

## Bridging: The Spatial Construction of Knowledge in Architectural Research

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This contribution proposes an interdisciplinary approach to architectural research, and states that composition is a methodological act of research. I will first argue that architectural research and practice can gain from a multi-perspectival approach, bringing in knowledge from different fields – in this case the field of literature. Then I will make clear that bringing together knowledge from different fields requires an act of composition. I argue that knowledge can be seen as a spatial construction rather than a linear one, and that the mediating capacity of the architect offers researchers with a background in architecture the possibility to develop such spatial research compositions.

I base this proposal on my recently finished dissertation, *Urban Literacy. A Scriptive Approach to the Experience, Use and Imagination of Place*,<sup>1</sup> in which I developed a literary view on the experience, use and imagination of place. My quest for the formulation of another approach to architecture and the city derived from a critique on the relative absence of these themes in the architecture discourse, education and practice, which tend to foreground formalistic and visual aspects of architecture. Looking for a way to find a richer perspective from which to address the complexity of lived experience, I arrived at literature. Through literature, my work proposed another way of thinking about architecture and the city, and offered tools to practice and educate their analysis and design. As a writer and reader of both architectural and literary texts, I had come to realize that in litera-

ture, the experiences of space and spatial practice are often much more accurately described than in professional writings on architecture and cities. Indeed, the relationship between humans and their environment is often described with great accuracy and detail in novels and stories. Space in literature, as seen from the point of view of literary characters with their own memories and emotions, is almost by definition *lived* space.<sup>2</sup> Literary writing confronts us with a certain ambivalence concerning subjectivity and objectivity, author and reader, and reality and fiction. This ambiguity of literature, I argue, is the strength of a literary approach: the gaze of the literary writer enables us to momentarily resolve these seemingly binary oppositions, and to illustrate that in fact, the lived experience of architecture is a matter of both. If existing literature can provide such insights, a literary approach using instruments from literature is conceivable within the domain of architectural research and even of architectural design.

The theoretical construction that I proposed to connect the idea of urban literacy to architectural research and practice can be visualized as a *three-fold literary bridge* addressing important aspects of urban literacy by means of three interrelated 'scriptive' concepts: description, transcription and prescription – three different concepts that offer the possibility to introduce the gaze of the literary writer in the domain of architecture and urbanism. While the three concepts are also 'literary', I chose the term scriptive since this addresses the *active use* of a literary gaze: writing, *scribere*, is the most

essential activity of the writer. The term scriptive can also be related to architecture: architecture 'scripts' spaces and spatial sequences, as it were. Each of the three branches of this bridge provides a different perspective by connecting to different theoretical discourses and examples of architectural and literary practices. The terms description, transcription and prescription supply a framework to structure knowledge and develop literary tools for research, education and design concerning architecture and the city. First, I propose with the notion *description* that the descriptive capacity of the literary writer is a skill that can help architects to develop a sensitivity to perceptual and poetic aspects of places. Here, the ambiguous relation between subject and object is at stake. Then, *transcription* focuses on the crossing of disciplinary borders, and on the investigation of the interactive relationship between author and reader and, consequently, between architect and user. Finally, *prescription* deals with the field of tension between reality and imagination, as indeed architects and planners are involved with the making of a not yet existing situation. Literary approaches that deal with indeterminacy and creatively use the relationship between reality and imagination offer tools to deal with this relation in design.

Within each of these branches the same path of research has been followed in order to construct the spatiality of the bridge of urban literacy. First, the concept at stake is defined in terms of etymology and connotation. Fragments from novels and poems serve as illustrations of these definitions. Second, a critical reading of relevant theoretical sources provides a basis on which to connect each concept to a specific architectural discourse. Third, an analytical model is presented in the form of an analysis of the work of an architect, which is argued to be exemplary for the approach, while a number of exercises in architecture education show how the approach can be taught and further developed.

### Triads as Methodological Puzzles

The threefold structure of this work is exemplary for the methodology by means of which it came about. Knowing that my quest for a literary approach to the experience, use and imagination of place would bring me to a wide variety of literary and spatial notions, I chose not to focus on one specific notion, but rather to explore a larger field to test my initial hypothesis. Not only did I introduce three notions, I also travelled parallel paths in order to explore my field, deepen my thoughts and elaborate my concepts. The use of three interconnected notions, a so-called triad, is a methodological choice for a dialectic approach. In *Thirdspace*, the book in which Edward Soja offers a contemporary reading of Henri Lefebvre's work, the term 'thirthing' is introduced, or more precisely 'Thirthing-as-Othering'.<sup>3</sup> Soja states that, rather than thinking in binary opposites, it is intellectually productive to add a third term, which provides a new balance, another perspective, 'a third possibility' or 'moment'.<sup>4</sup> Soja shows, for instance, how social space in Henri Lefebvre's writing is distinguishable from mental and physical space, yet it also encompasses them. In *The Production of Space*, Lefebvre indeed continuously brings up such triads: mental-physical-social space, conceived-perceived-lived. As for Soja's own work, his key triad concerns the theoretical notions of social-spatial-historical, while his term 'Thirdspace' indeed is intended to break open the common ways space is thought. This third position, according to Soja, is not a simple addition to the two others, it belongs to both of them and therefore breaks the oppositional composition. It does, in this way, provide an 'open alternative'.<sup>5</sup> This idea of methodological openness created by a third moment is crucial to be able to address the ambiguities that I have intended to bring to the fore in this work. Indeed, I did not want to discuss the subject-object, reader-writer and reality-fiction pairs as opposites, but rather as active relationships. Especially when such two seemingly opposite notions start to work together, a third condition arises, and as I will

argue further in this work, precisely this moment, this productive exchange, this *bridging moment* is the very moment of architecture – or of literature. The third condition is not just another, next to the previous two, it is a bridge that connects them. In regard to the relationship between architecture and literature, a third condition may be at stake as well, as Angelika Corbineau-Hoffmann states: ‘Similar to how the writer brings truth and untruth together in a “third”, architecture as well builds, when entering literature, a third ...’<sup>6</sup> Architectural motives in literature, she claims, can in their richness address many different aspects at once, thereby indeed constructing a third, an alternative – not by denying such categories, but rather by explicitly confronting them.<sup>7</sup> The exact nature of such a third condition remains vague on purpose, she explains, because its function is to trigger the curiosity of the reader, who is challenged to rethink his habit of thinking in binary oppositions. Indeed, when thinking of the connections between architecture and literature, and when trying, in this work, to make such connections operational, it is not the two disciplines themselves that are the key topic, but precisely the unnameable that lies in between, a third condition, which offers alternative possibilities to describe, understand and practice architecture.

Similarly, I have worked with triads as a sort of methodological puzzles, helping me to obtain an open gaze within my project. In the first phase of the research process, I ordered my work in three interconnected fields: the *theoretical positioning*, concerning the formulation of my ontological and epistemological perspective, the particular *context* that I wished to address, and, as a third category, the related *activities* in education and practice. Under the first heading, the theoretical positioning, I noted as a starting point: ‘Architecture is not only a practice concerned with physical, measurable construction. Architecture deals with human experience of the physical environment. The ontological perspective of this work concerns the

experiential aspects of architecture, and relates to the discourse of phenomenology of perception.’ I stated that place is a complex stratified phenomenon, a physical structure bearing layers of history, atmosphere and lived space. With that in mind, I stated that my contribution to knowledge would be to address the need to develop different ways to measure and analyse place, and to explore different instruments. Second, to frame the context of the current urban and architectural debate that I wished to contribute to, I formulated the following themes: the debate on urban regeneration approaches, as an urgent and topical context in which the need for new approaches was expressed; the public realm, as the social dimension of architecture and the city – precisely the place of intersection between the individual and the collective, the subject and the object, the author and the reader; and the third, but overarching theme of literature as a source for instruments and inspiration. These themes, together with the theoretical positioning, have been present throughout the whole process of this work, and have played a role as a filter for the third part: the selection of related activities in education and design practice. These activities, such as workshops with students, design studies or participation in conferences, allowed me to explore themes, methods and ideas.

The parallel paths I have followed in the course of the work (theoretical positioning, thematic explorations and related activities; academia, teaching and practice) have indeed led to another triad of parallel paths: description, transcription and prescription. This triad is more than an organizational model alone; it has become a method of research in itself, a sequence that allowed me to make the necessary steps in the process, while the literary tools discussed in this sequence of chapters were simultaneously used in the process of the writing itself. If the notion of description is linked to observation, in the process of the research it has been the first step of reading and observing the

field upon which I wished to operate. In this phase, the related literary skills of meticulous observation and evocative description were carried out in relation to the sources read and the themes explored. Observation can be understood as a form of close reading – this entailed the very precise observation of detailed information while mapping out the field of possible connections. Meanwhile, rather than limiting my reading to the field of theory, I literally went out to observe the social and spatial context of this work: observing the spaces, scenes and processes of urban regeneration. In this phase, it was important to use different forms of making notes: both using the flow of associative writing and making detailed lists of the observed spatial and social phenomena.

Transcription, then, was the step to transcribe the knowledge from this first step to the specific task at hand – for instance, to link the literary instruments that I had studied to architectural questions. While I have discussed narrative as one of the key notions in the chapter entitled Transcription, precisely this notion of narrative – the composition of sequences, of the structure along which events take place – was crucial in the second phase of my work. Here, the storyline was composed – not as a singular narrative, developing a linear argument, but as an essentially *spatial* construction, which can be viewed from different perspectives, offering multiple narratives. This act of composition has strongly been characterized by an aspect of play, or rather, by the playful use of constraints. The structure of the chapters, the order of the paragraphs, the titles and the amount of space used for each fragment were all consciously defined and positioned as in a juggling game: carefully playing with weight and speed while balancing suspense. In the final phase of my project, steps towards the possible implications had to be considered.

The notion of Prescription was defined as the act of imagining a new situation, rather than as the

literal writing of a recipe. In literature, the chronotope as the intellectual construction of a worldview has been a useful notion to discuss such imaginations, as well as the concept of scenario writing. In my research project, I indeed had the task to imagine how new, possible realities could be based on the knowledge that had been acquired and on the transcriptions that had been undertaken from one discipline to the other. Through on-site case studies with students in my Delft University of Technology seminar and design studios, I have been able to test the techniques and insights developed in this work, thereby developing scenarios appropriate for the tasks at hand.

### **Bridging as a Spatial and Intellectual Composition**

I have explicitly chosen *bridging* as a method: the bridging between literary and architectural insights, between different fields and approaches. A bridge is more than a mere connector of two sides, it also defines the banks and their hinterland more clearly, and the bridge is a place, a unity in itself. In *Building, Dwelling, Thinking* Martin Heidegger made use of the bridge to explain how a building ‘gathers’ the seemingly contrasting notions earth and sky, the mortals and the divine:

‘The banks emerge only as the bridge crosses the stream ... With the banks, the bridge brings to the stream the one and the other expanse of the landscape lying behind them. It brings stream and bank and land into each other’s neighbourhood. The bridge *gathers* the earth as landscape around the stream. Thus it guides and attends the stream ...’<sup>8</sup>

According to Heidegger, the bridge, even if it is an object, a *thing* in itself, allows a location to come into existence. A bridge is practical, in that it allows us to cross from one side to the other, but it is also an intellectual construct: it is through the



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Fig. 1: The triple bridge Tromostovje in Ljubljana, Slovenia, Jože Plečnik, photo D. Wedam.

bridge that the ambiguity of connectedness and separation becomes visible. As Georg Simmel put it even before Heidegger in his seminal essay *Bridge and Door*, this gives the bridge an aesthetic value in itself: 'The bridge gives the eye the same support for connecting the sides of the landscape as it does to the body for practical reality.'<sup>9</sup> Indeed, a bridge is both a mental and a physical construction; it gives meaning to both sides while it is experienced by the body that uses it to cross a river or an abyss. This work can be seen as a bridge, a conceptual bridge, that is, but one that in its very essence concerns architectural experience in all its aspects. This bridge of 'urban literacy' does not only connect two banks or bridge one gap; rather, it opens up a field for architecture to explore, beyond the banks, but also the space of the bridge itself. The threefold bridge that I have constructed refers to a physical urban place: the Tromostovje (three bridges) in Ljubljana, Slovenia, designed in the 1930s by Jože Plečnik [fig. 1]. This bridge, consisting of three branches with slightly different characters and directions, has been a highly inspirational reference. While offering a model for my project, discussing three different perspectives of a literary approach to architecture, it also accommodates Lefebvre's triad of social space: the conceived, the perceived and the lived. The image of this bridge can be seen as an intellectually conceived composition, looked at in bird's-eye view from the castle in Ljubljana; meanwhile it is a built reality in stone and concrete upon which the inhabitants and visitors of Ljubljana have traced out their paths and constructed their memories and stories. In the final composition of my dissertation, I have devoted special attention to this bridge: it is the bridge itself that, in the form of the prologue and epilogue, forms the opening and closure of the work. The triple bridge has been simultaneously structure, method and metaphor of this work, and as such, the composition has been a leading principle to guide the intellectual decisions made throughout the process. The composition in three parts reappears throughout the work: not only

in the description-transcription-prescription triad, but also in the tripartite division of each chapter and subchapter, and ultimately in the composition of the whole work.

The ambition to bridge the gap between theory and practice, between architecture as a product of the mind and as an experienced and 'lived' reality, implies that yet another gap had to be bridged: the one between scientific research and the more artistic approach of literary writing and architectural design. If I indeed choose to present literary references and literary techniques, I have to acknowledge their explicitly subjective nature and recognize the value of this subjectivity. Subjectivity, in my view, is not the opposite of objectivity: while a claim for objectivity can be made in the natural sciences, in architecture, as well as in literature, both notions are at stake simultaneously, and it is in fact the very reversibility of subject and object that makes for a *lived* experience of architecture. This is not to say, however, that my methodology as such totally breaks with scientific research, as French philosopher and scientist Gaston Bachelard suggested in the introduction to his seminal book *The Poetics of Space*. Here, he describes a need to let go of rational, intellectual reflection in his search for a theory of the poetic imagination: 'Little by little, this method, which has in favour its scientific prudence, seemed to me an insufficient basis on which to found a metaphysics of imagination'.<sup>10</sup> He argues even that the philosopher 'must forget his learning and break with all his habits of philosophical research, if he wants to study the problems posed by the poetic imagination'.<sup>11</sup> Also Henri Lefebvre, whose notion of lived space has been one of the foundational concepts of my work, warns against all too narrow scientific thinking. It seems that Lefebvre himself, as an author and thinker, in some ways applied a rather 'literary' viewpoint, in the sense that he tells different story lines, looks from multiple perspectives, and 'explores' his field of study by traveling through it rather than pretending to be 'scientific'.<sup>12</sup>

While indebted to the positions of Bachelard and Lefebvre, I do not attempt to escape the methods of scientific research. As any work of scientific research, architectural research of this kind intends to reveal connections between matters or ideas that are not usually connected. It should be based on a rigorous reading of relevant sources in the different fields that one intends to connect. However, the topic to be addressed, such as experience, use and imagination of places, are indeed difficult to measure or verify. The looking glass of literature, the art of observing and imagining, of setting scenes and making narratives, offers a means to address these topics in another way. It is therefore that I have searched for the formulation of such an in-between approach by means of literature. The work itself, however, is not literary, nor should it be entirely defined as a study in architectural or spatial theory. In this project, architectural research can be understood as the reinterpreting and re-ordering of knowledge from various disciplines, ultimately bridging all the different aspects at stake in a mediating composition. The work may best be characterized as critical theory, in the words of Jane Rendell: ‘... critical theories are forms of knowledge [that] differ from theories in the natural sciences because they are “reflective” rather than “objectifying” – they take into account their own procedures and methods... . Critical theories aim neither to provide a hypothesis nor to prescribe a particular methodology ... Critical theory is instructive in offering many different ways of operating between “two”.’<sup>13</sup>

And indeed, the way of operating between ‘two’ has in this case become a triad: a continuous shifting between three similar, but simultaneously very different paths. In my quest for tools and insights from literature, composition has never been a theme as such – in fact, composition might be regarded as a skill that literary writers borrow from architects, rather than vice versa. However, I have found that in terms of research methodology, the crucial moment of design has been the very composition of the work

as a threefold structure, discussing three diverging perspectives, together forming a bridge between both sides of the paradox that I intended to address. If in an architectural design process, composition can be seen as a *moment of autonomy* of the architect within the heterogeneous setting that each project entails, one might argue that the composition of a work of architectural research is an act of design as well. A crucial skill for practicing architects is the capacity to mediate: between different actors, between reality and the imagination of a future situation, between different scales and between different fields of knowledge. In the complexity of a building process, architects have to mediate between different actors: they have to be capable of switching between different languages, as it were, to communicate with clients, technicians of various fields, and users. By definition, architects operate between times, between the present and the imagination of future spatial situation – while aspects of historicity may also play a part in a design process. Within each project, a balance is also sought between various scales: the detail and the urban setting, the parts and the whole. Architects continuously mediate between material, technical, structural, cultural, social and economic fields of knowledge. We might argue that architects operate as generalists, rather than as specialists. Their ‘specialism’ is the capacity to make connections between the different fields, scales, actors and time frames, and to productively address the ambiguities that are at stake in each and every architectural project. Architect and theorist Juhani Pallasmaa has described architecture as an ‘impure’ discipline, not only in that it is in many ways related to other fields and disciplines, but also because numerous seemingly opposite notions are at stake within architecture itself: ‘Architecture is simultaneously a practical and a metaphysical act: a utilitarian and poetic, technological and artistic, economic and existential, collective and individual, manifestation of our being.’<sup>14</sup> This impurity, as Pallasmaa calls it, is by no means to be understood as a weakness of architec-

ture. On the contrary, I would argue that the nature of architecture to always address two sides of the matter should be considered its richness. The bringing together of such different perspectives is the very essence of architectural design. The moment of a design decision is thus a moment *bridging* all the different aspects and perspectives involved. The bringing together of these notions is by definition an act of composition. Indeed, as architects are compelled to find a balance between various fields and approaches, a researcher in the field of architecture is confronted with the task of balancing between the conceptuality of academic discourse and the experience of architecture's physical reality; especially when addressing themes such as poetic experience, the user's perspective and indeterminacy, which are difficult to express in scientific terms. The underlying structure, threefold in this particular case, may not be brought to the fore as content of a work of research, but it is the very composition that allows all the different components to be read and interpreted. In this way, architectural research thus addresses ways of mediating, and uses a mediating approach to do so: it offers a reading, interpretation and new organization of various architectural perspectives.

### Notes

1. This text is strongly based on the introductory chapter of my dissertation 'Urban Literacy. A Scriptive Approach to the Experience, Use and Imagination of Place', Delft University of Technology, 2012.
2. Lived space as defined by Henri Lefebvre in his triad of social space: conceived-perceived-lived, Henri Lefebvre, *The Production of Space*, (London: Blackwell Publishing, 1991) [*La Production d'espace*, Paris: Editions Anthropos, 1974].
3. Edward Soja, *Thirdspace, Journeys to Los-Angeles and Other Real-and-Imagined Places* (Massachusetts: Malden, 1996), p. 60.
4. Soja, *Thirdspace*, p. 61.
5. Soja, *Thirdspace*, p. 61.
6. Angelika Corbineau-Hoffmann, 'Architekturen der Vorstellung. Ansätze zu einer Geschichte architektonische Motive in der Literatur.' in: Winfried Nerdinger (ed.) *Architektur wie sie im Buche steht, Fiktive Bauten und Städte in der Literatur*, (München: Architekturmuseum der Technische Universität München/Verlag Anton Pustet, 2007), pp. 27,8 (translation from German KH).
7. Corbineau-Hoffmann, 'Architekturen der Vorstellung', p. 38.
8. Martin Heidegger, 'Building, Dwelling, Thinking', originally published as 'Bauen, Wohnen, Denken' in 1951, in: Neil Leach (ed.), *Rethinking Architecture. A Reader in Cultural Theory* (London/New York: Routledge, 2003 [1997]), p. 104.
9. Georg Simmel, 'Bridge and Door', originally published in 1909, in: Neil Leach (ed.), *Rethinking Architecture. A Reader in Cultural Theory* (London/New York: Routledge, 2003 [1997]), pp. 66,7.
10. Gaston Bachelard, *The Poetics of Space* (Boston, MA: Beacon Press, 1994), p. xviii.
11. Bachelard, *The Poetics of Space*, p. xv.
12. For an account of Lefebvre's literary approach, see also: Edward Soja, *Thirdspace, Journeys to Los-Angeles and Other Real-and-Imagined Places* (Massachusetts: Malden, 1996), pp. 54,5.
13. With these lines, Rendell refers to Raymond Geuss's definition of critical theory (Raymond Geuss, *The Idea of Critical Theory: Habermas and the Frankfurt School 1981*), Jane Rendell, *Art and Architecture. A Place Between* (London/New York: I.B. Tauris, 2006), pp. 8,9.
14. Juhani Pallasmaa, 'Landscapes of Architecture- Architecture and the Influence of Other Fields of Inquiry', 2003, published in: Peter Mackeith (editor), *Encounters. Architectural essays by Juhani Pallasmaa* (Helsinki: Rakennustieto Oy, 2005), pp. 335,36

**Biography**

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