

THE THICK TIMELINE AS METHOD FOR DESIGN-ORIENTED EDUCATION

Author:

MARIE MOORS, BIE PLEVOETS, KOENRAAD VAN CLEEMPOEL

Affiliation:

HASSELT UNIVERSITY, BELGIUM

INTRODUCTION

In a time where students in design-oriented education are confronted with images and (digital) information in a fragmented and unstructured way, the need for tools to process this data in a coherent and structured way is prominent. Furthermore, to understand architecture as a cultural signifier, it is necessary to have sufficient knowledge of architectural history and a broad cultural background; especially in the light of writing a master thesis, a critical essay within specific seminars or an analysis of projects within the personal reference frame, being all part of the curricula of design-oriented courses today. However, we also notice that students sometimes struggle to collect and interpret events, edifices, and movements, ... in a coherent fashion. Therefore, this article aims to provide a method for students to identify, capture and compare information through the lens of architecture as a social construct in the format of the “thick timeline”. Additionally, this method can also be used as a teaching tool for architectural history and theory courses.

This article is part of an ongoing Ph.D. research (funded by the Flanders Research foundation FWO – Fellowship fundamental research 1116421N) entitled ‘*Belgian MoMo heritage on the radar, re-reading modernist housing estates: an inquiry into the value of threatened heritage sites and the possibilities of adaptive reuse as a method for re-evaluation*’.

We start from a conceptual basis by referring to Vittoria Di Palma’s *Radical Thought* where she positions history as integral to the creative process, similar to, for example, sketching. Secondly, we apply this to the “thick timeline” as a useful method in design education. The latest version of the timeline can be accessed at <https://indd.adobe.com/view/2afec35b-5286-49ed-9b4d-f02b947d0dac>.¹ We strongly recommend consulting the link during the reading of this paper, so you can experience, try out and practice the described aspects yourself.

HISTORY AS A MIRROR TO THE PRESENT

Vittoria Di Palma is Associate Professor of Architectural History and Theory in the School of Architecture at USC. In her essay entitled ‘*Radical Thought*’² (2017) she points out four ways in which history can be seen as something operational, going hand in hand with architecture. (1) First, “history can be posited as a collection of objects” positioned as representative examples, as the establishment of a *canon*. Further in the text she refers to the form and content of the history courses in design-oriented education, solely presented as “wide-ranging, chronologically organized, stylistically-categorized overview of buildings and projects that the discipline has deemed worthy of attention”, treating history as dead form. This understanding of architectural history found its ground

in the modernist conflicted relationship with it, as being “cast as an impediment to innovation since its study reduced students to mere copyists”. An attitude that can be still detected with some students today, seeking to rediscover common knowledge. (2) Second, buildings – as they depend on societal conditions – can be used to understand civilization and cultural meanings. In the post-war period, the previously described conventional object-based understanding was challenged as architecture was positioned and approached in a broader sense: as part of a society, landscape, network, infrastructure etc. (3) Third, history with respect to architecture can be seen as theory-generator consisting of “abstract principles, or axioms”. This leads us to question the role of history in architectural design. Di Palma points out the elusive character between history and design; in which the trigger of history in a design-related context is dismissed the moment its contemporary relevance is not clear or specific. Yet, some inspiring exceptions are touched upon as well: Manfredo Tafuri’s *Teorie e storia dell’architettura*,³ Robert Venturi’s *Complexity and Contradiction*,⁴ and Aldo Rossi’s *L’architettura della città*,⁵ as those works are all demonstrating that robust architectural theory can grow from historical architecture in a formal, contextual, typological, political, or memorable sense. (4) Fourth, she proposes history as *a practice* as a way of architectural thinking. Di Palma speaks up to “historians, educators, and individuals involved in the design professions to position history as integral to the creative process”: don’t see history as a dead form but as a vehicle to think critically and push ideas further. The study of architectural history is like holding up a mirror to the present, unraveling endurances and variations, and therefore stimulating thinking that exceeds culture or periods. The confrontation between familiar elements (established certainties) and unfamiliar (remote) things encourages us to think outside of the box. In the last part of the text, she explains the word ‘radical’, deriving from the Latin radix- or “root”, referring to the origin (essence) of something, and effecting change from the political angle as “radical reform”. In this light, the potential of history lies in its power to be an “engine of change”.⁶ The previously described four aspects are the guiding principles for the development of the “thick timeline”, covered in the next chapter.

The thick timeline as response to Palma’s thoughts

The proposed timeline is a (teaching) method that attempts to present a multifaceted perspective on architectural history across space and time – meaning nations, regions, and time periods. It is a tool to develop an interactive combination of various (chosen) topics expressed in the form of different (overlapping) timelines. It allows showing simultaneously a variety of historical situations as conditions for architectural manifestations. We aimed to overcome the limits of the object-based representation of history, stimulating the discovery of connections between projects, books, ideas, historical events etc. Next to the capacity of a timeline to generate an objective consistency and help a student to clearly classify information (orientation in time and space) in a graphic manner; the implemented interactivity (showing and hiding the specific timelines), stimulates the exploration of new networks between topics. We therefore also integrate political, cultural, and social happenings that appeared simultaneously. We took it even one step further by the integration of different journal articles (written by the first author), which have been depicted via colors and lines that literally link the different elements on the timeline(s) that are addressed in a specific paper. The aim is to envisage a practical execution of Di Palma’s ideas about history as an incentive for ideas for change, critical questioning, and design interventions.

Set up and usage

The timeline is set up in the Adobe application InDesign⁷ via the tools of interactivity and animation. By means, you can export the document as an interactive PDF (only readable via the Adobe program) or publish it online via a unique URL (accessible online for everyone who has the link). This enlarges

the scope of the methodology and lowers the threshold. A tutorial was made to support students/teachers in the development of a personal timeline in which the implementation of interactivity is explained step by step. The following interactive elements were developed: going to the next/previous page, setting up a link to a document or annex via an icon, and showing or hiding different objects or texts via ‘buttons and forms’– as illustrated in Figure 1.

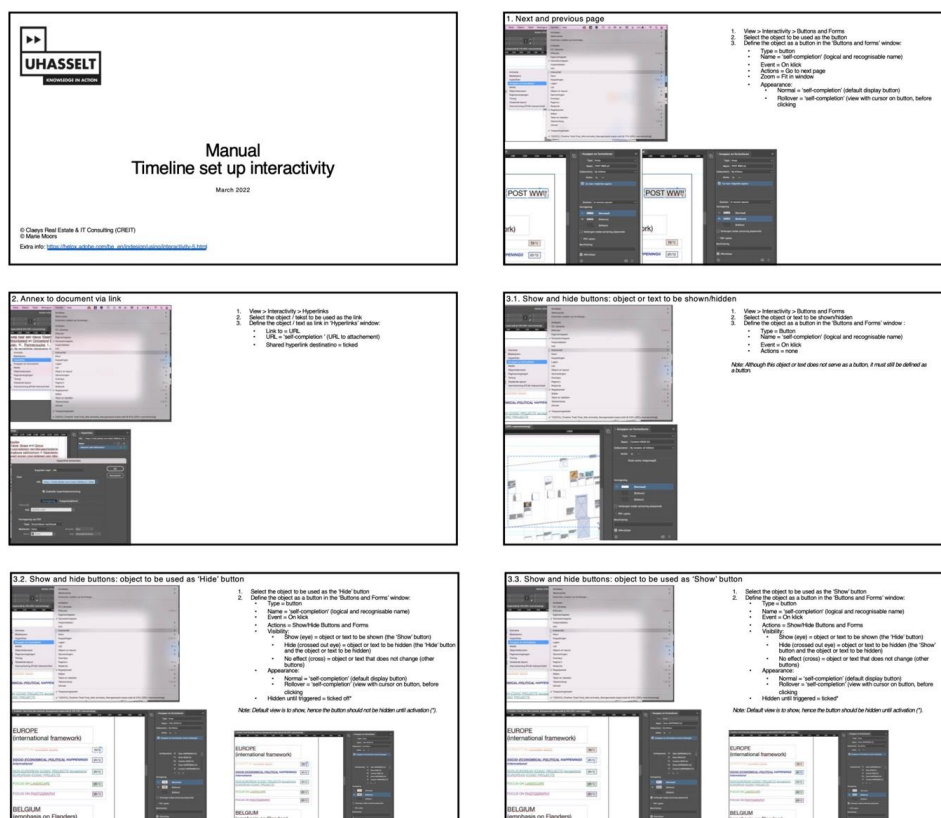


Figure 1. Extraction from the tutorial for students/teachers on how to develop and implement the interactivity within their personal timeline.

Navigation within the online document is developed as intuitively as possible. Resulting in the use of toggles that you can click to show or hide the different topics/themes/articles/papers. Furthermore, you can occasionally download extra information or an annexed PDF document via a download icon – as clarified in Figure 2. Figure 3 shows that zooming in and out or going back to the full screen happens via the toolbar at the bottom of the page. To navigate to the previous or next page, you click on the grey arrows right and left of the screen (or on the buttons shown in Figure 2).

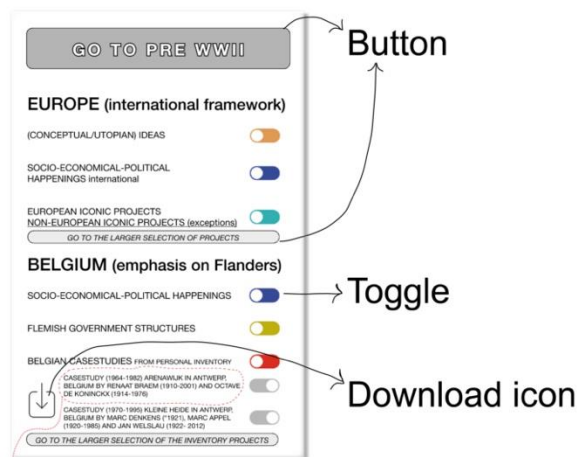


Figure 2. Navigation tools: toggle, button and download icon.

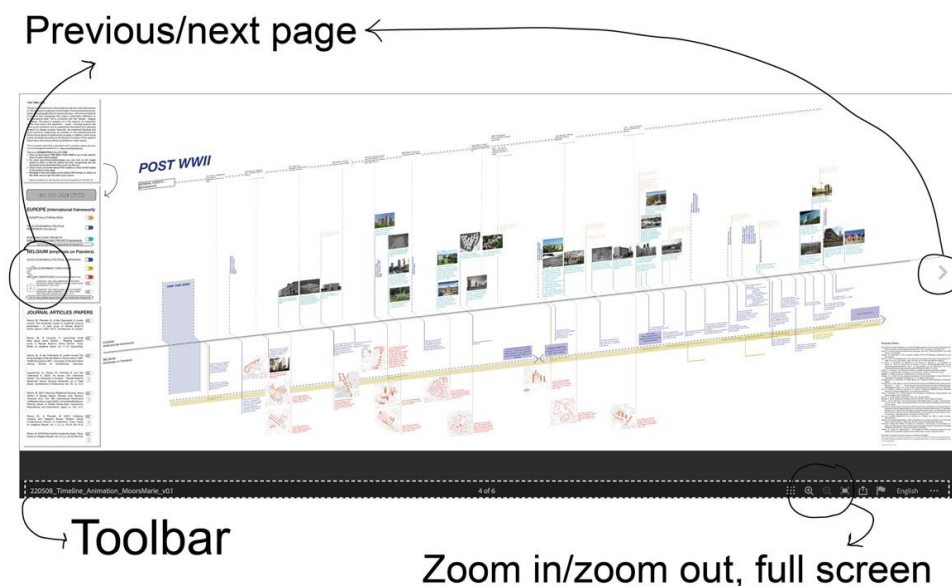


Figure 3. Navigation tools of the toolbar: zooming in and zooming out or full screen mode, and grey arrows to navigate to the previous or next page.

THE TIMELINE AS PART OF THE PHD RESEARCH

The timeline is part of the PhD research of the first author, addressing the challenges of modernist post-war housing ensembles in Flanders (BE), with a focus on the estates that were constructed according to the *Congrès Internationaux d'Architecture Moderne* (CIAM) principles. Today, they are put in a negative daylight – technical as well as social – which often leads to demolition. But the options for adaptive reuse remain often unexplored. The project looks at the potential of these sites by embracing the initial optimist ambitions and meaning of those modernist ensembles. The main objective is to develop a theoretical framework that defines a set of strategies for intervention, reacting upon the critical shift in connotation. Based on a process of research by design,⁸ precise architectural interventions for two specific case studies are developed. The overall aim is to clearly evaluate and conceptualize different scenarios and regeneration strategies so that they are applicable to a broader (inter)national range of projects dealing with similar issues.

Case study: the thick timeline about collective (modernist) housing

The timeline was partly initiated in the first phase of the Ph.D. project as a personal tool to collect and process information, such as literature and case studies. Eventually, the potential of the timeline as a research document and methodology (for other (Ph.D.) students/teachers) emerged over time. We present this timeline today as a work in progress. The first two pages of the online document are introductory texts to contextualize the role and aim of the timeline within the Ph.D. topic, of which the following part is a summary.

This research defines World War II as the specific cause for the transformation of the meaning of modernity in the light of post-war social housing. The following question is posed: “What is the meaning of modernity during post-war social housing?” We chose a chronological way of sharing the collected information. But we also agree with Theodor Adorno (1903-1969) that modernity is not a chronologic category but something qualitative (*Minima Moralia*, 1951).⁹ “Modern” is a way of thinking, not only a specific period of time in history. It is about looking for the new, so to speak developing a certain attitude in relation to the past – the traditional. This means that not one moment is an absolute value *an sich*, the value is relative and depends on the past and future aim. Modernity is like a generic cultural condition. We focus on the traces of modernist architecture on the one hand and the meaning and impact of modernity on our attitude towards architecture and society on the other hand. Modernity can also be analyzed from an etymological point of view, Hilde Heynen (2000) in *Architecture and Modernity: A Critique* (2020) identified three basic levels of meaning according to the word “modern”: the *current* (implying as the opposite of what is past), the *new* (opposed to the old, a period distinguished from previous periods) and the *transient* (the connotation of what is momentary). “Modernity is what gives the present the specific quality that makes it different from the past and points the way toward the future. (...) a break with tradition (...) typifying everything that rejects the inheritance of the past”.¹⁰

Charles Baudelaire’s (1821-1867) definition stresses this third meaning of “the momentary”: “Modernity is the transitory, the fugitive, the contingent, the half of art of which the other half is the eternal and the immutable”.¹¹ While the term ‘modernity’ stands for the typical features of modern times, the attitude toward life linked to a continuum of evolution and transformation, ‘modernism’ is the cultural tendency and artistic movement that is oriented toward the future and desires for progress. This last one can be seen as the subjective aspect of modernity, consisting of personal experiences and theoretical reflections. However, the socio-economic development represents the objective aspect of modernity. Jürgen Habermas (born in 1929) distinguishes two elements of modernity: the irreversible emergence of autonomy in the fields of science, arts, and morality – developed according to their “inner logic” – versus the “incomplete project” – the potential use for the rational organization of everyday social life. Furthermore, Jean Baudrillard (1929-2007) provokes “In the end, modernity purely and simply coincides with fashion, which at the same time means the end of modernity.”¹² This also emphasizes the complex transition between modernism and postmodernism. According to Heynen postmodernism can be seen as a new and complicated layer of the modern, by stressing its contradictory qualities.¹³

The aim of this timeline about collective housing is in the first instance to give a historical overview of “the response to response” of the modern movements and storyline, particularly geographically focussed on Europe – with some exceptions of projects and happenings that made a noteworthy difference on an international level. The following topics can be distilled from the menu bar on the left: Europe (international framework) with subtopics (conceptual/utopian) ideas, socio-economical-political happenings, European iconic projects, and non-European iconic projects (exceptions). This is combined with the Flemish/Belgian situation. For which the following topics are listed in the menu

bar: Belgium (emphasis on Flanders) with subtopics socio-economical-political happenings, Flemish Government structures, and Belgian case studies from personal inventory: case study Arenawijk (1964-1982) in Antwerp, Belgium by Renaat Braem (1910-2001) and Octave De Koninckx (1914-1976) and case study Kleine Heide (1970-1995) in Antwerp, Belgium by Marc Denkens (born in 1921), Marc Appel (1920-1985) and Jan Welslau (1922-2012) – as previously illustrated in Figure 2. This piece of research is in first instance an exploration of the most iconic and significant – social – housing projects that serve as an inspiration and an assessment framework for the personal research by design process. Secondly, the presented literature and socio-economic happenings are seen as pioneers in the practical/technical and/or social sense of experiencing housing. Lastly, “focus points” – represented by journal articles (published or under review) – are added according to the dynamic evolution of the research; named in the menu bar as journal articles/papers followed by the reference list. Figure 4 shows the default view of the Pre and Post WWII period timelines, whereas Figure 5 depicts the representation of specific papers toggled on; for which the different colors and lines, exemplify the interconnectedness between the topics on the various timelines.¹⁴ Moreover, a PDF download with all the (open-source) images that are used on the timeline is integrated in the link under the bibliography – also illustrated in Figure 5. Furthermore, some extra referrals have been implemented within the menu bar of the timeline such as a direct download link to a PDF document of the personal inventory¹⁵ consisting of the modernist housing ensembles that are the focus of the PhD research project. Besides, a reference to the larger selection of (Belgian) projects – which did not make it to the basic timelines (Figure 4) – but certainly contain interesting and representative aspects is created (Figure 5). Figure 6 shows the outline of the previous described selection.

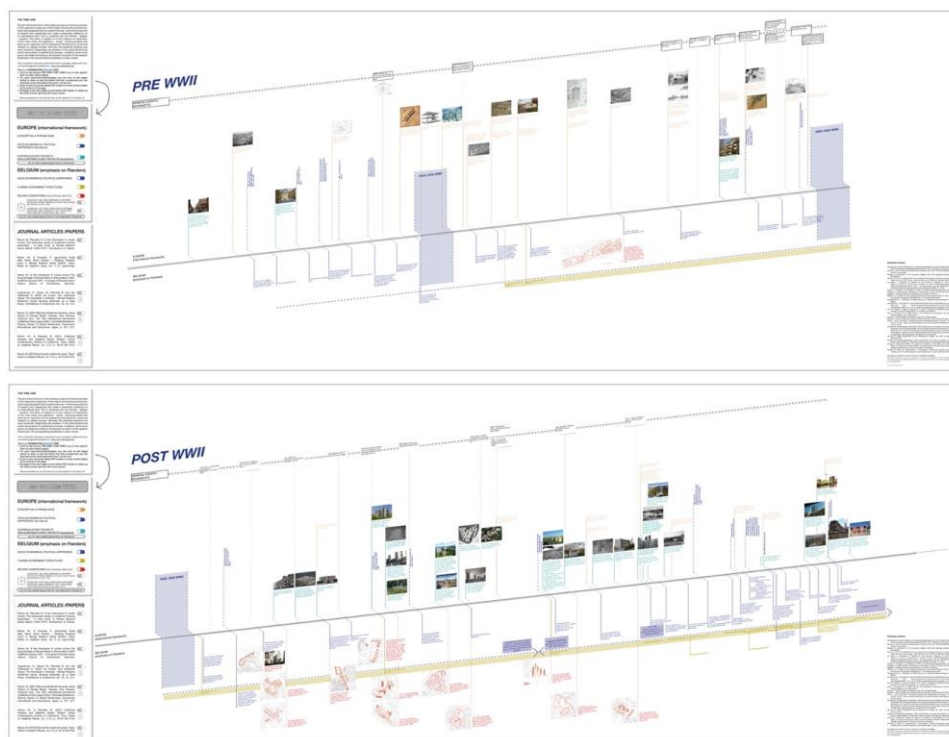


Figure 4. Default view of the timeline Pre WWII and Post WWII.

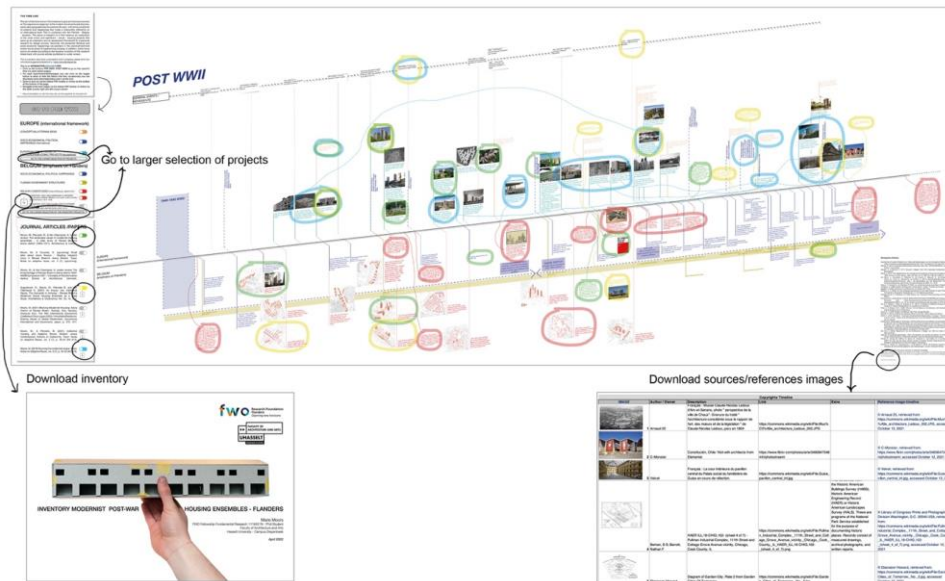


Figure 5. Three journal articles are toggled on, showing the addressed topics and interconnectedness between those topics indicated on the timeline; furthermore, the download button for the inventory and image sources is indicated as well, such as the buttons to go to the larger selection of projects.

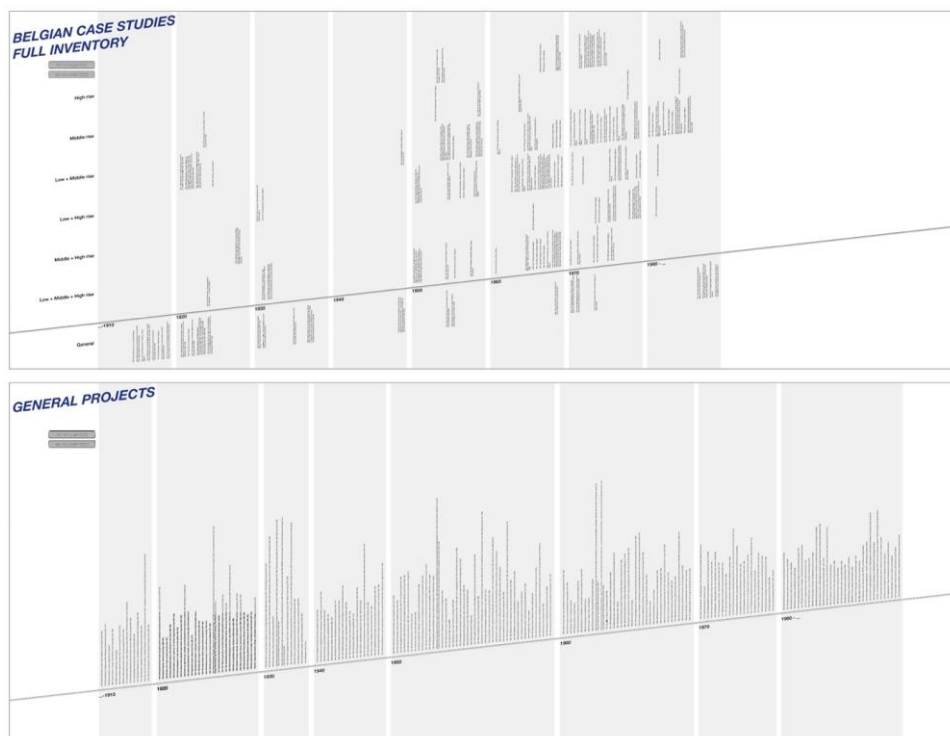


Figure 6. Timelines of the larger selection, respectively, of the Belgian case studies of the full inventory and the larger selection of the International/European general (housing) projects

CONCLUSION

We believe that the thick timeline offers many possibilities in an educational context. Teachers, as well in theoretical as practical education, can set up a timeline themselves covering the course content and use it as an interactive tool to make a specific topic more understandable, as it can be easily placed in and compared with a broader context. Resulting in a more interdisciplinary approach

towards courses in architectural education. The “response to response” aspects in architectural history – architects are always building further or reacting upon something/someone – can be covered in an easy and efficient way. The development of online and digital tools has gained importance, especially after the COVID-19 pandemic and the related lockdown. Today, *blended learning* has become a fixture within the curriculum of our universities.

Secondly, and here lies the focus of our paper, the timeline-method can help (Ph.D.) students in (the first steps of) mastering a specific subject. To come back to Di Palma’s call for turning history in a “critical engine of change” and way of “architectural thinking”, we believe that this method supports students in a structured way to capture and graphically communicate facts within various domains. But challenges them at the same time to discover interconnections between different topics or themes. In that regard, the method is based on the “framework for categorizing educational goals” entitled the Bloom’s Taxonomy¹⁶ of which a first version was developed by Benjamin Bloom in collaboration with Max Englehart, Edward Furst, Walter Hill, and David Krathwohl published in 1956. The revised version of 2001 “A Taxonomy for Teaching, Learning, and Assessment” covers six objectives which we link to the set-up of the thick timeline: *remember* (recalling facts/basic components: putting facts on the timeline(s)), *understand* (explain ideas/concepts: identify, explain the facts in a larger interdisciplinary context), *apply* (use information in a new situation: a combination of different domains in the form of different simultaneous timelines), *analyze* (draw connections among ideas: relate, question and connect the different facts/domains on the timelines), *evaluate* (justify a stand: value and critique the links/connections), and *create* (produce new work: design, assemble and develop new knowledge, re-reading of facts).

With this method, we want to concretize and exemplify the method of “research by design”, especially in architectural education; bridging practice and theory. Besides the larger accessibility and coverage of student’s work (being able to create online URLs), the thick timeline upgrades – the often as boring categorized – literature review work that is expected from students; moreover, it enforces and encourages the interdisciplinary perspective on domains, as infinite combinations of topics are possible. Another asset is the possibility for constant adjustments within the InDesign document itself, which keeps the “thinking engine” running.

Lastly, this methodology could be applied to any design or art field which attempts to explore its particular artifacts from a social history standpoint.

NOTES

¹ This is a dynamic document, a permanent work in progress, please send your comments/suggestions/additions to: marie.moors@uhasselt.be

² "Radical Thought," e-flux Architecture 2017, accessed October 10, 2022, <https://www.e-flux.com/architecture/history-theory/159243/radical-thought/>.

³ Manfredo Tafuri, *Teorie e storia dell'architettura* (Roma e Bari: Laterza, 1968).

⁴ Robert Venturi, *Complexity and Contradiction in Architecture* (New York: Museum of Modern Art, 1966).

⁵ Aldo Rossi, *L'architettura della città* (Venezia: Marsilio Editori, 1966).

⁶ Palma, "Radical Thought."

⁷ The students at Hasselt University can purchase an Adobe account with strong reduction, meaning that they have access to the different (graphical) applications such as InDesign, Photoshop, Illustrator and Acrobat.

⁸ The process of Research by Design is strongly inspired by the following sources: *The Reflective Practitioner* by Donald A. Schön (2008), *Designerly Ways of Knowing* by Nigel Cross (2006), *The Debate on Research in the Arts* by Henk Borgdorff (2006), and *Research in Art and Design* by Christopher Frayling (1993).

⁹ Theodor Adorno and E.F.N. Jephcott, *Minima Moralia: Reflections from Damaged Life* (Verso Books, 2005).

¹⁰ Hilde Heynen, *Architecture and Modernity: A Critique* (MIT Press, 2000), 9.

¹¹ Heynen, *Architecture and Modernity: A Critique*, 12.

¹² Heynen, *Architecture and Modernity: A Critique*, 12.

¹³ Heynen, *Architecture and Modernity: A Critique*.

¹⁴ Sidenote: we emphasize the importance and necessity to figure out which timeline has to be shown when toggling on one of the articles or papers. You have to make sure that the information that is part of the article/paper is shown on the timeline(s), when toggling on that specific article/paper. We set up an excel document with the different hide versus show settings for each possible scenario.

¹⁵ The following publication gives a good overview of the inventory process and method: Marie Moors, "Post-war social housing in Flanders: inventorying & research by design" (paper presented at the AI.2020 - Building the Contemporary Dwelling - New Themes and Methods of the Project, 2020).

¹⁶ "What is Bloom's Taxonomy?," 2022, accessed October 13, 2022, <https://bloomstaxonomy.net/>.

BIBLIOGRAPHY

Adorno, Theodor, and E.F.N. Jephcott. *Minima Moralia: Reflections from Damaged Life*. Verso Books, 2005.

Borgdorff, Henk. *The Debate on Research in the Arts*. Kunsthøgskolen i Bergen, 2006.

Frayling, Christopher. *Research in Art and Design*. Royal College of Art, 1993.

Cross, Nigel. *Designerly Ways of Knowing*. Springer London, 2006.

Heynen, Hilde. *Architecture and Modernity: A Critique*. MIT Press, 2000.

Moors, Marie. "Post-War Social Housing in Flanders: Inventorying & Research by Design." Paper presented at the AI.2020 - Building the Contemporary Dwelling - New Themes and Methods of the Project, 2020.

"Radical Thought." e-flux Architecture, 2017. Accessed October 10, 2022.

<https://www.e-flux.com/architecture/history-theory/159243/radical-thought/>.

Rossi, Aldo. *L'architettura Della Città*. Venezia: Marsilio Editori, 1966.

Schön, Donald A. *The Reflective Practitioner: How Professionals Think In Action*. United Kingdom: Basic Books, 2008.

Tafuri, Manfredo. *Teorie E Storia Dell'architettura*. Roma e Bari: Laterza, 1968.

Venturi, Robert. *Complexity and Contradiction in Architecture*. New York: Museum of Modern Art, 1966.

"What Is Bloom's Taxonomy?". Accessed October 13, 2022. <https://bloomstaxonomy.net/>.