Architecture is a very unique field because it can be truly experienced only once, when it is built. However, using design tools in programmed experiments helps to extrapolate the learnings to architectural design practice. In this project, design-driven methodologies are consistently used as an ideation, experimentation and reflection tool. First, the research is designed as a process where written and graphical resources are analysed to extract research questions that will take shape into design premises or prototypes. Experimentation will combine design, social sciences or visual art’s tools to map wider material and immaterial actor networks. Once design prototypes are tested, conclusions will be extracted through design methods such as drawing, mapping, collage, photography and model making. The reflection on these observations could lead to process iterations and eventually form a base of nonprescriptive conclusions for public building design.

From the engagement with peers and users to participation in conferences, every part of the research project will be approached from a design perspective: define the question, propose possible answers, test them with appropriate tools, reflect on the results and—if necessary—iterate. Presentations during CA2RE+ conferences will exemplify this approach to collective exploration following the scheme objective-premise-experiment-observation-reflection. Establishing the desired outcomes, logging the developments, reflecting on the input received and turning it into a new hypothesis. In the same way, during spatial experiments, civic engagements will maximise input while keeping a clear purpose in mind. Reflection will be the guiding thread connecting the re-search’s design and the design’s research: evaluating every step before taking the next.

In current times, which are dominated by uncertainty and change, the limits of public and private realms are in continuous definition. As a condensation of the public sphere, public buildings have turned into thresholds, into active public sphere agents that can motivate behavior and, as a result, produce public values. Public buildings designed for values should be created as unfinished processes instead of objects, leaving room for socio-spatial change and value dynamics. This research will use design-driven methodologies to show how spatial interventions in existing public buildings can incite public values. Connecting buildings and theories will highlight knowledge gaps leading to working hypothesis tested in experimental spatial interventions. Consequently, and as case study, the experimentation phase will explore the public role of makerspaces within libraries. A co-creation process, conceptual design and prototyping of spatial solutions will highlight findings on the effects of design decisions and interventions in the public sphere of the future spaces of literacy.
Ambivalent thresholds

Public space is born from a contradiction: it is defined by opposition and it exists because its contrary—private space—also exists (1). According to the notion of liquid modernity, modern times are characterised by uncertainty, insecurity and unsafety caused by capitalism’s social effects and the incapability of the public administration to counteract them (2). In an environment where reference points are ever-shifting, boundaries between public and private space are uncertain and continuously liquifying flooding or retreating from other realms. Public building design faces the challenge of integrating ambivalence and change in buildings that act as thresholds, as border-zones bridging physical, digital and social constraints.

Public buildings are an intentional condensation of civic aspirations serving the common good—a shared collective interest (3). They are inert agents of the public realm which absorb the public sphere, filter it through a membrane (construction) for a specific purpose (programme) and convert it to contributions to the public sphere (values). Often, public buildings and spaces have been alienated from each other, designed as independent entities neglecting their edges because of the practical division between Architecture and Urbanism. Designing public buildings transdisciplinarily beyond the division urban-architectural, object-space, indoor-outdoor, technician-client, would make space for public value creation turning public buildings into public sphere catalysts for better urban conditions.

Buildings motivate behaviour and behaviours create human values. Human values are negotiated socially by the ambivalence between good and bad in the public realm, our “space of appearance” (4). “We are moral because we live in uncertainty” and it is by continuously having to choose between good and bad that humans build their values (5). As a result of the dynamic definition of public values and the common good, public buildings became thresholds between apparent opposites (private and public, indoor and outdoor, individual and collective, physical and digital). Designing spaces that incorporate this opposition could allow values to develop, evolve and transform together with the space. Public buildings must embrace their ambivalent nature while providing the infrastructure for citizens to appear, interact and dissent embracing the uncertainty of their own values.

Designing for uncertainty and change

Designing buildings for values urges to embrace uncertainty and change as variables for an architecture that “creates conditions and provides possibilities” (6). Spaces that facilitate human interaction by designing deliberately unfinished but permanent structures and solutions that maximize spatial possibilities and group dynamics. In public buildings, it entails designing the threshold’s membrane porosity by introducing technical solutions for actual and probable civic uses that will influence the public sphere through social values. Public values in public space have been extensively researched through human-centred methodologies from Urbanism (participation, placemaking, action research). However, the part of public space that is contained by public buildings is commonly only researched theoretically or designed without theoretical support. There is great potential for architectural design to incorporate design methodologies for values to its tools by bridging theory and practice.

All designs produce values, either by design or by mistake. This doctoral research explores how spatial interventions in public buildings can incite public value dynamics in contemporary urban contexts. The research departs from a review on public space and buildings notions acknowledging as research sources both literary and built examples. Pulling the thread between design cases and written concepts, will extract relevant notions and propositions with conceptual notions as research sources both literary and built examples. All designs produce values, either by design or by mistake. This doctoral research explores how spatial interventions in public buildings can incite public value dynamics in contemporary urban contexts. The research departs from a review on public space and buildings notions acknowledging as research sources both literary and built examples. Pulling the thread between design cases and written concepts, will extract relevant notions and propositions with conceptual notions as research sources both literary and built examples.
Public thresholds will be investigated as a spatial and conceptual network, by complementing text with drawings, words with objects, books with buildings. For instance, analysing SESC Pompeia Centre in São Paulo (Fig.2-4) as an adaptable and multi-purpose threshold connecting the public and private realm, shows designers can make room for public values without overlooking design duties. These values are introduced by use, not determined by design, and the space’s adaptability favours value dynamics through time. This example leads to finding the book “Theory of Architectural Practice” by Lina Bo Bardi that highlights a need of theorising about practice and practising from theoretical convictions. In a reverse example, reading “Public Space? Lost and Found” drives attention to Theaster Gates’s practice bringing Art and Culture to communities of colour by turning derelict buildings into self-organized spaces where to build civic values (Fig.4).

Exploring the concept of time in design for value dynamics appears the work of Bryony Roberts. An approach where art, craft, movement and materials is combined into temporary interventions to transform values such as political involvement or social integration. Her temporary works are more than a “happening” since they were designed with the intention to ignite behaviour, strengthen communities and activate value creation beyond the designer role (Fig.5-6). Apparently disconnected, these examples share some the characteristic of being designed as unfinished processes integrating aesthetics with use and understand architecture and programming as dynamic entities hosted within a threshold, an umbrella for interaction.

This research’s design is to engage in a ‘back and forth’ exercise between ideas and actions, speculations and precedents establishing the elaborate network linking public space, buildings and values. Mapping connections between theory and practice, public design for values and built examples shows a knowledge gap on the issues of time and scale. Can temporary interventions have an effect on the public sphere? If so, how can it be measured and designed for? Can the results of temporary interventions be extrapolated to public building design? Public buildings?

**Experimenting with values**

Value intangibility makes evaluating design effects in the public sphere elusive with common desk research tools. For this reason, this doctoral research will employ design methods to test design solutions for public values through case studies. Literature review findings and case studies will constitute the point of departure for designing transposable small-scale experiments. Experimental interventions will place citizens, urban narratives and civic spaces at the centre to show how public buildings can be designed towards value production for the common good (Fig.7). Like laboratory research, spatial experiments are proposed as a scalable research tool of which results can be extrapolated to the object of research, public buildings. The experiments will consist of controlled interventions that
aim at testing ways of “opening up” existing structures by introducing infrastructural “disruptions” grounded by civic processes (7). Experiments will integrate social science (interviews, questionnaires), action research (workshops, meetings), artistic (performances, exhibitions) and architectural tools (prototyping, visualising) to broaden the scope towards transdisciplinary application.

The first experimental probation will revolve around makerspaces in Libraries as a public space for the construction of social values. Together with the National Library of the Netherlands and Hoge school Rotterdam, I will coordinate the co-creation process and prototyping of four makerspaces in different urban contexts and intended social values. The processes will mobilise collective intelligence towards enlarging programme and spatial possibilities for specific public values such as a digital literacy or social belonging. Infrastructure and material interventions developed from industrial design, material science, library science and architectural design expertise are expected to affect the public values around the library and civic context.

Comparing the real and expected results with feedback from the involved actors will direct the self-assessment and reflection process. Reflection and iteration will outline the project’s contribution to the body of knowledge: non-categorical proposals for architectural design of how design can facilitate public value creation in public buildings. The research is envisioned to prove how—when supported by theoretical analysis and civic engagement—design interventions in existing public buildings can influence the values relating a space with its urban context.

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IMAGE REFERENCES
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