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Temporal Framework

Towards a Broader Conceptualization of Time in Design Education

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DESIGN PEDAGOGIES IN TIMES OF CRISIS

Six Universities - Six Studios
on Post-Blast Beirut
Reconstruction





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Six Universities - Six studios on Post-Blast Beirut Reconstruction

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Temporal Framework

Towards a Broader Conceptualization of Time in Design Education

Carola Hein & John Hanna

Teaching design requires a conscious understanding of time and temporality. The passing of time is central to design as a creative process, which is mainly focused on initiating change and creating a transformation between two states.¹ Whether this transformation is driven by a societal need or an individual need for self-actualization, the creative initiative works in relation to the past (reproducing or challenging traditional knowledge), present (moment of action), and future (the final outcome and its life span).² Design also requires awareness of temporalities, that is the difference between natural times (seasons, day-night rhythms), or the times created by modern lifestyles (working hours, traffic jams).³ In this reading, time in all its tenses shapes and intersects with the process of design. The pedagogical practice of teaching design thus requires a concrete attention to this intersection.

However, as simple and straightforward as this might sound, our concept of time and the way we bring it into play is far from universal. For a few decades now, sociologists have argued that our understanding and perception of time are socially constructed, and they develop at the intersection of multiple sociocultural factors. Time is defined in relation to surrounding environments.⁴ Different groups and cultures experience time differently and that has important consequences for the development of ritual and everyday practices.⁵ The term 'multiple temporalities', which has been receiving increasing attention since the beginning of the twenty-first century⁶ within disciplines such as anthropology and sociology, highlights the ways standardized clock and calendar time fails to convey

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- 1 Burney, 'Intro to Design Thinking'.
 - 2 Rogers, 'Toward a Theory of Creativity'.
 - 3 Henckel and Thomaier, 'Efficiency, Temporal Justice'; Zhu and Hein, 'Temporalities'.
 - 4 Cipriani, 'Social Time'.
 - 5 Levine, *Geography of Time*.
 - 6 According to the number of occurrences of the word in books as illustrated on Google Ngram Viewr.

the multiplicity of time concepts.⁷

In this chapter, we propose some initial ideas for a stronger inclusion of a temporal framework in design studio culture. We have developed these ideas around three different trajectories: past, present, and future.

Past

Looking at the present, we are confronted with the questions of how and why we have reached where we are now, geographically and institutionally. This is relevant for **design practice** on a number of levels.⁸ First, we have to recognize path dependencies (a concept developed in the political sciences as part of the concept of historic institutionalism)⁹ to explore the ways in which decisions made in the past shape decisions today, and, we add, the ways in which the built environment reinforces these path dependencies. For example, the fact that London's decision makers once opted to construct docklands rather than tidal ports continues to impact waterfront renewal decisions today. In the architectural and planning fields, we constantly deal with places that have been designed with values and concepts of the past. Sites have long histories that explain their development over the years (or lack of development) in connection to their surrounding regions. The site, as a historic object, is important for determining the main architectural features and characteristics of the project, including its orientation, views, sensitivity to climate, and connectivity to its surrounding. By studying the history of a site one gains a sense of the socioeconomic forces that have combined to produce this site over time. An attention to temporality would entail looking beyond the mere order of historical events to understand the rhythms and routines of social life at different time scales and the way they have shaped a specific location and still influence our plans for the future. This becomes essential for a comprehensive understanding of the past.¹⁰

Looking at history through the lens of temporality also has implications for **pedagogical practice**. The selection of a site that has experienced crisis involves a clear acknowledgment of the role of time. Without the disaster, design schools would have paid much less attention to the urban development of Beirut. Disasters have often generated specific attention, notably because of the opportunity for rebuilding and its potential design implications. Teachers of design build on a very long tradition of teaching architecture and planning.¹¹ This necessitates an explanation of the effect of the passage of time on architectural institutions and actors. They need

7 McKenzie and Davies, 'Documenting Multiple Temporalities'; Schieffelin, 'Marking Time'.

8 Hein and Van Dooren, 'Teaching History'.

9 Sorensen, 'Path Dependence'; Sorensen, 'Planning History'; Hein and Schubert, 'Resilience and Path Dependence'.

10 Harding, 'Rethinking the Great Divide'.

11 Stevens, 'Struggle in the Studio'.

to acknowledge the fact that their choices of topics, places, and themes are also a result of time. The process of creating a design syllabus and leading a studio requires continual reflection on the temporal conditions that contribute to the development of the architectural discipline and teaching culture today. Only then, and through attention to sequences, repetitions, and continuities,¹² can history explain where architecture stands as a discipline and its institutional culture in relation to power.¹³

Teaching design needs to reconsider its modes of writing and presenting history. **Linear timelines** have frequently been used in design classrooms as important tools for representing consistent narratives of time. They focus mainly on single actors and major events to explain historical transitions where one event leads to the next – often in a deterministic fashion. A different approach to timelines rooted in Marxist thought gives less weight to individual action and events and instead focuses on the interaction between social structures and their surrounding environments at different scales and different temporalities in what can be seen in the bigger image as recurrent or consequent historical trends.¹⁴ While the second approach is apt to be more sensitive to the multiplicity of reference points and temporalities, both approaches fail to explain the chaotic and complex nature of life, and by extension, history. They remain driven by an acceptance of a linear connection between causes and effects. Conversely, **non-linear approaches** understand social change as an indeterminate outcome of the intersection between events, different rhythms, scales, and social structures. They accept the possibility of asymmetrical relations between causes and effects. Additionally, they recognize history as a complex system that cannot be explained or analyzed through the reduction of its temporal and spatial components.¹⁵

We also need to reflect on the **historical sources** that we often use and propose to students to consult, as well as the archives that host them. These sources need to be properly situated in the context in which they became public; we need to understand the (temporal) conditions that shaped the production of these textual sources and the relations between such conditions and today's conditions and teaching culture. Looking critically at the discipline's historical sources and textbooks implies questioning the different power dynamics that have historically shaped their dissemination. In which language were these sources first published? How were they first received? Who preserved them, where, and why? Did this change over time and why? What were the genders of their authors?¹⁶ And in which geographic areas were they promoted and

12 Bütthe, 'Taking Temporality Seriously'.

13 Ghirardo, 'Italian Architects'; Lane, 'Architects in Power'.

14 Kagan, 'Is History Chaotic?'

15 McGlade, 'Times of History'.

16 Gürel and Anthony, 'Canon and the Void'.

circulated?¹⁷

Then comes the need to think about the use of history for design, in other words, its driving force. The current economy of education and research suggests an **operative employment**; one that takes this historical knowledge to produce a better future.¹⁸ In this context, history becomes an instrument for inspiration and positioning. Historically, however, calls have been made by philosophers and architectural historians for a **critical use of history** – to use historical knowledge to expose the underlying ideology of architecture and to question the role of the architect. This responds directly to questions of power dynamics, and is often driven by an interest in preserving small fragments of history from oblivion.¹⁹

Present

The current time, the contemporary, is intrinsic to the process of design education. The present time is the lens through which we look at history. However, this lens is always moving.

Architectural studio education today is often led by hot topics and catchy headlines. Under the continuous pressure of having to come up with design studio themes that are new, catchy and creative on the one hand, and timely and relevant to their surrounding worlds on the other, many architecture studios address themes such as climate change, protests and public space, camps, refugees, host cities, borders, and regional cohesion. **Event-driven** studio topics highlight a temporality of the real: an authentic awareness of the present time (as defined by Heidegger),²⁰ which –unlike everyday ideology– encourages an urgent need for actions and interventions to unblock progress to the future. Within this understanding of constant emergency, be it in the form of natural disasters, events of political violence or social struggles, mentors and students of event-based studios understand these events as triggers of social change and become prompted to produce instant solutions to the most-urgent world problems. They often focus on surgical and calculated interventions as well as proposals that aim at creating a fast and tangible impact. Such an approach also includes a time component: Approaches that position design projects in the long-term rather than as a single project, are less prominent. Extensive investment in **prolonged socio-political or economic issues** is also related to an understanding of time where design interventions can follow slower and incremental processes.

Whether focused on events or invested in prolonged issues, the studio's understanding of the present time is important for defining its position.

17 Sibel Bozdogan, 'Architectural History'..

18 Hein and van Dooren, 'Teaching History'.

19 Keyvanian, 'Tafari's Notion of History'.

20 McGowan, 'Temporality of the Real'; Kealey, '15. No End in Sight'.

What does it mean to run a studio **today** in institutions that are complicit in former colonial activities or other human rights violations with the aim of addressing an issue in a former colonized geography? How do these temporal aspects shape the organization of the studio and influence the production of knowledge?

The engagement with the **present time** also calls for a conscious awareness of **personal learning**. The design of studio syllabi needs to incorporate an understanding of the temporality of the course of the studio itself. This should look into the impact of personal experiences of the studio duration on the learning process. Like many organizational models, teaching design studios involves a particular valorization of time as a finite resource.²¹ The students' experiences of studio time are shaped by the prioritization of assignments and deliverables, their sequences, duration and deadlines. Consequently, these experiences of time produce variances in learning curves, paces and final outcomes.

Future

Design studios are oriented toward the future. They produce design strategies and proposals that are to be realized in **a time that is yet to come**. An awareness of future temporalities presupposes thinking about the durability and fleetingness of architecture.²² It requires recognition of dynamic values and changing perspectives of space. Such thinking should be open to the dynamics and effects of time and the multiplicity of trajectories that an architectural artifact may follow. Above all, it needs to recognize failure (material and operational) as a natural component of the design and building process.²³ We therefore suggest an **adaptive approach to design** that promotes mutable architectural solutions and temporary interventions. Such an approach requires a detailed illustration of how a design proposal can be responsive to the dynamics of time. Adaptiveness entails looking for a certain phasing logic, a relevant awareness of the architectural proposal's lifetime, and looking at the afterlives of its materials and structural elements. Adaptive thinking in design challenges **universal approaches**, which are often driven by an assumption of architecture's longevity. Their products are timeless designs that are one-size-fits-all, whether this 'all' refers to the applicability of the project to various locations and regional context or a self-proclaimed immutability of the project to any future socio-political dynamics at its site.

An awareness of future temporality requires looking at the **use of design tools**. Architectural drawings, models, collages, and montages are all visual forms that are used within the framework of design studios

21 Ballard and Seibold, 'Communicating and Organizing'.

22 Królikowski, 'Durability of Architecture'.

23 Maher, '900 Miles to Paradise'.

to facilitate an imagination of future possibilities in the present time. Students of design use these tools not only to show the final image but to develop a persuasive logic and order of several sets of future action in particular rhythms and spans. The reliance on these visual tools and products to convey a proposed experience of future time imply a constant mediation between future and present temporalities.²⁴

During this collaboration, it became clear that different design studios have different understanding of temporalities. This has also been reflected in the position they give to the discussion of time within the studios. While this is very often related to specific institutional practices and local cultures, we recommend that design studios, specifically those who take problematic and conflictual contexts as their main focus, should create an adequate space for addressing the multiple dimensions of time and temporality for design.

References

Ballard, Dawna I., and David R. Seibold. 2003. 'Communicating and Organizing in Time: A Meso-Level Model of Organizational Temporality'. *Management Communication Quarterly* 16 (3): 380–415.

Bozdogan, Sibel. 1999. 'Architectural History in Professional Education: Reflections on Postcolonial Challenges to the Modern Survey 1'. *Journal of Architectural Education* 52 (4): 207–15.

Burney, D. 2006. 'Intro to Design Thinking'. Redhat, Inc 19.

Bütke, Tim. 2002. 'Taking Temporality Seriously: Modeling History and the Use of Narratives as Evidence'. *American Political Science Review* 96 (3): 481–93.

Cipriani, Roberto. 2013. 'The Many Faces of Social Time: A Sociological Approach'. *Time & Society* 22 (1): 5–30.

Comi, Alice, and Jennifer Whyte. 2018. 'Future Making and Visual Artefacts: An Ethnographic Study of a Design Project'. *Organization Studies* 39 (8): 1055–83.

Franck, Karen A. 2016. 'Designing with Time in Mind'. *Architectural Design* (March 7, 2016).

Ghirardo, Diane Yvonne. 1980. 'Italian Architects and Fascist Politics: An Evaluation of the Rationalist's Role in Regime Building'. *Journal of the Society of Architectural Historians* 39 (2): 109–27.

Gürel, Meltem Ö, and Kathryn H Anthony. 2006. 'The Canon and the Void: Gender, Race, and Architectural History Texts'. *Journal of Architectural Education* 59 (3): 66–76.

Harding, Jan. 2005. 'Rethinking the Great Divide: Long-term Structural History and the Temporality of Event'. *Norwegian Archaeological Review* 38 (2): 88–101.

Hein, Carola, and Elise van Dooren. 2020. 'Teaching History for Design at TU Delft: Exploring Types of Student Learning and Perceived Relevance of History for the Architecture Profession'. *International Journal of Technology and Design Education* 30: 849–65.

Hein, Carola, and Dirk Schubert. 2021. 'Resilience and Path Dependence: A Comparative Study of the Port Cities of London, Hamburg, and Philadelphia'. *Journal of Urban History* 47 (2): 389–419.

- Henckel, Dietrich, and Susanne Thomaier. 2013. 'Efficiency, Temporal Justice, and the Rhythm of Cities'. In *Space-Time Design of the Public City*, eds. Dietrich Henckel, Susanne Thomaier, Benjamin Könecke, Roberto Zedda, and Stefano Stabilini, 99–117. Springer.
- Kagan, Frederick W. 2005. 'Is History Chaotic?' *Historically Speaking* 6 (5): 34–38.
- Kealey, Erin. 2015. '15. No End in Sight: The Existential Temporality of Following'. In *The Cinema of Christopher Nolan*, 219–32. Columbia University Press.
- Keyvanian, Carla. 1992. 'Manfredo Tafuri's Notion of History and Its Methodological Sources: From Walter Benjamin to Roland Barthes'. Master's thesis, Massachusetts Institute of Technology.
- Królikowski, Jeremi T. 2011. 'The Durability of Architecture: Several Remarks'. *Definiowanie Przestrzeni Architektonicznej - Trwanie i Przemijanie Architektury*, no. 14: 221–24.
- Lane, Barbara Miller. 1986. 'Architects in Power: Politics and Ideology in the Work of Ernst May and Albert Speer'. *Journal of Interdisciplinary History* 17 (1): 283–310.
- Levine, Robert N. 2008. *A Geography Of Time: On Tempo, Culture, And The Pace Of Life*. Basic Books.
- Maher, Dennis. 2016. '900 Miles to Paradise, and Other Afterlives of Architecture'. In *Architecture Post Mortem*, 235–56. Routledge.
- McGlade, James. 2004. 'The Times of History: Archaeology, Narrative and Non-Linear Causality'. In *Time and Archaeology*, 153–77. Routledge.
- McGowan, Todd. 2007. 'The Temporality of the Real: The Path to Politics in the Constant Gardener'. *Film-Philosophy* 11 (3): 52–73.
- McKenzie, Pamela J, and Elisabeth Davies. 2021. 'Documenting Multiple Temporalities'. *Journal of Documentation*.
- Oster, Gary W. 2008. 'Practitioners Corner: Derailing Design Thinking'. *International Journal of Leadership Studies*, 4 (1): 107–15.
- Rogers, Carl R. 1954. 'Toward a Theory of Creativity'. *ETC: A Review of General Semantics*, 249–60.

Schieffelin, Bambi B. 2002. 'Marking Time: The Dichotomizing Discourse of Multiple Temporalities'. *Current Anthropology* 43 (S4): 5–17.

Sorensen, Andre. 2015. 'Taking Path Dependence Seriously: An Historical Institutional Research Agenda in Planning History'. *Planning Perspectives* 30 (1): 17–38.

———. 2017. 'Planning History and Theory: Institutions, Comparison, and Temporal Processes'. In *The Routledge Handbook of Planning History*, ed. Carola Hein, 35–45. Routledge.

Stevens, Garry. 1995. 'Struggle in the Studio: A Bourdivin Look at Architectural Pedagogy'. *Journal of Architectural Education* 49 (2): 105–22.

Taylor, Mark. 2016. 'Time Matters: Transition and Transformation in Architecture'. *Architectural Design*, 2016.

Zhu, Kaiyi, and Carola Hein. 2020, 'Temporalities and the Conservation of Cultural Relic Protection Units: Legislative, Economic and Citizen Times of the Bugaoli Community in Globalising Shanghai', *Built Heritage* 4, no. 11 (2020), <https://doi.org/10.1186/s43238-020-00012-8>.

