



LEEDS  
BECKETT  
UNIVERSITY

---

Citation:

Stoppani, T (2016) "Architecture and Trauma." In: Ataria, Y and Gurevitz, D and Pedaya, H and Neria, Y, (eds.) Interdisciplinary Handbook on Trauma and Culture. Springer International Publishing. ISBN 978-3-319-29402-5, 978-3-319-29404-9

Link to Leeds Beckett Repository record:

<https://eprints.leedsbeckett.ac.uk/id/eprint/1597/>

Document Version:

Book Section (Accepted Version)

---

The aim of the Leeds Beckett Repository is to provide open access to our research, as required by funder policies and permitted by publishers and copyright law.

The Leeds Beckett repository holds a wide range of publications, each of which has been checked for copyright and the relevant embargo period has been applied by the Research Services team.

We operate on a standard take-down policy. If you are the author or publisher of an output and you would like it removed from the repository, please [contact us](#) and we will investigate on a case-by-case basis.

Each thesis in the repository has been cleared where necessary by the author for third party copyright. If you would like a thesis to be removed from the repository or believe there is an issue with copyright, please contact us on [openaccess@leedsbeckett.ac.uk](mailto:openaccess@leedsbeckett.ac.uk) and we will investigate on a case-by-case basis.

**Yochai Ataria, David Gurevitz, Haviva Pedaya, and Yuval Neria (eds), *The Interdisciplinary Handbook on Trauma and Culture*, Springer International Publishing AG, 2015.**

Teresa Stoppani

**ARCHITECTURE AND TRAUMA**

### **AUTHOR'S INFORMATION**

Professor Teresa Stoppani, M.Arch Ph.D., School of Art Architecture and Design, Leeds Beckett University, Broadcasting Place, Leeds LS2 9EN  
United Kingdom, T.Stoppani@leedsbeckett.ac.uk

### **AUTHOR'S BIOGRAPHY**

**Teresa Stoppani** is an architectural theorist and critic, and Professor of Architecture at Leeds Beckett University, where she directs the PhD program in Architecture. Teresa's research focuses on the relationship between architecture theory and the design process in the urban environment, addressing in particular the influence on the specifically architectural of other spatial and critical practices. Her writings are published internationally and include: a series of works on G.B. Piranesi's architectural space in relation to contemporary spatial practices; explorations of the significance of dust in philosophy, the visual arts and media; essays on the grid and the map and their configurations and systematization of space; a study of the complex relation of the project of architecture with the destructive event of war and terrorism; work in progress on the material and critical nature of different forms of architectural representation Teresa's book *Paradigm Islands: Manhattan and Venice* (Routledge, 2010 and 2015) has explored the impasse of modernist architecture in historical contexts, while the forthcoming *X Unorthodox Ways to Rethink Architecture and the City* (Routledge, 2016) proposes a series of terms for the reconceptualization of the architecture of the city.

**Yochai Ataria, David Gurevitz, Haviva Pedaya, and Yuval Neria (eds), *The Interdisciplinary Handbook on Trauma and Culture*, Springer International Publishing AG, 2015.**

Teresa Stoppani

## **ARCHITECTURE AND TRAUMA**

### **Abstract**

Working through the ambiguities of the concepts and definitions of “trauma” and “architecture”, the paper defines and explores the “trauma of architecture”. The effects of traumatic events on architecture are considered beyond the physical damages and destruction of its body, to understand the temporally dilated workings of trauma through architecture as a practice and a discipline, and the processes through which architecture responds to trauma using its own languages, histories and forms of representation, in an attempt to incorporate it. *What are the changes that trauma produces on architecture as a discipline then, and how does trauma affect architectural discourse and forms of expression?*

Transposed to architecture, the idea of trauma’s “deferred action” is applied to the time of the architectural project. A series of examples – the aftermath of the events of 9/11, architectural responses to the effects of the war in Sarajevo, and Bernard Tschumi’s theoretical work on architecture and violence – illustrate different ways in which architecture elaborates the trauma to produce not only spatially and temporally situated physical responses, but also transformations of the discipline at large, with a further deferred effect in both time and space.

### **Keywords**

9/11

Architecture

Body (and architecture)

Deferred Action

Sarajevo (war in)

Trauma (architectural)

*Urbicide*

Violence of Architecture

War (destructions of)

*Wararchitecture*

De Boeck, Lieven

Sorkin, Michael

Tschumi, Bernard

Woods, Lebbeus

**Yochai Ataria, David Gurevitz, Haviva Pedaya, and Yuval Neria (eds), *The Interdisciplinary Handbook on Trauma and Culture*, Springer International Publishing AG, 2015.**

Teresa Stoppani

## **ARCHITECTURE AND TRAUMA**

### ***Introduction***

‘Trauma’ and ‘architecture’ are terms characterized by an intrinsic ambiguity in relation to their historical and cultural contexts. Both, in different ways, indicate cultural constructs that change through time (the definition of ‘trauma’ has indeed a recent history), and continue to adjust to the needs, events, body of knowledge and disciplinary positions of their times.

Spanning and embracing the ambiguities of ‘trauma’ and ‘architecture’, this paper defines and explores the ‘trauma of architecture’, that is, the effects of traumatic events on architecture. What trauma do we need to consider here though, physical or psychological, and is it always possible to trace a clear distinction between the two? Psychological trauma is fundamentally a disorder of memory, and what crucially defines it is its relation to time and to ‘normal’ consciousness. Frozen in time, the traumatic experience is re-lived in a traumatic present and escapes efforts to represent it *as* past.

Is it then legitimate to suggest that architecture can be ‘psychologically’ traumatized, beyond the evident effects of violent destructions and physical damages, that is, traumatized as a discipline? How is the architectural discipline wounded and shocked, and how does it react to the shock? And how does architecture respond to trauma, using its own languages, histories and forms of representation, in an attempt to incorporate it? This text discusses the different modes of these responses within the discipline of architecture.

In the background of these considerations lies the historically established foundational relation between architecture and the human organism: a relation that, beyond anthropomorphism, has always been grounded on ideas of proportion and connectivity, function and growth, evolution and change in time, linking the workings of architecture to the physiology of the body. According to these definitions architecture lives, and as life it can be traumatized. This genealogy of architecture allows also for a transposition of the idea of trauma from the body of architecture as an object to the complex system of social, functional, and temporal relations that are embedded in the process of architectural making.

What this text explores is not the relation between the traumatic event and the physical body of architecture (its buildings), but the more complex and temporally dilated workings of the effects of the traumatic event through architecture as a practice and a discipline. Trauma is therefore considered as a temporal becoming, as much as is the process of architecture, and

their relationship is examined as a complex process of interactions which affect the body of architecture as well as its pasts, its memories, narratives and languages.

Sigmund Freud's fundamental idea of *Nachträglichkeit* or "deferred action" of the trauma is important in an architectural discourse on trauma, as it distinguishes between the traumatic event or experience and its delayed revival as a memory. Transposed to architecture, the idea of "deferred action" can be applied to the time of the project, to study how a traumatized discipline responds in time: the different ways in which architecture elaborates the trauma to produce not only spatially and temporally situated physical responses, but also transformations of the discipline at large, with an further deferred effect in both time and space.

Through a series of examples, this paper explores those practices which, operating in architecture and around it, process the issues that traumatic events raise for the discipline of architecture. Different responses emerge that attempt to appropriate the work of trauma within architecture: from the (re)design of the traumatic event within the conventions of architectural representation, to political strategies for its urban diffusion and social redistribution; from the reinvention of a cartography of urban memory, to design strategies that imitate the forms of destruction, to an understanding of the violence of architecture that reveals the intrinsic and originary traumatized nature of architecture.

In the aftermath of the events of 9/11 in New York, theoretical architectural projects proposed different ways to process the trauma that the terrorist attack had inflicted not only upon buildings but on the role and the status of architecture in society. Lieven De Boeck's ex post drawings of the event in *Fireworks II. Le Blue du Ciel* remain specifically architectural, offering a visual graphic representation of the traumatic event that appropriates it to architecture, in a meticulous attempt to understand and process facts and data through the conventions of **architectural representation** (plan, section and elevation drawings).

Michael Sorkin's socially and politically engaged architectural criticism and design proposals offer a different strategy of appropriation of the trauma, through a diffusion and **redistribution in the social**.

In the case of the *Urbicide Sarajevo* project, the architectural response to the prolonged urban warfare comes in the form of a **reinvented cartography** of the city that visually documents, categorizes and systematically maps the instances of physical damage and destruction of buildings. War introduces an alternative logic that induces a re-categorization of architecture, foreign to the criteria of its aesthetics and production, and the *Urbicide* project, while painstakingly detailed, remains unable to find a synthesis and declares the impossibility of articulating a linear narrative of the traumatic event and its consequences.

Produced as an architectural response to the effects of the war in Sarajevo, Lebbeus Woods's *Wararchitecture* projects offer a very prolific catalogue of design solutions resolved and expressed in highly personal architectural style. Yet, they too remain incapable to construct a response other than by embracing, as the title of the series suggests, the language and the aesthetic of the trauma, ultimately showing the failure of a **mimetic approach**.

The theoretical background of these and more questions and approaches remains the critical position developed by Bernard Tschumi in the 1970s with his work on **architecture and violence**, which questions the nature of architecture through writings, drawings and

theoretical design projects. On the grounds of Tschumi's work it is possible to develop the argumentation of the relationship between architecture and trauma even further. Architecture can be traumatized, and the traumatic effects are recorded and expressed on its body, while they are also reflected in its project, that is, they affect changes in the discipline and its forms of representation both visual and social. What are the changes that trauma produces on architecture as a discipline then, and how does trauma affect architectural discourse and forms of expression? In his early writings and projects Tschumi explored the violence exerted on architecture and exposed the nature of the **violence of architecture**, that violence on space and bodies that performed *by* architecture. Here the idea of architecture's intrinsic violence is developed further, to suggest that architecture is always already traumatized as it defines itself through a subject-object relation. The possibility is thus opened up to use architecture's **intrinsic trauma** (traumatized nature) as a critical tool for architecture's auto-analysis and self-development.

### *Analogies to Transitions: Architecture as a Body*

In her book *Trauma: A Genealogy*<sup>1</sup> Ruth Leys points out that post-traumatic stress disorder (PTSD) was first officially recognized and defined by the American Psychiatric Association only in 1980.<sup>2</sup> But the history of trauma and its consequences on the psyche are much older, and Leys sets out to document the different and often contradictory positions and theories that, in time, have contributed to the development of the definition of trauma.<sup>3</sup> Ley's genealogy of trauma shows that the definition of the term oscillates even within the work of the same psychiatrist, and that the ambiguity of the term and of the approaches to it persists today.<sup>4</sup>

Post-traumatic stress disorder is fundamentally a disorder of memory. The idea is that, owing to the emotions of terror and surprise caused by certain events, the mind is split or dissociated: it is unable to register the wound to the psyche because the ordinary mechanisms of awareness and cognition are destroyed. As a result, the victim is unable to recollect and integrate the hurtful experience in normal consciousness; instead, she is haunted or possessed by intrusive traumatic memories. The experience of the trauma, fixed or frozen in time, refuses to be represented *as* past, but is perpetually re-experienced in a painful, dissociated, traumatic present. (Leys 2000, 2)

This preamble can offer some clues to the notes on architecture and trauma that follow here, as some of the terms it introduces can significantly be applied to architecture.

What does one speak of when one speaks of trauma and architecture? Can architecture be traumatized, and what is the trauma of architecture? If trauma occurs when terror and surprise or, in transposing this to architecture, violence and suddenness, destroy 'ordinary mechanisms of awareness and cognition', what is it that is destroyed of architecture when architecture is traumatized? I suggest here that it is not only the body of architecture, its physical edifice, that is traumatized. The whole discipline of architecture, its history,

assumptions, knowledge and practices are affected, as architecture is always already invested by social, political, economic, ideological and symbolic values. The dual nature of trauma lies also at the origin and definition of the medical term, suspended between the body and the mind, the medico-surgical and the psychological-psychiatric.

Leys invokes 'Morton Prince, Josef Breuer, Sigmund Freud, and other turn of the century figures to describe the wounding of the *mind* brought about by sudden, unexpected, emotional shock.' (Leys 2000, 4). If we accept these early definitions, how is the "mind" of architecture shocked and wounded, and how does architecture react to the shock? What allows this transfer of feelings, altered perceptions and memories from an individual and a society to their built environment and to architecture as the key discipline that defines it?

If architecture can be traumatized it is because of its ongoing relation with human beings, not only in its definition, but also in its making and changing. We can argue that architecture lives because it lives with man, rather than say that human beings inhabit architecture. This relationship is in fact much more complex: architecture is not only the habitat of human life, but also the product of such inhabitation, as well as the result of the application of a knowledge that developed in time. But there is more at stake. Architecture is not only a container and a support of life while being at once also its product; architecture is also a cultural and symbolic production, always invested with political and ideological meanings that reflect those of the society it hosts and represents. Architecture changes with life and culture; in this sense it lives.

The association of architecture with the human body and human life is not relevant only when discussing trauma, traumatic effects on architecture, and architecture's response to them. Both the forms and the functioning of architecture as a dynamic relational system have always been associated with those of an organism, and in particular with the human body. Western architecture was defined, from its very origins, in relation to the forms and the proportions of the human body. While the relation to nature at large was always mediated by a material and structural culturally and technologically mediated intervention (think for instance of the myth of the primitive hut as the origin of architecture, which does not imitate the tree structure but uses and combines trees to produce its own structure), the relation to the human body has always been direct, and a certain anthropomorphism has always informed architecture. The forms and proportions of the Greek orders imitated those of masculine or feminine human bodies, and Renaissance architecture organized its spaces according to harmonic proportions that were supposed to elevate them to the divine by imitating the terrestrial "perfection" of the human body. We are all familiar with the figure of Leonardo's (1452-1519) man, inscribed in a circle and taken as rule and measure for an umbilically centered universe, and with Leon Battista Alberti's (1404-72) suggestive image of the city as a well functioning body, whose head, heart, intestines and other parts are ideally informed in their the distribution, relations and functioning by the different components of a human body.<sup>5</sup> Passages of Francesco di Giorgio Martini's (1439-1501/2) treatise on architecture further develop this relation, adding also illustrations that may seem naïve but are self-explanatory, and well express the by then widely shared assumption that the human body, the body of architecture and the body of the city are connected by correspondences that go beyond formal similitude and structure also their functioning.<sup>6</sup>

Less well known passages of Antonio Averlino il Filarete's (c.1400-1469) treatise on architecture<sup>7</sup> further focus on the physiology of the body (human and architectural), concentrating on the issue of the production of architecture and its analogy with the reproduction of the human body. Here, in an apparently bemusing narrative, the architect, as author of the project of architecture, is presented not as the father but as the mother of architecture, the father being instead the client, who both initiates the project and makes its realization possible. As mother of architecture, the architect makes, revises and develops his (her?) project, in a design process that is explicitly referred to as "gestation". The architect then delivers the architectural "baby" in form of an architectural model, and with the support of the client then nurses it to completion with the construction of the building. While obsolete in the way it represents authorship and the relationship between architectural design and the construction process, Filarete's text remains crucial today, beyond the transgender twist of his narrative,<sup>8</sup> as it performs a double shift in the definition of architecture. The making of architecture is defined here as a dynamic, negotiated and collaborative process: before, around and beyond the production of the object-building act a complex network of voices, forces, desires, specialisms, intentions and possibilities. More importantly, architecture is defined as a temporal entity, which evolves in time, in the process of its making, as well as in the alterations of its inhabitation. According to this narrative, as early as its embryonic state, architecture has a story of change, of variation, of adjustments in time. Even in the Renaissance dominated by images of harmonic proportion, the analogy of architecture with the body pushes beyond and behind the figure of an idealized well-proportioned body, to take on the time and the physiology of the body, as well as its occasional messy malfunctionings.

Can architecture be traumatized then? Can architecture, as psychology did, perform a transposition of the idea of trauma from the body of architecture to the complex system of social, functional, temporal relations that are embedded in the making of architecture and embodied in its object? And if so, what is a traumatized architecture? In other words, how does trauma work on architecture as a body and on architecture as a practice and a discipline?

Trauma, Ruth Leys explains, 'was originally the term for a surgical wound, conceived on the model of a rupture of the skin or protective envelope of the body resulting in a catastrophic global reaction in the entire organism' (Leys 2000, 19). The idea of trauma as the rupture of a protective envelope easily suggests the possibility that the analogy from the body to the mind can indeed be extended to architecture, thus returning trauma, in a sense, to the body – the body of architecture as well as the body that inhabits architecture. It is important to understand that these transpositions are not mere formal analogies, but need to be considered as processes in time, also when they refer to architecture. The "transposition" of the medicosurgical notion of trauma into psychology and psychiatry is well described by Jean Laplanche (1924-2012). Laplanche explains that in physical trauma there are 'a series of gradations linking major impairments of tissue to decreasingly perceptible degrees of damage, but that would nevertheless be of the same nature' and produce 'histological damage and, ultimately, intracellular damage. The trauma would proceed, as it were, to a kind of self-

extenuation, but without losing its nature, until it reached a certain limit, that limit being precisely what we call “psychical trauma.”<sup>9</sup>

There are here a few points that offer a key to better understand the relation of trauma to architecture. Trauma is not the sudden event, usually violently triggered and enacted (the rupture of the protective envelope), but the series of reactions that the event triggers and that spread out from it, in time-space, in the body. Trauma is therefore a temporal becoming. The transition from the body to the psyche then is not marked by a discontinuity. This is not an analogy but a continuum of becoming of the organism, be it a body or the body of architecture. Architecture too then can be seen not as a wounded body, but as an organism that progressively reacts to a triggering rupture. The relationship between trauma and architecture is thus a complex process of interactions, and, as in psychology, the body of architecture as well as its pasts, memories and languages are affected.

The very ambiguity of the notion of trauma, once it is applied to architecture, exposes the equally complex and ambiguous nature of architecture. That architecture is not only an affected and then reacting body, but an active and changing repository of memories, as well as a form of expression and communication, can be further clarified if another aspect of psychological trauma is considered as well. Leys observes that the temporality of the continuity between physical and psychological trauma suggested by Laplanche needs to be further complicated and that ‘an entirely different direction was taken by Freud [...] [as he] stressed the role of a post-traumatic “incubation” or latency period of psychic elaboration, in ways that made the traumatic experience irreducible to the idea of a purely physiological causal sequence’ (Leys 2000, 19). Sigmund Freud’s (1856-1939) fundamental contribution to the debate is important for an architectural discourse on trauma, as it distinguishes between the traumatic event or experience and its delayed revival as a memory. Freud’s *Nachträglichkeit* or “deferred action” suggests a ‘temporal delay or latency through which the past was available only by a deferred act of understanding and interpretation’.<sup>10</sup> This becomes crucial when we consider architecture as a project, whether in response to a traumatic event or else, as it brings into the discourse the temporality that characterizes its process. Beyond and before the more evident time of the building and its inhabitation, there exists in architecture, essential to it, the time of the project, what Filarete in the 1400s had called the “gestation” of the architectural idea and representation. But how is this project altered when it is assaulted from the outside, and how does it perform its alterations?

The following notes do not aim to offer a survey of cases where trauma and architecture intersected in the history of humanity. The task would be both endless and always insufficient, not only in its dimensions, but for its intrinsic Borgesian impossibility.<sup>11</sup> Architecture, that is, is always traumatized, by life, by history, by ideas, by events that are outside architecture but affect it. On the other hand, architecture always traumatizes its immediate context, its inhabitants, its environment, and ultimately the planet. The study of this aspect of the relation between architecture and trauma would then be an issue of gradation, scale, velocity and pace. What is important instead is to understand the possible articulations that the relation of trauma and architecture can take. These notes offer a very

small selection of cases that are paradigmatic in defining the possible articulation of such relations.<sup>12</sup>

### ***Under Attack: Violence on Architecture***

On the 11<sup>th</sup> of September 2001 violence hit architecture in a sudden and unexpected way, with a speed that is unconceivable in architecture, and was precisely and carefully choreographed outside of it. The terrorist attack on the towers of the World Trade Center in New York was not only swift and swiftly doubled, but also magnified in scale, dimension, conflict, political significance, and human tragedy. The airline Boeings that were flown into the symbols of the American global economical power destroyed buildings and lives, and yet they attacked also values, meanings, political and economic systems, and beliefs. As a discipline, architecture was muted, physically pulverized and stunned as a discourse. Then, beyond and beside the human tragedy, architecture too had to cope. Beyond the immediate impact and destruction of the buildings, the trauma of the attack slowly worked its effects through architecture, triggering a questioning of the role, the meanings, the weaknesses and the responsibilities of the discipline, from the ambition to verticality that has always characterized it, to the moral issues of representation that invest it.

While the general architectural debate concerned itself with the meaning and the legitimacy of wanting to build higher and higher, with the problem of the aestheticization of the ruin, with issues of memory and monumentalization, and with the effect of land value and speculation,<sup>13</sup> Belgian architect Lieven De Boeck (1971—) produced critical architectural response by design to the events of 9/11 in Manhattan. His project *Fireworks II, Le Bleu du Ciel* – the title an obvious homage to Tschumi's homonymous project and to his references to the writings of Georges Bataille<sup>14</sup> (both discussed below) – remained focused on the planning and the unfolding of the traumatic event, redefining it and reliving it as a choreographed architectural act. In *Fireworks II* the planning and the execution of the attack are turned into architectural drawings, diagrams, legends and data sheets. Architecture re-appropriates, incorporates and graphically re-enacts the violent attack, as a strategy to cope with it, in an attempt to reorder, categorize and normalize within the architectural knowledge and media what normal is not.

After the traumatic events, De Boeck's project condenses the planning, the unfolding and the consequences of the attack in a series of architectural documents, reconstructing and reinterpreting the facts *in* architecture. The figurative (the drawings of the explosions), the descriptive (architectural drawings of the buildings and the airplanes), the diagrammatic (the reconstruction of flight paths and time lines) and the quantitative (the calculations and display of times, distances, geographical coordinates, speeds, weights) are combined in a synthesis that employs different architectural media. The project focuses on the details and the measurements of the event itself rather than its aftermath, and the explosions become here part of the architectural project that is represented. De Boeck reads the repeated attack on the Twin Towers as an architectural performance. He even reminds us that the pilot who flew the

first plane into the North Tower was an architect who had graduated in Cairo and specialized in urban planning and preservation at Hamburg TU.

Here, as if in a process of healing that does not propose a reconstruction but offers instead a reframing and a reinterpretation, the architectural project mimics the project of the attack. Thus appropriated into architecture, the attack will continue to affect (disturb?) the discipline, ultimately forcing it to elaborate a response, at least in form of an exorcizing representation performed through its habitual conventional media. This project strips architecture bare to its essentials, outside humanitarian concerns, political and ideological connotations and corporate real estate values, and in doing so, paradoxically, it exposes the trauma suffered by architecture and its internal linguistic response. De Boeck analyzes the event ‘as an architectural enterprise, as an act that gains significance from an architectural point of view’.<sup>15</sup> The site plan, flight positioning and data, coordinates and times, together with conventional architectural drawings – plans, sections and elevations – are used here to represent the traumatic event and the architectural understanding of it.

Immediately after 9/11 variously sponsored exhibitions, publications and design competitions called for architectural proposals for the reconstruction of the World Trade Center site and for monumental commemorations of what was quickly renamed Ground Zero, not only to indicate the tabula rasa caused by the terroristic attack, but also to suggest the possibility of an optimistic and amnesiac new beginning, for both the site and its architecture. Prompted by urgency, by the vitalistic reaction of the city, and by the enormous political and financial interests invested in the site, the reconstruction proposals, and in particular Daniel Libeskind’s winning project, all displayed in different ways a will to forget and carry on, building higher and higher in an optimistic commemoration of the event. What lacked in these most conventional and then successfully realized proposals was the critical distance that was demanded of architecture after 9/11. De Boeck’s theoretical exercise with the *Fireworks II* project proposed instead an analytical understanding and critical denunciation of the events, and as such remains controversially and uncomfortably active within the discipline. It shows why and how architecture should have engaged with the events of 9/11, responding not with an amnesiac (re)construction, but with a critical reconsideration of the role architecture in society.

What does this mean in the specifics of architecture? The extreme event exposes the complexities, limitations and conflicts that inhabit architecture, invested as it is by “other” systems of signification. Beyond the symbolism of a late modern international building complex that had come to represent the center of global economic influence, the Twin Towers were also the icon of a myth of renewed birth and indomitable progress that is exquisitely “New York”. Superposed on these givens, De Boeck’s attempt is specifically architectural; it re-appropriates the event to architecture, incorporating it in the project: trauma *as* architecture.

De Boeck’s work concentrates on 9/11 as a traumatic event, proposing an architectural aftermath of formal and linguistic re-elaboration. The writings and theoretical projects proposed by Michael Sorkin (1948—) in the period that immediately followed 9/11 develop instead a slow reaction in time that moves away from the idea of the traumatic moment, and

evolve a strategy of change and reconstruction (therapy?) that gradually spreads in time and space.<sup>16</sup> Sorkin suggests that ‘the process of recovery would involve repeated mapping of the meanings not just of the site but of the very idea of site’,<sup>17</sup> and his proposal suggests a series of social and political interventions that would not concentrate exclusively on the physical site of the 9/11 attack, but would combine the redevelopment of the Lower Manhattan site with a comprehensive redistribution plan throughout the city.(November 2001). Mirroring this strategy, Sorkin’s projects for the World Trade Center site, initially similar to other conventional architectural responses (a reconstruction of twinned towers), gradually dissolve the architectural form, moving from the idea of the tower to the proposal of a protective berm around the explosion craters, to a huge geodesic dome, to its opening up into a group of smaller torqued towers, and to their eventual disappearance, as in the blossoming, opening up and ultimate undoing of a flower. Sorkin’s critical response remains firmly based on design, but it becomes increasingly focused on devising strategies for the wider city rather than on the definition of closed forms for the Ground Zero site. In the end his *Back to Zero* project (April 2003) returns the site to the city as an open public park that maintains the gigantic footprints of the World Trade Center towers but covers everything in grass, because ‘Nothing need be built there’ (Sorkin 2003, 137).

Responding to an architecture that rushed a reaction of reconstruction and verticalism and left many questions unanswered, Sorkin proposes an architecture that can be formally silent but socially relevant. “Build nothing” is not “do nothing”, and it addresses the political agency of an architecture that aims to be globally and internationally effective beyond its formal resolution. ‘Perhaps this is a scar that should simply be left. Perhaps the billions should be spent improving transportation and building in neglected parts of the city [and] of the world.’ (Sorkin 2003, 23). Sorkin’s *Back to Zero* project called for an architectural silence capable of reappropriating the terrorists’ symbolic appropriation of architectural space. Proposing architecture as a practice of social collective engagement, and speaking up against the U.S. imperialism that had indirectly enabled that symbolic appropriation, Sorkin’s “silent” project for Ground Zero proposed a constant reminder of the ghost presence of the traumatic event – not as a celebration of the ruin, but as a form of reactivation for collective public re-use.

Beyond the devastating dimension of the human tragedy, the attacks of 9/11 raised also questions of architecture. In different ways, Leven De Boeck’s and Michael Sorkin’s projects attempted to ‘speak of the unspeakable’<sup>18</sup> in architecture, in response to the trauma that had hit architecture too. From the personal and yet universal, to the socially engaged and yet dislocated, they aimed to find the architectural truth of 9/11, ‘because telling that truth has not merely a personal therapeutic but a public or collective value as well’ (Leys 2000, 109). ‘Remembering and telling the truth about terrible events are prerequisites both for the restoration of the social order and for the healing of individual victims.’ (Lewis Herman 1992, 1).

### ***Traces and Scars: Urbicide and Wararchitecture***

On the 16<sup>th</sup> of March 1994, during the war in former Yugoslavia, while Sarajevo was still under siege, five members of the Architects Association Das-Sabih escaped from Sarajevo with the documentary materials that recorded the systematic destruction of the city with photographs, maps, video footage, and audio and written accounts. The materials will become *Wararchitecture-Sarajevo: a Wounded City*, a travelling multimedia exhibition that showed to the world the destruction of the architecture of Sarajevo.<sup>19</sup> *Urbicide Sarajevo, A Wararchitecture Dossier* (1994) that accompanied the exhibition and circulated even more widely, documented the systematic destruction of the city's monuments and buildings. The dossier offers a systematic survey of the damages to buildings and structures, organized in a chronological/stylistic order according to four architectural periods.<sup>20</sup> The scale of the disaster is measured in details, hit by hit, fire by fire, grenade by grenade. Each damage is photographically documented, described in lists that read like inverted architectural specification documents, and recorded on cadastral maps and city maps. Yet, as both the war and the documents were still in the making at the time (while the city was being destroyed), the documents were presented in an unordered *open archive* of loose sheets that could be rearranged, reworked and complemented with new ones, in an ongoing survey that was offered without commentary, as a silent witness.

Painfully and painstakingly precise, photos, mappings and words documented a siege perpetrated in *time*. War here becomes as slow as architecture and its making. The destruction proceeds systematically but slowly, piecemeal, in a time so long that, as in the long exposure of early photographs, human presence is erased and only its traces remain in the objects that are left behind. Documenting buildings according to the chronological order of their making rather than by the time of their destruction, this systematic account of damages does not count deaths. There are no people in this documentation, no information on human lives lost, no blood. The photos are published in black and white, and their emphasis thus falls onto the incompleteness and the unraveling of the built forms. Mute, scarred, burnt, the buildings or what remains of them carry the loss and bear witness to the traumatic event. Weak and vulnerable, structurally damaged, collapsed, they become both precarious records and symbols. But both the precarious and the symbolic are so diffuse in this Sarajevo that they become part of the very urban tissue, beyond the single architectural object, in a new disquieting continuity. The photographic documentation then becomes insufficient and unstructured, and the visual record of the damaged fragment or the lost detail work only when they are considered in the plural, as a series. The photographic reportage is complemented by the mapping of the damages. Detailed and annotated with accuracy, the maps are even more powerful than the photographs, as they enter both public buildings and private lives with the precision of a surgical knife. Like the archive that they accompany, these maps are unfinished, only provisionally fixedly; and while the physical city will heal most of its wounds, bear the scars but grow new tissue in them, these maps (and photographs) remain charged with the role of defining (and re-membering) the moment of the traumatic event. And yet even the event here is multiple, fractured and repeated again and again and again, and yet never identical to itself.

The *Urbicide Sarajevo* dossier, characterized by the precision of its data and the systematic organization of its details against the historical and architectural background of the city,

becomes a critical project. The survey of the damages could have been structured in a moment-by-moment chronological account of the moments of destruction, or in a neighborhood-by-neighborhood spatial description. Instead the dossier is placed within the discipline of architecture, providing a historical background to what of the body of the city has been erased. It also chooses to operate in space-time, using the conventional tools of architectural and urban representation (the photo, the plan, the text) to produce an archive in progress that remains open to future strategies of intervention. The materials are thus presented in a loose-leaf folio that avoids any linear narrative, and their sequence remains re-combinable.

The maps represent the synthetic moment of this process, but they too are renegotiable. While photos can be added to photos, and words to the list of damages, the map remains subject to constant reworking. Encoded, synoptic, dynamic, the map represents at once the pre-existing context and the formal effect of the damage; it also records the production of the photographic documentation; and, open and instrumental, it offers basic information for potential reconstruction projects. The map becomes also the representation of the work of war on architecture, as it records buildings that have become relevant or representative for their damages rather than for their historical or architectural qualities. Here the war produces, and the map records, an alternative logic that establishes new categories, blind to aesthetic and stylistic criteria as well as to the utilitarian and infrastructural reasons of architecture. The survey, ranging from the city scale to the microdetail of the damages to a single building, produces a reading of the city as an organic, wounded and traumatized but still alive body. The pain of the wounds seems even bigger because it is so diffuse, so extensive, and yet so precisely and clinically articulated by the dossier's legends: 'direct hit, direct hit in the roof, direct hit in the façade, roof damage, partly burnt, completely burnt down, completely destroyed'<sup>21</sup> produce a new glossary of spatial and architectural classification whose entries and definitions are determined by absence and defined by what is materially missing.

The *Urbicide Sarajevo* dossier is a precise survey, an archive, a tour guide, a plan for reconstruction; but, as unstructured catalogue, it is also a monument, a witness, a mute book, a non linear account openly structured to be as heterogeneous and as pluralistic as the culture of Sarajevo itself. A memory that can be selectively and differently reactivated, *Urbicide Sarajevo* is also a project that chooses not to design. It does not offer sets of building instructions, it does not devise spatial arrangements. On one hand the project declares the impossibility of articulating a linear narrative of the traumatic event, and of producing of it an exhaustive account. Not only will this document (the map or the archive) be always in the making (incomplete); it will also be always insufficient to the object of its representation. On the other hand the recording of the urban trauma takes place in and on the city itself: the buildings and their remains become the inscription (the tracing) of the war, a three-dimensional rendering of the horror. But above all *Urbicide Sarajevo* is a project for the distance that it produces, for its 'editing out', for what it does not say and what it does not show.

While the *Urbicide Sarajevo* dossier is presented around the world, American architect Lebbeus Woods (1940-2012) produces his own *War and Architecture* project, which addresses the conditions of Sarajevo after the siege of 1992-96 proposing that cities

devastated by war should not restore their buildings in a way that erases the evidence of the destruction, but should express the traces of their wounds by incorporating and expressing them in the architectural projects of reconstruction. For Woods building is ‘an aggressive, even warlike act’<sup>22</sup> and therefore the traumatic effects of war on architecture are not external to it, but bring to paradoxical extremes the violence that is intrinsic to architecture. The violence released by war indeed questions architecture’s own performances and rituals, ultimately exposing violence as an integral part of the architectural project and organism. For Woods the reconstruction of the city should acknowledge the damages of war and build around them a ‘new tissue’ of ‘scabs’, ‘scars’ and ‘insertions’ (these are the titles of Woods’s projects for Sarajevo) to be grafted on its wounded fabric and buildings. While the architects of Das-Sabih had documented the traumatic events of Sarajevo by recording the physical damages, Woods accepts the damages and works with them, assimilating the workings (destructions) of war and incorporating them in his architectural project (their undoings are turned into makings). Here architecture and war are no longer mutually exclusive but coexist in the same cityscape where destruction and a process of rebuilding by grafts and insertions can happen simultaneously. Yet, what remains excluded from Woods’s project is the idea of the city as a functioning organism, as a system of interconnected spaces and as a network of energy. The piecemeal repairs performed by Woods’s projects propose a new esthetic of reconstruction, but do not address the city as such, apparently ignoring that the damage may spread beyond the eye and beyond isolated damaged structures, to an invisible that ranges from hidden building structures and urban networks to the environmental and psychological comfort of the inhabitants.

For Woods architecture’s possibility of survival in a context of random destruction lies in its fluidity and adaptability. He propounds an architecture that operates by moves rather than rules: quick, shifty, adaptable, able to make do with given precarious conditions and makeshift materials; an architecture characterized not by the forms it produces, but by the moves that generate it. Different formal outcomes, regimes of ownership and occupations are determined by the specificity of the situation. The architectural forms produced are always unpredictable, constantly changing, and always incorporating different times and durations: the sudden time of the explosion, the quick time of collapse, the slow or broken time of a makeshift construction. This is a design strategy that claims to assimilate contemporary strategies of war, the urban raid and the guerrilla rather than the frontal array and confrontation of regular armies. Woods suggests that the project is not only formal and proposes in fact a political and social strategy of survival through occupation tactics and a new regime of ownership. But the design projects remain trapped in a mimetic response to the traumatic event, materializing the effects of the trauma into an architectural translation (transposition) of its effects. Instead of producing a distance and a response, architecture here becomes the formal language for the concretion of the trauma, thus reducing any tension and stifling any possibility of change.

Too quickly and too literally, Woods’s projects “transpose” the trauma into architecture without constructing any distance from it. Frozen in the time and in the forms of a building (or building repair), the matter and the forces of architecture are composed according to the rules of a project of destruction whose finality was other than form making. Woods’s *wararchitecture* literally traces the forms produced by war, constructing the craters, using as

a mould the urban gaps produced by the explosions, embracing a rhetoric of destruction that is not indifferent to the formal appeals of the architecture of deconstruction. What remains unresolved here is the possibility (and the responsibility) for architecture to go beyond a formal strategy of given forms and to propose instead a strategy of *making* form that affects and organizes space.

Woods's projects for Sarajevo perform a mimesis of trauma, a sort of architectural 'hypnotic imitation or identification' (Leys 2000, 8) that 'preclude[s] the kind of spectacular distance necessary for cognitive knowledge of what had happened' (Leys 2000, 8—9). Like the "altered" traumatized subject his proposals are reduced to "nothing more than a series of heterogeneous and dissociated roles," and the trauma remains, defined by "multiple borrowing".<sup>23</sup> Traumatized, Woods's projects remain imprisoned in a rhetorical imitation and repetition of the forms of war, unable to suggest a way forward.

### ***Languages and Ruptures: the Violence of Architecture***

*1. There is no architecture without action, no architecture without events, no architecture without program.*

*2. By extension, there is no architecture without violence.*

—Bernard Tschumi<sup>24</sup>

Architecture can be subjected to trauma, and this remains recorded and expressed on its body and is reflected in its project. But what are the changes that trauma produces on architecture as a discipline, and how does it affect its discourse? And what if the trauma that affects and changes architecture is self-generated, a rupture internal to the discipline? The idea that architecture and violence may intersect in ways that are different from that of an extreme attack on a predefined, static and passive architectural edifice is long established and deeply encoded in the architectural discourse.<sup>25</sup>

Recent positions in trauma studies, 'hold that the traumatic event is encoded in the brain in a different way from ordinary memory' (Leys 2000, 6).

Bessel A. van der Kolk suggests that traumatic memory may be less like what some theorists have called "declarative" or "narrative" memory, involving the ability to be consciously aware of and verbally narrate events that have happened to the individual, than like the "implicit" or "nondeclarative" memory, involving bodily memories of skills, habits, reflex actions, and classically conditioned responses that lie outside verbal-semantic-linguistic representation.<sup>26</sup>

The architectural discourse has similarly shifted in the last half a century from the verbal-semantic-linguistic approach to concerns with the physical, the material and the bodily. Yet it is important here to consider the relationship of architecture with trauma within the frame of the crucial questions that originated in the 1960s and 1970s in the work on architecture as a

semiotic system of, among others, philosopher Jacques Derrida, semiologist Umberto Eco, and architect Bernard Tschumi.

It is in particular the work of Bernard Tschumi (1944—) that directly and explicitly addresses the idea of the violence of architecture, as performed by architecture on space, on its environment, on its inhabitants, as well as on its own structures, rules and conventions of representation. Tschumi drew from the work of French philosopher and polemical intellectual Georges Bataille (1897-1962), whose writings had exposed architecture's compromised relationship with society, as a subservient form of expression of hierarchical power systems that celebrates and perpetuates authority.<sup>27</sup> Bataille had performed an irreverent critique of all forms of authority, and his writings challenged all established form of knowledge and expressions of power, architecture included.<sup>28</sup> For instance, Bataille reads the pyramid as the expression of a static hierarchical social structure and as the form representing a structured system of knowledge, while the labyrinth becomes for him the never fully knowable and representable image of being in the world and of human relations that are always in the making, produced by fluid associations, and always exposed to the threat of sudden reconfiguration.

Tschumi embraces the idea of architecture as dynamic and relational, and sets out to challenge its forms of conventional representation. In order to question the stability of architecture and to represent it as a structure that is subject to ongoing transformations beyond and behind the appearances of its firmness, Tschumi's architectural projects experiment with languages and media borrowed from other disciplines. His early works propose architecture as political demonstrations, as social and political manifestoes, as advertisements that show improper uses of architectural spaces or their decay and ruination in time,<sup>29</sup> and as performances that dissolve the solidity and permanence of architecture altogether. *Fireworks* (1974)<sup>30</sup> proposes a staged and timed fireworks performance where architecture becomes an explosive event: immaterial, ephemeral, sudden and violent and yet designed, measured, instructed, and built (if only for only a few minutes). Dissolved in an ephemeral choreography for a designed violent release of energy, architecture is intentionally reduced to some of its paroxysmal moments, in order to reveal and release energies that are always present, dormant or hidden and usually very slow, in any architecture. Architecture is no longer a restrictive container or a constrictive frame for the event, but the designed event itself, and the energy released by it is translated in a system of spatio-temporal organizations (the explosion of the fireworks) that are anticipated (designed and represented) by a script and a set of drawings and notations.<sup>31</sup>

Working from 'inside' architecture but appropriating themes developed in philosophy, film and semiotics, Tschumi theorizes the intrinsic violence of architecture to emphasize its dynamic aspect. Action, explosion, destruction and violence become in his work both goals and mediums for the expression of an architectural project that refuses to privilege space and includes the time of the event. Architecture is presented as a tensioned ground of confrontation between objects and man, each operating according to a different logic. Each intrusion of the human body in the established order of architecture violates and at the same time animates a construct that would otherwise remain inert, and as such would not be architecture but only its image. The violence on architecture that brings about its physical

destruction is therefore reframed as the paroxysmal manifestation of ‘the intensity of a relationship between individuals and their surrounding spaces’ (Tschumi 1994b, 122) that exists also in calm conditions of apparent stability. But this relationship is not so straightforward. The presence and the movement of bodies in space constitute already an architectural act, in which ‘bodies carve all sorts of new and unexpected spaces, through fluid or erratic motions’ (Tschumi 1994b, 123). And while bodies produce disturbances in the architectural order, architecture inflicts control and restriction onto the body in motion, and is in itself ‘violence ritualized’ (Tschumi 1994b, 125) that freezes and repeatedly re-stages the relationships between action and space. Codified architecture solidifies this relationship in a procedural prescription of iterated acts.

In parallel with his writings, Tschumi’s architectural projects aim to operate between the violence that is already embedded and codified in architecture, and the violence of the body that disrupts the order of architecture. By deprogramming, by introducing the unexpected, by breaking away from the rituals that architecture solidifies, Tschumi’s interventions question the relation of architecture to life, inhabitation and movement. The deliberate introduction of unusual or misplaced actions in architecture releases the energy that is frozen in this relationship, and challenges the codification of architecture and its representations, revealing the transgression that is always already at play in architecture. What Tschumi defines ‘programmatically violence’, far from being metaphoric, intervenes not only in the architectural representation but also on the material structures of architecture, and indeed on human bodies. This violence ‘encompasses those uses, actions, events, and programs which, by accident or by design, are specifically evil and destructive. Among them are killing, internment and torture, which become slaughterhouses, concentration camps or torture chambers’ (Tschumi 1994b, 134). Tschumi does not seem to distinguish between accident and designed violent act, and yet he concentrates mainly on actions that require not only an intentionality but also a project, a detailed strategy of implementation in space and time, and often a choreography of movement for group acts.

In the same years when he is theorizing the violence of architecture and designing pyrotechnic explosions, Tschumi produces the *Manhattan Transcripts* (1976-81), a series of theoretical projects that propose a system to represent not only the structure and the form of architecture, but also its time and the dynamic release of its energy in relation with inhabitation. Architecture is critically reconsidered in the context of the city, as it is primarily in the city that architecture has to deal with phenomena that are out of its control, and these are often violent. In the *Manhattan Transcripts* ‘the idea of order is constantly questioned, challenged, pushed to the edge’,<sup>32</sup> conventional representations of architecture (plan, section, elevation, axonometric or perspectival view) are reinvented, and the projects are represented by the triad of ‘space-event-movement’, transcribed respectively by the drawing, the photograph and the diagram, always presented together. Extreme programs and violent actions that exceed the common notion of ‘function’ are introduced to separate the project from both architectural form and social conventions. Presented as stages for and participants in a murder, a chase, a suicide, and an explosion of institutional structures, the four projects of the series – *The Park*, *The Street (Border Crossing)*, *The Tower (The Fall)*, *The Block*<sup>33</sup> – dissect and disrupt the architectural discipline and the given orders of the city, in a crescendo

that focuses on its in-between spaces, borders and limits. In the last of the Transcripts, *The Block*, groups of acrobats, skaters, soldiers, dancers and football players, progressively transgress their routines break loose from their choreographed movements, attacking, gradually deconstructing, and eventually exploding block courtyards that contain them. The observer's point of view becomes itself dynamic and involved in the action, no longer able to measure and control space, but only to experience it through a disoriented exploring eye. Space, movement and event progress towards dynamic articulations that undermine the integrity and the boundaries of the image (frame). Addition, repetition and disjunction are the tools that Tschumi uses to represent these broken spaces and their activities. The project 'plays' with the fragments of a given reality and uses them as materials of architecture<sup>34</sup> but remains incapable of reconstructing the broken whole, or find an alternative synthetic medium to represent it. The *Transcripts*, Tschumi explains, 'never attempt to transcend the contradictions between object, man and event in order to bring them to a new synthesis: on the contrary, they aim to maintain these contradictions in a dynamic manner, in a new relation of indifference, reciprocity or conflict.' (Tschumi 1994a, xxi).

The *Transcripts* question the discipline from within, while proposing trans-disciplinary openings for a redefinition of architecture. Tschumi's theoretical works from the 1970s seem to move away from explicit political and social concerns to concentrate on the investigation of the forms and the languages of architecture. Yet, architectural manifestos, firework displays, urban narratives and their graphic representations in the form of 'transcripts' are projects that combine architecture's formal concerns with a social and political critique of the hierarchies of space and power. Tschumi theorizes the effect of a traumatic event *on* architecture as a release of the violence *of* architecture itself that breaks not only the architectural object but also its conventional forms of representation. Photograph, notation diagram and drawing are used together to "transcribe" the traumatic event that ultimately releases the violence embedded in architecture. Architecture thus appropriates the event, and the violence that invests it conflagrates, in one moment, all the roles — shelter, representation, symbolism, power — that architecture normally plays in day-to-day experience. Architectural representation, *what* architecture represents and *how* it represents, is also transformed.

### ***Intrinsically Traumatized: Architecture as a Relational System***

Architectural responses to traumatic events that affect architecture are significant when, beyond instances of immediate physical reconstruction, they engage in investigations that aim to expose the internal and diffuse ruptures of the discipline that the traumatic event both triggers and uncovers. The examples discussed in this paper show how in this process, a series of disciplinary assumptions are questioned: the integrity and the solidity of the architectural edifice (9/11 and the critical responses by De Boeck and by Sorkin, Tschumi's 1970s projects); the static and lasting nature of the building (Woods's *Wararchitecture*); the proper and functional use of the building (Tschumi and Woods); the power of the symbolic

role of architecture in society (9/11 and Sarajevo's *Urbicide* dossier); architecture's different forms of representation, both through images and in the built environment (De Boeck, *Urbicide* dossier, Tschumi). Architectural investigations that engage with the traumatic event, those which refrain from an amnesiac reconstruction hubris, ultimately expose the very nature of architecture: architecture is dynamic, changing, fragile, exposed, as well as slow, restrictive, and both controlling and controlled. What emerges from these architectural auto-analyses is a fractured discipline, both violent and traumatized from its onset, in its antagonistic and duplicitous relationships with its environment, its context, its sites and its inhabitants, and ambiguously performing in different guises, throughout its history, between the natural and the artificial, the static and the dynamic, the solid and the ephemeral, the oppressive and the empowering. Architecture is thus posited as intrinsically traumatized in its very foundational act, where the trauma resides in the very relational nature of architecture.<sup>35</sup> It was Freudian psychoanalyst Sandor Ferenczi (1873-1933) who 'posited *two different models* of traumatic splitting and of the imitative mechanisms connected with them'. In Ferenczi's first model of trauma, which Ruth Leys calls the *originary* model, 'splitting was imagined as producing the separation of the ego from the object', while the second model, which Leys calls the *postoriginary* model, splitting was imagined 'as taking place on the basis of an already existing ego' (Leys 2000, 124). 'Trauma and splitting on the postoriginary model were pathological and exceptional processes that happened to the already constituted subject – the human being in the postoriginary condition'<sup>36</sup> but the 'originary' trauma is intrinsic to the making of the subject, as it 'was the very process which constituted the subject *as* a subject by the splitting apart of the ego from the objective world. Trauma and splitting on this model were absolutely originary for the subject-object opposition and hence were normal and inescapable'. Ferenczi's subject-object opposition is different from Freud's subject-subject opposition,<sup>37</sup> and allows to see the 'original' trauma of the subject-object opposition as 'normal' to the definition of the subject. For Ferenczi trauma and splitting occur in the individual for 'the mere existence of *objects as such*'; they originate the subject and the psychic development that follows. Trauma and splitting are both intrinsic to and necessary for the self-definition of the subject (Leys writes of a *traumatogenesis* of normality).<sup>38</sup>

This latter point becomes relevant when considering architectural discourse and production as a cultural construct that contributes to the creation of the subject-object opposition. If we consider it as an object, as a given, architecture is one of those objects (a complex and composite one) that, opposing the (human) subject, contribute to the definition of the subject itself. But considered as a subject (that is, in its becoming) architecture defines itself by differentiating and constructing the ambiguous foundational oppositions that I have referred to above. As a discourse and as a discipline, architecture needs to construct itself as a subject. When considering architecture in relation to trauma, a few distinctions must be performed. Architecture as a discipline is a constantly changing body of knowledge and a critical cultural construct that is always already embedded in and defined by its socio-political contexts. Beyond the material destruction of buildings and its effects on the body of architecture's edifices, architecture as a discipline can be traumatized by external events. The traumatic process that ensues after and beyond the sudden violence of the traumatic event affects the architectural discipline, triggering its reconsiderations and transformations. The relationship

between architecture and trauma, that is, is not restricted to the time of the violent event and to its physical destructive effect, but develops in time through the 'body' of the discipline, reconfiguring its relationship to its own past and affecting its processes of space and form making. The examples considered here show that such processes are both intrinsic to and necessary for architecture to perform a sort of disciplinary auto-analysis, and to be able to transform itself in relation and response to its changing contexts. Indeed, the traumatic process affects architecture not only when it is triggered by a planned or accidental external event, but is intrinsic to the relational nature of architecture and can be introduced (designed) in its process of critical (self)definition. The violence that architecture both performs and is affected by (and that Tschumi has released and represented in his projects to harness it in his argumentations) shows that architecture is a relational system, intrinsically (originarily) traumatized. Like the subject, and as a subject, architecture needs, as it were, to define itself through an originary traumatic process of differentiation and opposition.

## *Reference List*

Agrest, Diana I. (1988). Architecture from without: Body, Logic, and Sex. *Assemblage*, 7(10) 28–41.

Alberti, Leon Battista (1755). *Ten Books of Architecture*. Translated by James Leoni (1986). New York, NY: Dover.

Alberti, Leon Battista (1988). *On the Art of Building in Ten Books*. Translated by Joseph Rykwert, Neil Leach, and Robert Tavernor. Cambridge, MA: MIT Press.

American Psychiatric Association (1980). *Diagnostic and Statistical Manual of Mental Disorders*. Washington, DC: American Psychiatric Press Inc.

*Architecture and Conflict* (2011). *The Journal of Architecture*, 16(1).

Association of Architects DAS-SABIH Sarajevo (1994). *Urbicide Sarajevo, A Wararchitecture Dossier*. Paris, France: Ministere de l'Equipement, des Transports et du Tourisme, Direction de l'Architecture et de l'Urbanisme.

Bataille, Georges (2001). *Blue of Noon*. London: Penguin.

Borges, Jorge Luis (1975). *A Universal History of Infamy*. Trans. Norman Thomas de Giovanni. London: Penguin Books.

Borges, Jorge Luis (2000). *Labyrinths*. Trans. James E. Irby. London: Penguin Classics.

*Cities Unbuilt* (2007). *Volume*, 11(1). Archis.

Davidts, Wouter (2005). Home Call: A Case in Architectural Storytelling. Reflections on the Work of Lieven De Boeck. *dlk (de loeiende koe)*, 9(2) 236—251.

di Giorgio Martini, Francesco (1967). *Trattati di Architettura Ingegneria e Arte Militare*. Edited by Corrado Maltese; transcription by Livia Maltese Degrassi. Milan: Il Polifilo.

Dupont, Judith (Ed.) (1988). *The Clinical Diary of Sándor Ferenczi*. Cambridge, MA: Harvard University Press.

Fernandez-Galiano, Luis (2000). *Fire and Memory. On Architecture and Energy*, Cambridge, MA and London: MIT Press.

Filarete, Antonio di Averlino il (1965). *Treatise on Architecture; Being the Treatise by Antonio di Piero Averlino, Known as Filarete*. Translated with an introd. and notes by John R. Spencer. Yale Publications in the History of Art, 16. New Haven, CT: Yale University Press.

Filarete, Antonio di Averlino il (1972). *Trattato di Architettura*. Edited by Anna Maria Finoli and Liliana Grassi; translation and notes by Liliana Grassi. *Classici italiani di scienze*,

tecniche e arti. Milan: Il Polifilo.

Forensic Architecture (2014). *Forensis: The Architecture of Public Truth*, Berlin: Sternberg Press.

Freud, Sigmund (2001). *The Psychopathology of Everyday Life. Complete Psychological Works of Sigmund Freud, Vol 6*. London: Vintage Classics.

Graham, Stephen (Ed.) (2004). *Cities, War, and Terrorism*, Oxford: Blackwell.

Hollier, Denis (1989). *Against Architecture. The Writings of Georges Bataille*.

Kenzari, Bechir and Fierro, Annette (Eds.) (2008). *Architecture and Violence*, Barcelona: Actar.

Laplanche, Jean (1976). *Life and Death in Psychoanalysis*, Baltimore, MD: The Johns Hopkins University Press.

Lewis Herman, Judith (1992), *Trauma and Recovery*, New York: Basic Books.

Leys, Ruth (2000). *Trauma: A Genealogy*. Chicago, IL and London: The University of Chicago Press.

Libeskind, Daniel (2004). *Breaking Ground. Adventures in Life and Architecture*, London: John Murray, 50.

Martin, Louis (1990). Transpositions: On the Intellectual Origins of Tschumi's Architectural Theory. *Assemblage*, 11(4), 23—35.

*Post-Traumatic Urbanism* (2010). Lahoud, Adrian. Rice, Charles. Burke Anthony (Eds.). *AD Architectural Design*, 80(5).

Roustang, Francois (1988). Foreword. In Borch-Jacobsen, Mikkel. *The Freudian Subject*. Stanford, CA: Palgrave Macmillan.

Sorkin, Michael (2003). *Starting from Zero. Reconstructing Downtown New York*, New York, NY: Routledge.

Stoppani, Teresa (2012). The Architecture of the Disaster. *Space & Culture*, 15(2). Spaces of Terror and Risk. Wills, David. Moore, Cerwyn. McKim, Joel. Eds. 138—153.

Stoppani, Teresa (2015). Relational Architecture: Dense Voids and Violent Laughters. *Field: A Free Journal for Architecture*, University of Sheffield, 2(1), 42—54. [www.field-journal.org](http://www.field-journal.org)

Tschumi, Bernard (1979). *Architectural Manifestos*, London: Architectural Association.

Tschumi, Bernard (1989), Parc de la Villette, Paris. In Papadakis, Andreas. Cooke, Catherine. Benjamin, Andrew (Eds.). *Deconstruction*. London: Academy Editions, 174—183.

Tschumi, Bernard (1994a). *The Manhattan Transcripts*. London: Academy Editions.

Tschumi, Bernard (1994b). Violence of Architecture. In Tschumi, Bernard. *Architecture and Disjunction*, Cambridge, MA: MIT Press, 121—137.

van der Kolk, Bessel A. McFarlane, Alexander C. Weisaeth, Lars (Eds.). *Traumatic Stress: The Effects of Overwhelming Experience on Mind, Body and Society*. New York, NY.

Violence Space (1993). *Assemblage*, 20(4);

Woods, Lebbeus (1993). *War and Architecture*. Pamphlet Architecture, 15. New York, NY: Princeton Architectural Press.

Woods, Lebbeus (1995). Everyday War. In Lang, Peter (Ed.), *Mortal City*, New York, NY: Princeton Architectural Press, 47—53.

Young, Allan (1995). *The Harmony of Illusions: Inventing Post-Traumatic Stress Disorder*. Princeton, NJ: Princeton University Press.

---

<sup>1</sup> Leys, Ruth (2000). *Trauma: A Genealogy*. Chicago, IL and London: The University of Chicago Press.

<sup>2</sup> American Psychiatric Association (1980). *Diagnostic and Statistical Manual of Mental Disorders*. Washington, DC: American Psychiatric Press Inc.

<sup>3</sup> '[F]ar from being a timeless entity with an intrinsic unity [...] PTSD is a historical construct that has been "glued together by the practices, technologies, and narratives with which it is diagnosed, studied, treated, and represented and by the various interests, institutions, and moral arguments that mobilized these efforts and resources.'" (Leys 2000, 6). Leys quotes Young, Allan (1995). *The Harmony of Illusions: Inventing Post-Traumatic Stress Disorder*. Princeton, NJ: Princeton University Press, 5.

<sup>4</sup> '[...] the oscillation between mimesis and antimimesis that has structured the history of trauma all along (Leys 2000, 14). 'The history of trauma itself is marked by an alternation between episodes of forgetting and remembering' (Leys 2000, 15).

<sup>5</sup> Leon Battista Alberti's *De Re Aedificatoria*, was written in Latin. Two English translations are available: Alberti, Leon Battista (1755) *Ten Books of Architecture*. Translated by James Leoni (1986). New York, NY: Dover; and Alberti, Leon Battista (1988). *On the Art of Building in Ten Books*. Translated by Joseph Rykwert, Neil Leach, and Robert Tavernor. Cambridge, MA: MIT Press.

<sup>6</sup> di Giorgio Martini, Francesco (1967). *Trattati di Architettura Ingegneria e Arte Militare*. Edited by Corrado Maltese; transcription by Livia Maltese Degrassi. Milan: Il Polifilo.

<sup>7</sup> Filarete, Antonio di Averlino il (1972). *Trattato di Architettura*. Edited by Anna Maria Finoli and Liliana Grassi; translation and notes by Liliana Grassi. *Classici italiani di scienze, tecniche e arti*. Milan: Il Polifilo. For the English translation: Filarete (1965). *Treatise on Architecture; Being the Treatise by Antonio di Piero Averlino, Known as Filarete*. Translated with an introd. and notes by John R. Spencer. Yale Publications in the History of Art, 16. New Haven, CT: Yale University Press.

<sup>8</sup> Agrest, Diana I. (1988). Architecture from without: Body, Logic, and Sex. *Assemblage*, 7(10) 28–41.

---

<sup>9</sup> Laplanche, Jean (1976). *Life and Death in Psychoanalysis*, Baltimore, MD: The Johns Hopkins University Press, 129—30. Quoted in Leys 2000, 19.

<sup>10</sup> Leys 2000, 20. Leys refers here to Freud's *The Psychopathology of Everyday Life* (1901). See Freud, Sigmund (2001). *The Psychopathology of Everyday Life. Complete Psychological Works of Sigmund Freud, Vol 6*. London: Vintage Classics.

<sup>11</sup> In two short fictions Jorge Luis Borges tells stories of excess of information and of identity with the represented or narrated object. 'On Exactitude in Science' (Borges, Jorge Luis (1975). *A Universal History of Infamy*. Trans. Norman Thomas de Giovanni. London: Penguin Books) tells of a map that becomes gradually so accurate that it coincides with the territory which it represents, and is therefore useless. Similarly, in 'Funes the Memorious' (Borges, Jorge Luis (2000). *Labyrinths*. Trans. James E. Irby. London: Penguin Classics) the protagonist Ireneo Funes remembers everything, and therefore cannot live.

<sup>12</sup> A series of recent publications have specifically addressed the effects of war, violence and trauma on the urban environment. This is not the purpose of this paper, which focuses instead on the relationship between architecture and traumatic events by looking at how the latter produce critical responses and transformations of architecture as a discipline. On war, violence and trauma and the city see, for instance, and to cite just a few recent publications: Graham, Stephen (Ed.) (2004). *Cities, War, and Terrorism*, Oxford: Blackwell; *Cities Unbuilt* (2007) *Volume*, 11(1). Archis; *Post-Traumatic Urbanism* (2010). Lahoud, Adrian. Rice, Charles. Burke Anthony (Eds.). *AD Architectural Design*, 80(5); Forensic Architecture (2014). *Forensis: The Architecture of Public Truth*, Berlin: Sternberg Press.

<sup>13</sup> I have discussed these, as well as the other New York cases examined here, in relation to the idea of "disaster" in Stoppani, Teresa (2012). The Architecture of the Disaster. *Space & Culture*, 15(2). Spaces of Terror and Risk. Wills, David. Moore, Cerwyn. McKim, Joel. Eds. 138—153. The essay considers the irruption of the artificial disaster, as 'designed destructive event', in the order of the project of architecture. It explores a series of architectural modes of practice which work on and with the energy released by the disastrous event, suggesting that silence, or the project of the silence of architecture, is an act of design too.

<sup>14</sup> Georges Bataille's novella *Le Bleu du Ciel*, set in the civil war of Franco's Spain, was written in 1935, but published only in 1957. See Bataille, Georges (2001). *Blue of Noon*. London: Penguin.

<sup>15</sup> Davidts, Wouter (2005). Home call: A case in architectural storytelling. Reflections on the work of Lieven De Boeck. *dlk (de loeiende koe)*, 9(2) 236—251. Quote from page 242.

<sup>16</sup> Sorkin, Michael (2003). *Starting from Zero. Reconstructing Downtown New York*, New York, NY: Routledge.

<sup>17</sup> Sorkin 2003, 8—9. More morbidly, for Daniel Libeskind, the architect of the reconstruction, these measurements could include the mapping of all the bodies and body parts found on the site. See Libeskind, Daniel (2004). *Breaking Ground. Adventures in Life and Architecture*, London: John Murray, 50.

<sup>18</sup> Lewis Herman, Judith (1992), *Trauma and Recovery*, New York: Basic Books, 175. Quoted in Leys 2000, 109.

<sup>19</sup> The exhibition was first presented at the Arc en Reve Centre d'Architecture in Bordeaux in 1994, then at the Centre Georges Pompidou in Paris and subsequently travelled to numerous museum and galleries around the world as an itinerant architectural witness of the destruction.

<sup>20</sup> 'Oriental period, Oriental influences until 1878', 'Austro-Hungarian period, European influences until 1918', 'Period between the two wars, Modern period until 1941', 'Post war period, contemporary architecture, until 1992'.

---

<sup>21</sup> Association of Architects DAS-SABIH Sarajevo (1994). *Urbicide Sarajevo, A Wararchitecture Dossier*. Paris, France: Ministere de l'Equipeement, des Transports et du Tourisme, Direction de l'Architecture et de l'Urbanisme. A selection of images from the catalogue is available at <http://imaginarymuseum.org/MHV/PZImhv/UrbicideSarajevo.html>.

<sup>22</sup> Woods, Lebbeus (1995). Everyday War. In Lang, Peter (Ed.), *Mortal City*, New York, NY: Princeton Architectural Press, 47—53. Quote from page 50. See also Woods, Lebbeus (1993). *War and Architecture*. Pamphlet Architecture, 15. New York, NY: Princeton Architectural Press.

<sup>23</sup> Roustang, Francois (1988). Foreword. In Borch-Jacobsen, Mikkel. *The Freudian Subject*. Stanford, CA: Palgrave Macmillan, viii. Quoted in Leys 2000, 9.

<sup>24</sup> Tschumi, Bernard (1994). Violence of Architecture. In Tschumi, Bernard. *Architecture and Disjunction*, Cambridge, MA: MIT Press, 121—137. Quote from page 121.

<sup>25</sup> On architecture and violence see, for instance (in chronological order): Violence Space (1993). *Assemblage*, 20(4); Fernandez-Galiano, Luis (2000). *Fire and Memory. On Architecture and Energy*, Cambridge, MA and London: MIT Press; Kenzari, Bechir and Fierro, Annette (Eds.) (2008). *Architecture and Violence*, Barcelona: Actar; Architecture and conflict (2011) *The Journal of Architecture*, 16(1).

<sup>26</sup> van der Kolk, Bessel A. McFarlane, Alexander C. Weisaeth, Lars (Eds.). *Traumatic Stress: The Effects of Overwhelming Experience on Mind, Body and Society*. New York, NY. Quoted in Leys 2000, 7.

<sup>27</sup> On this see Hollier, Denis (1989). *Against Architecture. The Writings of Georges Bataille*. Cambridge, MA and London: MIT Press.

<sup>28</sup> Martin, Louis (1990). Transpositions: On the Intellectual Origins of Tschumi's Architectural Theory. *Assemblage*, 11(4), 23—35.

<sup>29</sup> Tschumi, Bernard (1979). *Architectural Manifestos*, London: Architectural Association.

<sup>30</sup> Tschumi 1979, 4—5.

<sup>31</sup> The explosive and instantaneous theoretical provocation of the *Fireworks* was enacted again in 1992, with their display in the Tschumi designed Parc de la Villette in Paris, and in 2009 at the Architectural Association in London.

<sup>32</sup> Tschumi, Bernard (1989), Parc de la Villette, Paris. In Papadakis, Andreas. Cooke, Catherine. Benjamin, Andrew (Eds.). *Deconstruction*. London: Academy Editions, 174—183.

<sup>33</sup> The first of *The Manhattan Transcripts*, *The Park*, illustrates in a series of plates the dynamics of a homicide in New York's Central Park. The narration by images of the event (photographs), the recording of the movements performed (diagrams), and the documentation of the architectural settings (plans) are juxtaposed, and only together they define the space-event of the park. The extreme activities of the homicide-investigation-chase-capture provide the narrative with a free movement that involves and transgresses the built structures. The second transcript, *The Street (Border Crossing)* illustrates the east-west crossing of Manhattan along Forty-second Street, tracing the movements of a chase that carves new in-between spaces in the street facades by penetrating the buildings' fronts. The dynamic 'transcription' of the project disrupts the continuity of the façades and detaches them from the volume of the buildings behind, redesigning street and block interiors as a continuous sequence of movements, spaces and actions. In the third transcript, *The Tower (The Fall)*, the fatal fall (voluntary or induced?) of the prisoner of a Manhattan skyscraper produces an unconventional vertical reading of the space of the tower, as the falling body moves from floor to floor. Breaking through the horizontal layers of the building the falling body produces an altered perception of the spaces, defying any distinction determined by use and reading them as a vertical filmic sequence. The fourth transcript, *The Block*, sets in motion five inner courtyards of a Manhattan block with a series of 'programmatic impossibilities' of contradictory events and spaces. Choreographed group movements by acrobats,

---

skaters, soldiers, dancers and football players progressively break loose and transgress their routines, attacking, gradually deconstructing, and eventually exploding the architectural spaces that contain them. This last project represents spaces through perspective views that are gradually multiplied and exploded, as the observer's point of view becomes itself dynamic and involved in the action.

<sup>34</sup> 'Play with the fragments of a given reality [...] while questioning the nature of architectural signs. [...] these fragments are to be seen merely as part of the material of architecture – as neutral, objective, indifferent.' Tschumi, Bernard (1994). *The Manhattan Transcripts*. London: Academy Editions, 8.

<sup>35</sup> On the idea of 'relational architecture' see Stoppani, Teresa (2015). Relational Architecture: Dense Voids and Violent Laughters. *Field: A Free Journal for Architecture*, University of Sheffield, 2(1), 42—54. <[www.field-journal.org](http://www.field-journal.org)>

<sup>36</sup> Leys 2000, 125. Leys here refers to Dupont, Judith (Ed.) (1988). *The Clinical Diary of Sándor Ferenczi*. Cambridge, MA: Harvard University Press.

<sup>37</sup> 'Like Freud, Ferenczi in his *Clinical Diary* posited an original state of infantile psychic repose whose disturbance by excitation starts the process of reality judgment. But unlike Freud, Ferenczi tended to focus less on the disturbing force of the infant's unmet internal needs (the role of desire) than on the disrupting power of external objects, especially the will of another human being.' (Leys 2000, 127).

<sup>38</sup> It is the originary traumatic relation with objects that 'brings the ego into being by separating it off from the world of objects. Indeed, the more Ferenczi extends his analysis of trauma back in time to the very origins of subjectivity, the more trauma and splitting are held to occur prior to any properly intersubjective encounter. From this point of view, it is not the accidental imposition of an alien *human will* that traumatizes the individual but the mere existence of *objects as such*. We might describe this as a normalization of the idea of trauma, or better, as a *traumatogenesis* of normality, as traumatic splitting emerges on Ferenczi's first or originary model as a normal and necessary stage in psychic development.' (Leys 2000, 130).