

# Drawing Theory. An Introduction

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*Art would express a perception, whether it was an intuitive thought or a sensation, and transform this non-objective sensation into knowing.*

Kazimir Malevich

The field of drawing has been, at least during the last fifty years, increasingly extended and intensified to include drawing production and drawing reflection. Both the production of drawings and the critical assessment of their inherent meanings have become part of an intense disciplinary debate involving architects, artists, scholars, and philosophers. Within the architectural discipline, precisely the understanding that drawing and theory are intrinsically related has resulted in the continuous reflection on the relationship between thinking and drawing, or, more abstractly, on how the specific means of representation relate to specific conceptions of space. In his groundbreaking project *Mémoires d'aveugle. L'autoportrait et autres ruines* (Louvre, Paris, 1990/91), Jacques Derrida extensively clarified this aspect of drawing, focusing on the relationship between the mind's eye and the hand. Derrida compared drawing to writing and regarded 'anticipation' as a 'projected grasping', i.e. a touching that is oriented forward into an unknown, as the most fundamental act of drawing. Taking this reasoning to the extreme, led Derrida to regard both the drawing itself and the act of drawing as being 'blind'. The drawing becomes a tracing leading into an abyss, where it is not a summarizing interpretation by means of an external representation, but a reasonably subjective expression of an inner vision.

Nowadays, drawing practices seem to operate in a rather uncertain field that is typical of an in-between phase of disciplinary development and that needs to be addressed, if an 'anticipated projection' of the development of drawing is to be attempted. The field of drawing, as practice and discourse, seems to have entered an end-condition, where the celebration of the extensive production of drawings is combined with a certain fatigue in both its understanding and reflection. Drawing nowadays seems to be suspended in this in-between condition of objectivity and instrumentality, as image and information, as communication and science, whereas the theoretical field generated between these polarities seems to have lost its theoretical poignancy.

The observation that drawing is caught in the suspended field of an end-condition emerges out of the sustained questioning of drawing's relevance, which is combined, in a schizophrenic balancing act, with the simultaneous celebration of its inexhaustible power. Both aspects result in a historical phase of the contemporary reception of drawing that lies between mourning and appreciation, as drawing is raising both praise and suspicion. Recent drawing exhibitions, such as *Borderline Architecture* organized by the Hungarian Pavilion at the 2010 Venice Architecture Biennale, *Notations* at the ZKM, and *On Line; Drawing Through the Twentieth Century* at the MoMA, once again called attention to the relevance of drawing. In *On Line*, for instance, curators Catherine de Zegher and Cornelia Butler organized the exhibition according to three main themes

(surface tension, line extension, and confluence), thus juxtaposing drawing's means and techniques with a supposed field of operation. The curators emphasize the reductionist approach with which drawing is nowadays mostly conceived. The limitations in techniques and means of drawing are, in their view, related to the fact that 'lucidity of thought is exactly the aspect of drawing that is most valued'<sup>1</sup> yet becomes a delicate point in the celebration of the limitations caused by the perceived 'grandeur' of drawing. In other words, the relationship between drawing and thinking is located in the fact that both words and lines are cognitive representational instruments allowing for the construction of knowledge and communication, rather than 'simply' being the instruments that initiate an aesthetic pleasure via a visual appreciation.

The seventh issue of *Footprint* attempts to address this contemporary state of affairs within a disciplinary understanding of the drawn theory of architecture. The premise of raising this issue originates from the critical exploration of a field within architectural theory that in the last decades has seen a progressive 'de-problematization'. Even though the role of drawing is nowadays still regarded as the most common act of architecture, this understanding of drawing is hardly subject to critical inquiries, and, unfortunately, mostly limited to its instrumental role within the representation of the project.

The relationship between drawing and theory belongs instead to a long and well-established tradition, according to which drawing is seen as a 'doubly significant instrument of representation: as a moment of knowledge (therefore adjusting the idea to fit the object), and as an act of creative construction, capable of modifying the passive perception of the real and refocusing it within the dimension of theoretical and practical construction, often with a pronounced ideological content'.<sup>2</sup> In the early part of the twentieth century, after the radical experiments of the historical avant-gardes

within the wider context of the Modern Movement, the theoretical interest in drawing underwent a radical reduction in favour of an instrumental role, functional to the ideology of the modernist project. It was only at the beginning of the 1960s that architecture rediscovered a specific field of elaboration of its content within drawing. Influenced by the development of the science of language and by a renewed formalism, a new architectural 'mentality' elaborated a series of alternatives to the functionalism of the International Style. The phenomenon of *paper architecture* emerged within a highly heterogeneous context that included experiences such as Archigram, Superstudio, Archizoom, The New York Five, Tendenza, Architecture Principe, etc.

During the sixties, the architectural drawing essentially '[becomes a] critique of the existent and wishes to be a forerunner of a different future full of planning and of social promises, [but] it is in the seventies that it acquired a specific theoretical dimension'.<sup>3</sup> Drawing once again reflected upon its own specificity as an autonomous instrument of architectural knowledge and beyond the specificity of privileged representational techniques, only to discover that this autonomy was actually a project that needed to be reformulated as well. Drawing deliberately reduced and classified the 'things' of architecture to their own particular field, each of which 'undertakes to constitute an autonomous theoretical unit within the complex system of the project'.<sup>4</sup>

To outline this particular theoretical dimension of the project and the amplitude of themes and research studies that converge thematically around a similar theoretical position, we should recall the phenomenon of the *Architettura Disegnata* that emerged at the beginning of the 1970s in Italy. According to architect and theorist Franco Purini, who thoroughly analysed (often very critically) this phenomenon, 'at the bases of the *Architettura Disegnata* experiences were the re-foundations

of the idea of “construction”, both in its specific architectural character and in its wider meanings. In this context, architecture attempted to define its own language, taking the field of representation as its point of departure. Moreover, the *architectural drawing* defines with great exemplariness not only the idea of construction, but this construction within the representation represents the architecture more than the *real construction*, unfolding at the same time the meaning of the *project of the self*.<sup>6</sup> Purini continues: ‘The *Architettura Disegnata* also returns to the origins of the modern city. The representation of it, the city, is intercepted as well in a moment of renaissance. This operation also expresses the beginning of the end of the theoretical purity of drawing, because the idea of city indicated in the works of the *Architettura Disegnata* is the historic city, namely the very opposite of the native moment of the origin. Thus, by accepting to represent its opposite, the *Architettura Disegnata* renounces its potential for theoretical purity in favour of the persuasion that will lead to the first translations into real construction in the middle of the eighties, hence rejecting its very nature and producing a theoretical emptiness that still has to be filled.’<sup>5</sup>

Moreover, and on top of this debate, the exhilarating period of architectural experimentation on and via the drawing of the 1970s and 1980s - a period after which Hadid, Libeskind, Tschumi and Eisenman became the celebrated protagonists of the recent era of architectural ‘superstars’ - still lingers on. The architectural discourse apparently continues to recuperate from, and has difficulty ‘transcending’, the long shadows cast by the research conducted during this period, probably precisely because of the conceptual advancement that had been introduced. Libeskind’s *Chamber Works* is perhaps the clearest expression of the fundamental instability at the basis of the architectural discourse during this period. In retrospect, Evans formulated one of the more thorough critiques on *Chamber Works*, focusing the speculative discussion on the specific nature

of the project.<sup>6</sup> *Chamber Works* opened up a space in which the meaning of architecture is in need of rethinking and redefinition, as the set of drawings tests and questions the very notion of architecture itself. In the end, Libeskind claimed to have looked for, but was unable to find, any fixed instruments, elements, or strategies with which either to ‘ground’ the discipline of architecture or, at least, ‘determine’ the temporary boundaries that might circumscribe it.<sup>7</sup> Nowadays, while drawing still receives unrelenting attention as a field of artistic and architectural expression, the theoretical reflection on drawing still seems to be caught in this vicious circle of clarification and reiteration, perhaps especially because of the absence or acknowledgement of ‘new’ publications that could confront the relevance of the works from the aforementioned period.

There is an undeniably disturbing dimension to this analysis, which positions the current practices of drawing in an apparent state of paralysis. The conclusion of Purini’s above-mentioned text, which articulates the relevance and decay of the theoretical poignancy experienced by the drawing during the 1970s, constitutes one of the facets of a ‘theoretical emptiness’ that was the premise of this issue. In recent years, ‘drawing’ has suffered a general ‘de-problematization’, which probably started at the end of the 1980s, a period in which the experiences that had begun in the 1960s and 1970s started to fade, including the flourishing series of scholarly contributions and the development of a highly sophisticated rhetoric of the architectural representation with dedicated journals, such as *AA Files*, *Daidalos*, *Controspazio*, *XY*, and, to some extent, *Oppositions*. At the same time, new experimentations guided by the infatuation with new technological resources, further widened the field with new theoretical questions, thus making it more complex to structure a unifying theoretical question in relation to a cultural tradition of reference. In fact, nowadays, drawing appears to have dissolved into a visual culture that is fundamentally guided by the

opening of a seemingly infinite amount of possibilities, offered by new technologies and software, which only seems to enhance and deepen the end-condition.

The amazing power of expression of dynamic drawings (see, for instance, *superDraw* and Aubo Lessi), as well as the theorizations of architectural fluency (Kwinter and De Landa, to mention the main protagonists) and, for instance, the recent manifestation *Emerging Territories of Movement* in *Storefront for Art and Architecture* (organized by *Draw-Think-Tank*), during which collective drawings were produced via a smartphone app, are all exemplary of the submergence of drawing into a realm of seemingly unlimited possibilities. Under these circumstances, the slippery territory of production and reflection can no longer be discussed by using the more traditional conceptual frameworks and knowledge of drawing. The acknowledgement that the means of representation is framed by the specific content or intent of the drawing thus becomes an inconclusive statement, to say the least.

However, and notwithstanding the difficulty of spotting elements of a unifying theoretical theme and the absence of contributions that attempts to tackle the problem from 'within the drawing', we could identify a common characteristic in all of the papers in this issue of *Footprint*. We could argue that a specific character of the theoretical field generated by drawing is the elaboration of the correlation between two epistemic regions: in Hartoonian, between the vertical and horizontal point of view, and between the painterly and the abstract; in Fitzsimons, between the knowledge and the desire; in Bovelet, between the analogue and the digital; in Bordeleau, between the epistemic and the phenomenon; and in Wortham-Galvin, between 'the woof' and 'the warp'. This singular character probably belongs to drawing's structural duality of being simultaneously a simulacrum of a reality and reality itself, memory and anticipation, subject and

object, by being in essence the measure of two different facets inherent to architectural thinking. Drawing not only gives consistency to the poles, rendering them architectural matter, but also literally (re)constructs them. At the same time, drawing formalizes the theoretical distance between the two.

Kent Fitzsimons offers a theoretical framework for addressing the relationship between drawing and body, and, more generally, elaborates a way through which drawing conveys an external reality of knowledge and desire. Desire's touch and knowledge's grasp are both discussed as bodily engagements that are the literal and figural subject of drawing. Drawing is an act of opening up towards the other, as well as a caring appreciation of the other. Fitzsimons exemplifies this point with Loos's design for the house of Josephine Baker, where the dancer's body becomes the central core of the ritual engagement within the house. Here, the author shows how architectural drawings always contain two bodily moments, one related to knowledge, the other to desire, insofar as they embody a will to give form to a lived world. These aspects of drawing would 'correspond to the difference between *touching* the body and *grasping* it; between an architect pursuing the desire to affect others through their senses, and an architectural discipline extending its knowledge of human existence'.

Drawing is not only determined by or limited to the bodily engagement of the draughtsman, but Fitzsimons argues that the act of producing a drawing is also a contemplation of the limitations of the other's body, within the spatial framework of architecture itself. Drawing is a 'holding on' to an absence and thus introduces a distance within the drawing itself. The author develops this reference to the human body, claiming that the body remains the major point of reference of the architectural drawing and structures the relationship between drawing, knowledge, and desire by extensively discussing sources ranging from Pliny the Elder's *Origin of*

*Painting*, the fountainhead of every speculation on drawing, Robin Evans, Michel Foucault, Michel de Certeau, William T. Mitchell, and Jean-Luc Nancy, among others. Fitzsimons shows that although the body might be absent in a drawing, it is nevertheless strongly present as the premise of the drawing itself, both as the means through which a drawing is produced and as an object the proposed spaces are projected to contain. In Foucault's terms, the 'holding onto the body' in drawing is set in a field of power relations, which Agamben redirected to the organization of the household. This longing embedded in drawing is intrinsically linked to the reflection on life, namely through the formal organization of the holding of the house.

With reference to the current age of digital production, Gevork Hartoonian analyses the transformative change the act of drawing has undergone when the horizontality of drawing was replaced with the verticality of painting. The perception of the architectural object, as it is processed via the act of drawing, has led to a reassessment towards the 'painterly', due to the digitalization of the architectural image. In order to construct a viable argument within a complex and multiform thematic framework, which necessarily involves the age-old intrinsic relationship between drawing technique and architectural conception, the author elaborates an argumentative structure, intertwining a critical reflection on Bernard Tschumi's work with traces of the historical influence of technique on the relationship between drawing and body.<sup>8</sup> Heinrich Wölfflin's theorization of the 'line', as an index for stylistic differentiation between the Renaissance and Baroque, forms the historical background of this discussion. However, the transformation of architectural drawing into the realm of the painterly was, according to the author, 'not a stylistic choice'. Hartoonian sees the shift in drawing towards a painterly orientation already in previous historical periods. In Le Corbusier's façades - for instance in Villa Savoye or Villa Stein, where the surface becomes a painterly surface

and both the structural function of the wall and the organization of the house no longer have any influence on the specific character of the surface - it is argued that the painterly 'was induced by technology'. Hartoonian emphasizes the importance of the grid as a system of drawing that unites body and spatial experience in a 'non-totalized form understood in terms of either the temptation to express the spirit of a digital age, or the humanist notion of the architecture and the body'.

By referring to the contemporary question of the digital and by actualizing Martin Heidegger's discourse on the 'world picture', the essay's argument prompts from a reading of two drawings by Bernard Tschumi prepared for the *Museu de Arte Contemporânea*. In this investigation, the horizontality and verticality are assumed as an inherently structural character of drawing, both with respect to the body and the gaze. It may be a tautology to affirm that the digital means of production and reproduction used in architecture constituted a turn to the painterly and to the 'superficial', but what emerges from the reading of Tschumi's drawings and the persistence on the 'classical' vertical and horizontal coordinates within the organization of his images is a substantial indication of the possibility of structuring this not-yet-theorized condition. The author, in fact, generalizes his hypothesis on Tschumi's critical use of technique through a further analysis of *The Manhattan Transcripts*. The sequence of images conceived by Tschumi in this 1981 theoretical work consistently offers the opportunity to see how different techniques of production and conception of the image are structured within a unified pictorial character. The filmic sequence of images, including photography and line drawing, montage, and diagrammatic organization techniques, are qualitatively enhancing the architectural conception in the context of the progressive technification (digitalization) of architecture.

The observation that drawing produces a tracing that gathers summarized knowledge from the past and a projection towards the unknown future, is expanded upon by Bordeleau and Bresler in their discussion of mapping and representation. The authors start with a reiteration of the contemporary critique of the controversial objectifying tendency of maps, and develop their argument through the understanding of mapping as the representational technique that allows time to become part of the architectural design process. With reference to Doreen Massey's articulation of mapping as 'representation' and 'agent' within spatial conceptions, and her critique of the tendency of maps to disregard the impact that 'objective recording' of the world actually projects onto the world, the authors single out a semantic distinction between 'map' and 'drawing' as two different modes within the intended process of the architect's intervention. Comparing Carlo Scarpa's material practice through drawing with Peter Eisenman's textual practice through diagrammatics within their respective projects for the Castelvecchio Museum in Verona, Bordeleau and Bresler make a distinction between the use of the drawing and the map. The map is the 'epistemological positioning' of architecture, while the drawing 'phenomenologically grounds' architecture. Both architects aim to address the historical traces of the site, and both use specific representational means to confront these historical characteristics with the present conditions found on site.

Using these two distinctive frameworks underpinning architecture and its representation, while anchoring the analysis to a common 'ground', the authors discuss both the fragmented drawings of Scarpa, which constitute a reading of the site and are informative for the built project, and juxtapose them with Eisenman's drawings, which offers mainly plan views aiming to reveal the site's complexity from a distant point, and where the 'construction' occurs within the realm of the representation. This comparison enables the authors to formulate the hypothesis

of a type of mapping in which the epistemological dimension opens the possibility of a relationship with the inherent phenomenological aspects of the site and its temporal dimension within a unifying concept of drawing/mapping. In this type of drawing, time is present in (at least) three different ways, namely through recording, action, and projection: firstly, drawing/mapping constitutes a representation of a found condition; secondly, it records the constructive process in which the project establishes its legitimacy; and, thirdly, it should index multiple perceptions and untapped possibilities. This threefold role, expressed in the three concepts of Documenting, Documentation, Documentator, is able to unify the indexical dimension of the project.

In the fourth essay, B.D. Wortham-Galvin elaborates on the specific theoretical function of drawing, informing the process of urban design during the mid- to late-twentieth century. Paraphrasing Hegel's metaphor adopted in the *Philosophy of History* to describe historical processes, the author states that 'architecture should be understood as a series of complex threads wherein one recognizes the physical forms as the warp, and the temporal, socio-political, natural, and aural contexts as the woof'. More specifically, the author applies this assumption to an extensive concept of urban fabric that exceeds the immediate physical and tangible situation in which individual buildings are located, and enables a grasping of the complexity of the built environment and lived experience. Central to this argument is the analysis and the critique of the figure-ground as a privileged methodological tool of urban design. According to the author, the figure-ground can reinvigorate contemporary urban design praxis (once more) by reasserting drawing as more than mere illustration, and as a means of conceptualizing design methodologies that support a holistic notion of fabric.

After recalling the origins of Giovanni Battista Nolli's plan for Rome (1748), the author analyses

its 'rediscovery' during the 1970s, and how figure-ground became integral to design methodology and a primary tool in the formulation of an urban design theory through Colin Rowe's work at the Cornell School of Architecture. By drawing a critical trajectory within the transformation of the figure-ground as a design tool and a narrative, this analysis also explicates the process that led to its conceptual decay and reduction into a mere formal exercise in pattern making, thus becoming a generative code of binary black-and-white design decision (pre-) determining the 'res publica' and the 'res privata' of the urban context. In order to grasp the complexity of the built environment and the different milieu of the condition determining it, 'figure-grounds' cannot be conceived as pure theory only, as the case of Cornell might suggest, but should, according to Wortham-Galvin, necessarily be 'reformulated' in a continuous relation with practice. In conclusion, the text provides a series of references that could help to conceptualize a holistic notion of the urban fabric and the possible ways of engaging it. Among the references used, the work on 'map overlays' by Ian McHarg is among the most promising theories needing further elaboration.

Returning to the original questioning of the relationship between drawing and theory, Jan Bovelet's essay properly concludes this *Footprint* issue by investigating the epistemic dimension of drawing, intended as a pure form of architectural knowledge. This argument confronts the extensive digital habitat, involving contemporary architectural practices and the consequent algebraization of drawing by means of digital computation. Organized in three parts, the text first offers a philosophical excursus of general examples in order to position the epistemic of drawing and the relationships between text/writing and pictures/painting. From this investigation, drawing emerges as a sort of 'visual thinking', a 'third thing' with a specific epistemic autonomy, in contrast to the realm of concept and language. This part also identifies four aspects of drawing to

be addressed. Drawings are epistemically effective by way of their use; they are generative, aiming at operational relationships, and always including some sort of non-conceptual reasoning.

Departing from Sybille Krämer's classification of diagrammatic thinking, the second part of the text develops a heuristic of the epistemic properties of drawing, where relationships and differences between the *modus operandi* of texts, pictures and drawings, and the significance of their specific epistemic environments are discussed. With particular consideration to the digital habitat, the author envisions a set of criteria and theoretical limitations for the digitalization of drawing, which is further discussed in the last part of the text: the specific knowledge embedded within the drawing is analysed from a symbol-theoretical perspective and investigated following Nelson Goodman's theory and his differentiation of the semantic and syntactic properties within analogue and digital symbol systems. The author then elaborates the criteria by which, in theory, drawings can critically oscillate (and thus produce knowledge) between the extremes of a continuous spectrum identified by the analogue and the digital symbol system. The epistemic capacity of drawing lies precisely in the spaces of manipulation, observation, and practice: through its way of representing objects or processes, drawing produces genuine epistemic objects that can become the target of arguments and, eventually, objects of knowledge. The observation of the epistemic role of drawings in the development of architectural design suggests that the production of knowledge is always internally entangled with the representation of the to-be-known.

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**Notes**

1. Catherine de Zegher, 'A Century under the Sign of Line; Drawing and its Extension (1910-2010)', in: Cornelia H. Butler and Catherine de Zegher, *On Line; Drawing Through the Twentieth Century* (New York: The Museum of Modern Art, 2010), p. 23.
2. Francesco Moschini, 'Sign', in: Franco Purini, Livio Sacchi, Nicola Marzot (eds.), *The New City. Italia-Y-26. Venice Biennale. The Italian Pavilion at the 10th International Exhibition* (Bologna: ed. Compositori, 2006), p. 414.
3. See: Francesco Moschini, 'Disegno, Teoria, Progetto/ Drawing, Theory, Project', in: *Domus*, no. 603, 1980, p. 10.
4. *Ibid.*, p. 11.
5. See: Franco Purini, *Proclamandone l'isolamento*, in: *XY, Dimensioni del disegno*, no.10, 1989. Republished in: Francesco Moschini, Gianfranco Neri (eds.), *Dal Progetto. Scritti teorici di Franco Purini, 1966-1991*, (Rome: Edizioni Kappa, 1999), pp. 358-62. My translation.
6. Robin Evans, 'Traces that Leave Nothing Behind', in: K. Michael Hays (ed.), *Architecture Theory since 1968*, The MIT Press, Cambridge, MA/London, 1998, pp. 482-89.
7. Daniel Libeskind, *Chamber Works; Architectural Meditations on Themes from Heraclitus* (London: Architectural Association, 1983), and Jeffrey Kipnis, *Perfect Acts of Architecture* (New York: MoMA & Columbus: Wexner Center for the Arts, 2001), p. 5.
8. In this text, the 'body' is assumed as a given, as a positional reference to the production and reading of a drawing, as well as a determining factor of orientation and a limitation of movement.