cinemas, malls, cafés, and restaurants and sports facilities such as gyms, sports complexes and parks, Amman has a shortage of all-encompassing youth centers. This triggered the idea of proposing a youth center in the city that responds to the common practices of the youth. Located in Jabal Al-Luweibdeh, which translates to mountain of Al-Luweibdeh, the site sits on an incline and is bounded by Ahmed Bin Hanbal Street in the south, and by neighbouring empty plots in the remaining directions. Jabal Al-Luweibdeh is one of Amman’s oldest areas and is known today for its art scene, sidewalk cafes and restaurants and its views of nearby Amman citadel.

The design approach began primarily with a photographic exposition that aimed at describing moments, or instances of how the youth interact with the city of Amman. The goal was to capture common activities performed by the youth, or a “pattern of events” particular to the city of Amman. The photographs documented moments of action, of activity, or of event (Figure 2).



Figure 2. Photographs by Jehan Diab and Deema Al Shaheen.

3. Spatializing Activity

When addressing activity or human action, spatial interaction and the spatial condition that accommodates the action serve as the fundamental considerations for spatializing that activity. In other words, how users interact with the space in question, how the environment is set up and the conditions that allow for that interaction are the ingredients for the creation of a new space. For example, by looking at the photograph of individuals eating while seated on a sidewalk in Figure 2, one can deduce certain conditions that could be used to create a space that accommodates that action. First would be a food outlet that does not provide traditional seating or a formal dining experience, second is the provision of an open-air space, third would be visibility of circulation/walking routes and finally an actual seating method. The method of taking all these factors into consideration in the creation of a space would aid in spatializing that activity.

The following are two examples of two activities translated to spatial conditions and incorporated in their respective project proposals. A simple plan drawing situated next to the photograph communicated the translation while a circulation diagram explained how a user will move in that space. The spatial condition constituted a primary program to be included in the youth center proposal.

3.1 Example 1: The Street

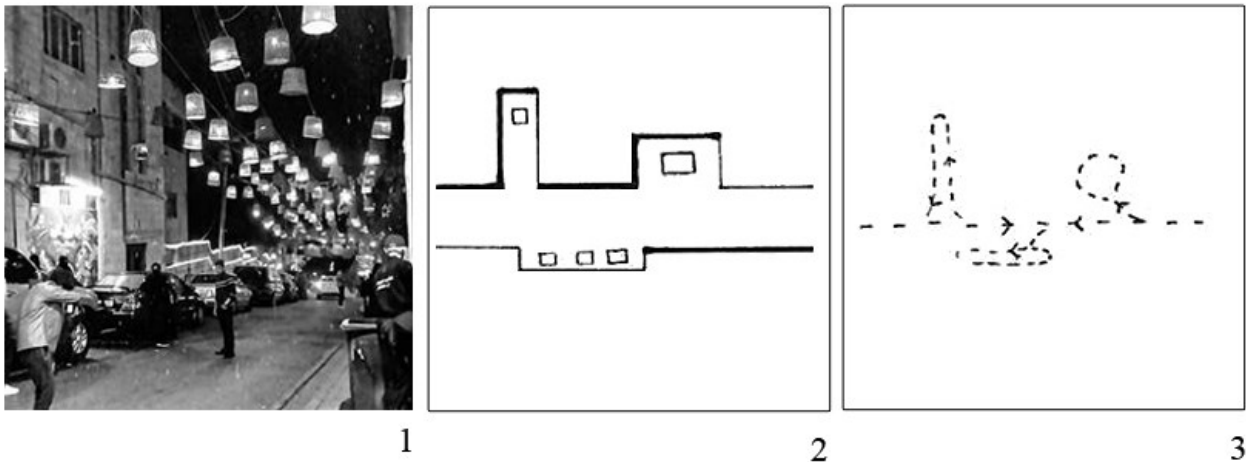


Figure 3. The Street (Produced by Jehan Diab).

The street is a space derived from a photograph (Figure 3-1) taken in the streets of Amman of two individuals; one of them is taking a picture of the other. This activity/event/interaction is one of the most common sightings in the streets of Amman. Spatializing this activity resulted in a linear spatial condition with occasional niches for picture taking (Figure 3-2). The action of taking pictures against a backdrop in a circulation route was spatialized into *The Street*. In relation to the building proposal the street became a central space connecting the volumes proposed and the lower part of the landscape with the upper one (Figure 4). It parallels the performance of the streets in the area of Jabal Al Luweibdeh, which are known to be some of Amman's few pedestrian friendly streets. Situated within a building, the street is an adaptation, or an embodiment of context-specific human activity or action.

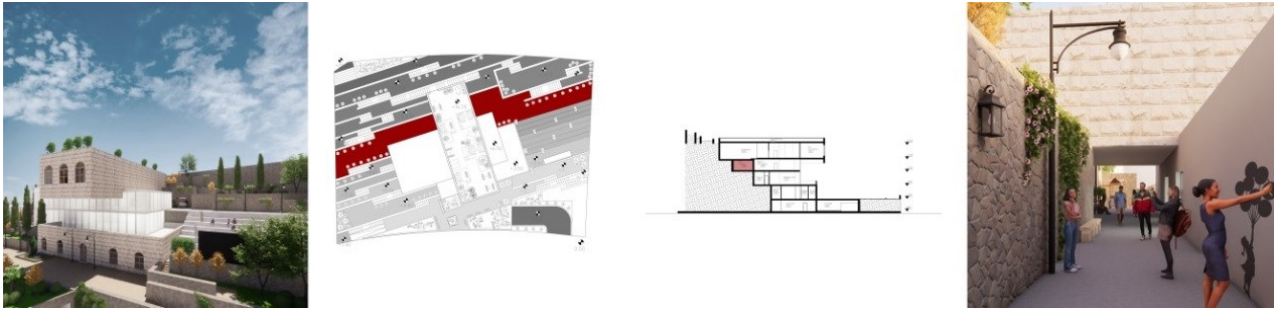


Figure 4. The Street relative to the proposal (Produced by Jehan Diab).

3.2 Example 2: The Mural Room

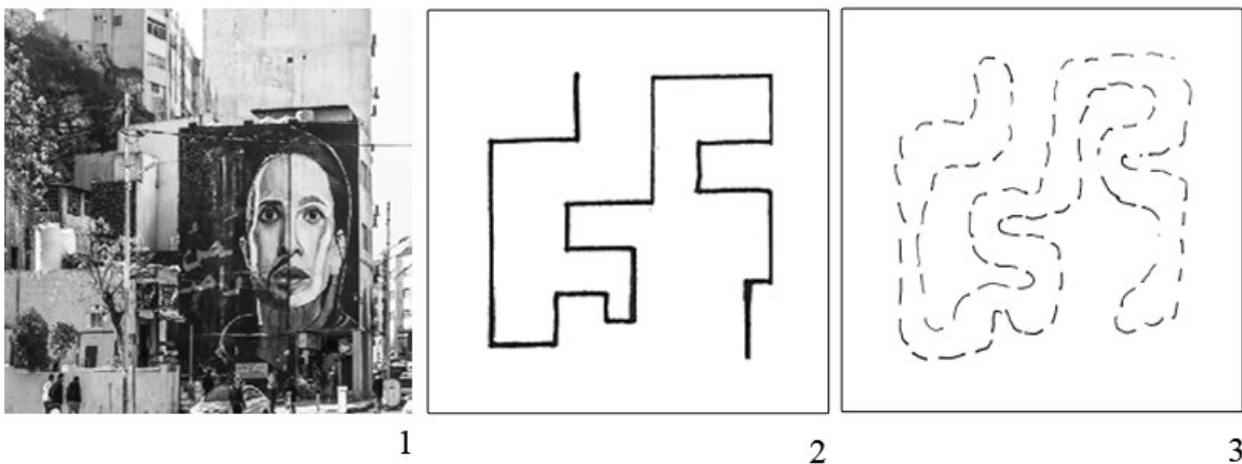


Figure 5. The Mural Room (Produced by Deema Al Shaheen).

The Mural Room is a space that translates the activity of painting murals on the exterior walls of buildings to a space that consists of a series of walls that get painted and repainted repeatedly (Figure 5). It is proposed to be a space for experimentation, expression and practice. This space type responds to the plethora of murals painted by the youth in the city of Amman and hence contextualizes the proposal spatially. In relation to the proposed building, the mural room is located in one of the building's four volumes as one of its five main programs (Figure 6).

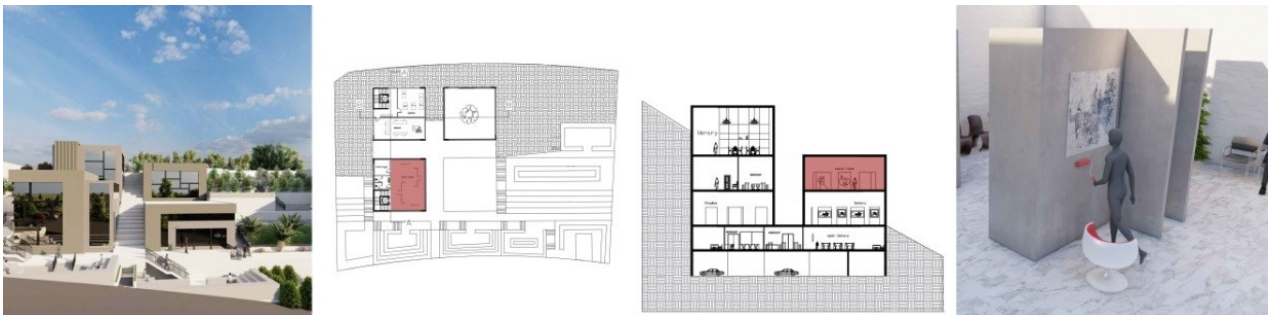


Figure 6. The Mural Room relative to the proposal (Produced by Deema Al Shaheen).

Similar to the previous example, the mural room brings the social reality of the outside to the interior of the building. Through this, the building starts to house a pattern of events that are specific and relevant to its locale. Both of these spaces exemplify the design approach of developing building programs and spaces based on extant human action. The photographs aided in creating a condition that is specific and reflective of the social realities present in the city. In discussing the potential of space to contain or express meaning in physical form, Netto (2005) argues that space is a “physical counterpart of social reality” and that it could only be part of social processes if it were “an active part of action experientially, interpretively and practically.” This leads to an understanding of space not as a background to social behavior but a producer and a manifestation of it. Lefebvre (1991) in *The Production of Space* discusses his

theory of space as a social product, and how spaces express or constitute social practices. The design approach presented in this paper seeks to draw that relationship between the social realities of a place and the articulation or construction of space to create a condition of harmonious existence of users and physical environment or what is referred to as “responsive cohesion” (Radford, 2009). A term that implies a mutually beneficial interaction between building and context.

4. Architecture as a Verb

Shifting the focus of architectural design from the actual building to the realm of human action and space will inevitably lead one to a verb. The verb allows for that level of specificity and relevance proposed in this paper. It aids in understanding the dynamic of architectural space and leaves a great room for creative design. The simple verb or action of “eating” will vary depending on place, society, culture and in this context age group. Even within the same age group, there will be several possible ways to address or design for the action of eating. Almost all social practices are verbs and therefore to produce spaces that are sensitive to context or that express these social practices is to begin with the verbs that constitute these practices.

In designing community clubs targeting children in Zaatari refugee camp in Jordan, Nada Maani identified a list of verbs that support the actions of children in the camp and designed spaces accordingly (Galvin, 2016). The spaces celebrated child play and ranged from dancing, dangling, jumping, to drawing spaces. With no reliance on photographs, the spaces Maani designed explored tectonics, organization, and light admission.

In *Architecture is a Verb*, Sarah Robinson (2021) discusses human action as an interaction that is influenced and modulated by a situation which could be understood as the spatial condition that houses an interaction. Robinson also describes the potential of buildings to materialize our collective values and social practices, therefore, highlighting the potential of buildings to respond to context, to user, and to society. “Indeed, architectural space is the matrix of situated human action long before it is structured geometrically” (Robinson, 2021).

5. Conclusion

In deriving building program from human actions or activities, it is important to look at these actions in context and relative to the social realities of a place. The design approach presented in this paper relied on photographs that described how the youth interacted with the city and then translated those observed practices to spatial conditions. This allowed for a more specific adaptation or translation of these activities. Therefore, the action or verb, discussed earlier, is not to be disassociated and instead must be specific, relevant and reflective of social practices. The event or pattern of events must be particular to a locale to allow for various forms of spatial articulation and to allow for a contextualized intervention. Although this paper presents two examples of spaces proposed for two different youth centers, there remains the discourse on circulation and how the organization of spaces could be informed by existing conditions.

References

- Abrar, N. (2021). Contextuality and Design Approaches in Architecture: Methods to Design in a Significant Context. *International Journal of Education & Social Sciences*, 2(11), 294–305.
- Alexander, C. (1979). *The Timeless Way of Building*. Oxford University Press.
- Al-Hammadi, N. A., & Grchev, K. (2023). Aspects of Contextual Architecture Regarding Traditional/Contemporary Architecture, Physical/Cultural and Place Identity: A Systematic Literature Review. *Open House International*, 48(1), 119–140. <https://doi.org/10.1108/ohi-01-2022-0007>
- Ballestrem, M., & Simon-Meyer, T. (2022). From Body to Space: An Introduction to Architectural Design, *From Body To Space: An Architectural Relation* (pp. 127–139). essay, HafenCity Universität Hamburg.
- Frampton, K. (2019). Towards a Critical Regionalism. Six Points for an Architecture of Resistance. *Critical Regionalism. Revisited*, OASE, (103), 11–22. Retrieved from <https://www.oasejournal.nl/en/Issues/103/TowardsaCriticalRegionalism>
- Galvin, W. (2016). Architecture as a Verb/ Design as Cultural Practice. In R. Corser & S. Haar (Eds.), *Shaping New Knowledges* (pp. 43–51). ACSA.
- Graf, S. (2021). Allan Kaprow and the Art of Happenings. Retrieved from <https://www.thecollector.com/allan-kaprow-art-of-happenings/>
- Hirst, P. (1993). Foucault and Architecture. *AA Files*, 26, 52–60. <http://www.jstor.org/stable/29543867>
- Komez-Daglioglu, E. (2017), *Reclaiming Context: Architectural Theory, Pedagogy and Practice since 1950*, Delft University of Technology.
- Lefebvre, H. (1991). *The Production of Space* (D. Nicholson-Smith, Trans.). Basil Blackwell Ltd.
- Wigley, M. (1991). Prosthetic Theory: The Disciplining of Architecture. *Assemblage*, 15, 7–29. <https://doi.org/10.2307/3171122>

- Netto, V. (2005). Is architecture an active part of life? From the form-function paradigm to space as context to practice. *Arquiteturarevista*, 1(2).
- Norberg-Schulz, C. (1971). *Existence, Space and Architecture*. Praeger Publishers Inc.
- Radford, A. (2009). Responsive Cohesion as The Foundational Value in Architecture. *The Journal of Architecture*, 14(4), 511–532. <https://doi.org/10.1080/13602360903119553>
- Robinson, S. (2021). Situated Poetics. In *Architecture is a Verb* (1st ed., pp. 18–28). Chapter, Routledge.
- Topolovská, T. (2022). Reading buildings: The Textual Turn of Architecture as a Parallel to the Spatial Turn in Literary Studies. *Ars Aeterna*, 14(1), 58–70. <https://doi.org/10.2478/aa-2022-0006>
- Tschumi, B. (1994). Violence of Architecture. In *Architecture and Disjunction* (pp. 121–138). essay, The MIT Press.
- Tschumi, B. (1994). Spaces and Events. In *Architecture and Disjunction* (pp. 139–150). essay, The MIT Press.
- Tschumi, B. (1981). *The Manhattan transcripts*. Academy Editions.
- Ventzislavov, R. (2023). Taking Up Space: Architecture, Performance Art and the Ethos of Encounter. *Aesthetic Investigations*, 6(1), 91–99. <https://doi.org/10.58519/aesthinv.v6i1.14950>
- Worldometers (2023). Jordan Demographics. Worldometer. <https://www.worldometers.info/demographics/jordan-demographics/#median-age>