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12 Mapping and Its Projective Multi-Dimensionality

Marc Schoonderbeek

The map is open and connectable in all of its dimensions
Gilles Deleuze and Felix Guattari, 2004, p. 13.

Opening

As in other instances, quoting Deleuze/Guattari, as issued above, is as enlightening as it is intriguing. Foremost, its ambiguous nature produces clarifying as well as puzzling, yet startling insights. In this particular case, the question regarding the map being “open and connectable in all of its dimensions” propels the following questions: does the map itself already produce a multiplicity of dimensions, beyond the limitations of our Euclidean geometrical three-dimensionality? How many dimensions are we then actually talking about? Would there be the possibility of conceiving of as many dimensions as there are mapping gazes or even mapping practices? And how, then, to understand this multiplication of the gaze, or what Massey (2005, p. 91) has termed “the dimension of multiplicity,” where space is “the sphere of open-ended configurations within multiplicities?” In this chapter, an attempt is made to clarify the multi-dimensional character of the map, offering a careful delineation that proceeds by addressing respectively the proliferation of a multiplicity of frameworks within Cartesian space, followed by the tweaking and thwarting of that same space and concluded by the explication of the multi-dimensionality of the map. First, however, the conceptualisation of mapping in architectural discourse will be addressed by clarifying the hetero-topological nature of any mapping construct.

The Discontinuous Gathering of Places and Times in Mapping

In another context (Schoonderbeek, 2021), I have already argued that mappings in architectural discourse present “place-time discontinuities” and ultimately conceptualised these depictions as being hetero-topological in nature. Criticising contemporary topological understandings, especially in geography and social sciences, for being too much focused on spatial characteristics, rather than focusing on the intricacies of space-time relationships, hetero-topology, as a conceptual notion, would better address the multiplicity of both place and time in mapping. To this end, the term “chrono-topology” had already been brought forward in recent years, to

counter-balance the critique on the emphasis on topological space by emphasising the temporal dimension of topology more proactively. Mikhail Bakhtin proposed this term, literally meaning “time space,” to indicate “the intrinsic connectedness of temporal and spatial relationships that are artistically expressed in literature,” with “time as the fourth dimension of space” (Bakhtin, 1981; Smethurst, 2000). Chronotopology had been further elaborated in architectural discourse, ranging from the discussion on the political ordering of society via digital information means and processes to new-materialist debates on morphogenesis (Boyer, 2010; Simondon, 1964). Eduardo Mendieta (2001) significantly contributed to this debate, arguing that societies are managing space and time in a very particular way and considered chronotopology indicative of spatiotemporal regimes that control the very horizon within which and from which society can visualise itself.

What is absent in these overall conceptions of space-time relationships is that hybrid spatialities became related to multiple temporalities, but overall “space” remained rigid in its dimensionality, thus considered to be a rather static, absolute, and neutral entity. The work of Hermann Minkowski, on the contrary, had managed to present the world as a “four-dimensional, non-Euclidean manifold” (Galison, 2010). As a result of space and time being inherently interwoven, where “times” coexist with an infinite number of “spaces,” Minkowski introduced a radical plurality in chrono-topological thinking, a feature that called for further elaboration when relating these insights to architectural discourse. This radical plurality, namely, provides the conceptual framework for mapping to incorporate the consideration of a multiplicity of spaces and a multiplicity of times. Peter Galison extended this argument by propagating that space and time are always relative, intertwined, ambiguous, and unevenly distributed (neither sequentially nor chronologically across time and space). Furthermore, Rob Shields (2013) had pointed out that topology anyway would introduce in mapping procedures sets of space-time relationships that can be altered, distanced, collapsed, or distorted. In other words, mappings were to be basically understood as being discontinuous in nature and contain (or project) an activating force, thus producing post-topological relationships.

In the aforementioned argument, Guy Debord and Asger Jorn’s *The Naked City* was foregrounded as an example of how mapping in itself could already defy representational conventions while simultaneously constituting the projective basis for a spatial intervention through the act of its fabrication. Also in that specific case, the potentials embedded in the mapping originate in the discontinuity that is introduced in the representational delineation (and thus conceptual understanding) of a spatial or surficial condition. Any mapping, as an initiator for future action, offers sets of discontinuous relationships that are indicators of possibilities that can be activated. The notion of performance thus extends the idea of the agency of maps (Gerlach, 2014). This activation of the discontinuity of the gathered places and times within a mapping was thus elaborated through three modalities, each emphasising a particular form of map activation, namely instrumentalisation, operationalisation, and conceptualisation. Consequently, it was argued that each of these map activations would be dependent on a specific act (measuring difference (i.e., place-related to chorography), sequenced notation (time-related to aionology),

and spatial ordering (place-time-related to hetero-topology) respectively) and have a specific finality (i.e., architectural idea, architectural form, and architectural theory respectively) (Schoonderbeek, 2021). Within this hetero-topological understanding of a mapping construct, the problematisation of its implied, expressed, represented, and explicated dimensionality needs further elaboration in the argument at hand.

Orthogonal Multi-Dimensionality

Returning to the questions generated by the quote of Deleuze and Guattari, which pointed towards an opening up of the potential multi-dimensionality of mapping in architectural discourse, a disciplinary detour is successively elaborated here, foregrounding non-architectural works that will be able to shed light on issues of dimensionality in two-dimensional depictions. Or, to formulate this procedure more properly, works in which the architectural dimensional features in the artistic work can assist in clarifying some issues important for this argument by further elaborating mapping's multi-dimensionality. The painting *Las Meninas* by Diego Velázquez from 1656 is taken as the starting proposition. Even though *Las Meninas* is heralded for its centralising theme of representation, playing with notions of gaze, composition, spectatorship, portrait and portrayal, mirror and mirroring, and the role of the depicted artist and their canvas, the interest in the painting in this context is strictly limited to its implied spatiality. Much scholarly debate is, namely, focused on the doubling of the position of the royal couple vis-à-vis the standpoint of the viewer and the introduction of the backside of the canvas taking a frontal position in the painting. Yet the scene depicted is, here, regarded as being intriguing from an architectural point of view. The almost central focus of frames, for instance, or the placement of the various elements in the scenery, instigates quite some elaborate reflections on the importance of the spatial exuberance of the painting. Michel Foucault (1966) contributes to this discussion by emphasising the sense of movement that especially the light introduces in *Las Meninas*. In his argument, not only the falling of the light from right to left, but also the “compulsive tracer line, joining the reflection to that which is reflecting, cuts perpendicularly through the lateral flood of light.”

In terms of its multi-dimensionality, the whole scenery plays an ambiguous game of front and back, of foregrounding and framing. In this Cartesian space (of XYZ), the frames subdivide the scenery into a multiplicity of smaller spaces, whether these are literally depicted, reflected, or simply framed. And, indeed, light does contribute to this multi-dimensionality, but shadow also plays a role, confusing the perspectival set-up of the painting at various positions within the frame. Adding to this overall sense of multi-dimensionality, several other considerations emerge when contemplating the depicted scenery: is the presence of a seemingly excess of (frozen) gestures contributing to this impression? Are the characters in the front suggesting there is room for murmur in the painting, thus suggesting a more choreographic set-up of the scenery? Is the implied movement then perhaps partly a still depiction of an informal and casual gathering (or, stretching this interpretation, even of a dance)? And what about the materiality and tactility of

elements present: not only the room, but also the canvas, the mirror, the clothes. Most certainly, this act of simultaneously adding to the spatial configuration but also confusing it introduces an ambiguity in which what is seemingly positioned in the background might be “read” as overtaking the foreground, as if pictorial juxtaposition is exchanged for a collage-like technique of superposition. The result being a sense of the simultaneous presence of instability, of flight, of suspension, of the almost-neurotic movement of the gaze.¹

Within such a reading of *Las Meninas*, the painting can be considered a predecessor of Piranesi’s *Carceri* etchings, as the *Carceri* fall within the same spatial logic, even if the constructed three-dimensional space of the prisons is deliberately constructed at odds with the Euclidean geometrical logic of rectilinearity. In his article “Piranesi or the Fluidity of Forms” from 1946–47 (in: Tafuri, 1987), film director (and trained architect) Sergei Eisenstein had offered an extensive exploration of Piranesi’s *Carceri*. Eisenstein noted the spaces being depicted by the engraver as particularly fragmentary, introducing a sense of motion, or “fluidity,” that would render these depicted spaces cinematographic. He termed the preliminary *carcere oscura* [“dark prison”] a kind of *Ur-Carceri*, which provided “the flatness of form, softened by light, flows into space, the preciseness of facets [...] absorbed in the fluid contours of form” (Eisenstein, p. 74). This flatness of form and fluidity of space (i.e., this seemingly contradictory rendering of Piranesi’s importance for his filmic work by Eisenstein) points precisely to the subtle and sophisticated creation of depth illusion and a sense of multi-dimensionality within the two-dimensionality of the cinematographic screen. But despite Piranesi’s “celebration of the virtues of complexity” (Wilton-Ely, 1988), precisely the fact that Piranesi’s depicted spaces are “fluid” as well as deliberately ambiguous with respect to the Euclidean geometrical logic is a defining moment, allowing one to realise that perhaps *Las Meninas* is an interesting starting point as an example of multi-dimensionality, but ultimately remains too limiting, too encapsulated by the possibilities of frames and boxes, too much devoid of a certain “warpedness” of space (Vidler, 2000).

Post-Representational Cartography

During the 1970s and 1980s, the critical stance on cartography turned its focus on representational accuracy, towards the form of knowledge the map produced and, ultimately, the kind of censorship the map exerted. Scientific progress came under scrutiny through the clarification of the very agency it produced as effect and affect. The spatial knowledge embedded in the map was no longer considered to be without ideology and power struggles. Afterwards, and as an indirect consequence of these discussions, rather than merely “revealing the politics of mapping,” as well as emphasising the limitations the critical debate around maps had started to show (Harley, 1989; Wood, 1992), the argument turned towards the map as object. Realising that both scientific knowledge and ideological content are contextual and culturally determined (and therefore not purely or absolutely “objective”), maps came to be viewed as practices. For if maps are contextually and culturally bound, i.e., they *come out* of these circumstantial conditions, they also must “act” contextually and culturally, i.e., they work *on* these circumstantial conditions. Maps

are, then, no longer a reflection of the territory only, and neither do they precede the territory any longer. Maps also precede maps, i.e., maps produce successive maps. In addition, Kitchin and Dodge have also made it clear that considering mapping as practice means understanding the production and reading of maps implies a practice that unfolds with every mapping as well as with every reading act. Rather than seeing the map as a “secure” or “stable” spatial representation (even if they are seen as “diverse, rhetorical, relational, multivocal and having effects in the world”), maps should be regarded as being “*ontogenetic* in nature”: constantly remade when addressed, constantly reterritorialised, in a constant state of becoming (Kitchin and Dodge, 2007).

A shift of attention, therefore, away from the consideration of optimisation of the map, of how to represent the earth as precisely as possible. The effectiveness of the representation was no longer the main focus. This “post-representational” tendency in cartography considers the map as both a tool for documentation and a tool for action (Azócar Fernández and Buchroithner, 2014). Or, stated differently, both an indicator as well as an initiator of development. The map indicates possible sets of relationships and possible sets of instructions, making it an object of both inscription and projection. A mapping offers projective spatial knowledge, the relations of which can hence be considered an index of possibilities. This index is generative as ideas become present by giving form to imagination. Indeed, “the fabric of space is open-ended rather than enclosing” (Thrift, 2008, p. 98). Tania Rosetto uses Duggan to accurately summarise towards a more synthetic understanding of maps by stipulating an inclusive theory of mapping interfaces that “create a single framework that draws together the notions that maps are objects of representation, have a materiality that matters, and have a performative capacity that is realised in practice” (Rossetto, 2019, p. 34; Duggan, 2017, p. 67). As stated in another context, mapping offers a geography of simultaneity, a gravitational constellation of relations, a multiplicity of places and of times: in a mapping, space and time are distributed unevenly, and it needs to mediate the differences that inform its construction (Schoonderbeek, 2021).

This emphasis on practice is rather peculiar and important, as it would potentially relate post-representational cartography to non-representational theory (NRT). Thrift’s propagation of NRT emphasises experimentation over representation, and thus practice over procedures and the pre-cognitive over the cognitive (Thrift, 2008). Furthermore, in his explication of this theory, Thrift had some intriguing understandings of space to offer. Rather than considering “nearness” as a measure of space, Thrift suggests “distribution” as a better measuring principle, as it enables one to divert from human and/or bodily references as well as opens the understanding of space to a multiplicity of scales (Thrift, 2008, p. 17). And then with “site” as “an active and always incomplete incarnation of events, an actualization of times and spaces that uses fluctuating conditions to assemble itself” (Kwon, 2004). NRT “takes the leitmotif of movement and works with it as a means of going beyond constructivism” (Thrift, 2008, p. 5). Relevant in this context is also Thrift’s delineation of NRT’s seven main tenets: (1) it pays more attention to the pre-cognitive; (2) “the world is made up of all kinds of things brought in to relation with one another by many and various spaces through a continuous

and largely involuntary process of encounter, and the violent training that such encounter forces”; (3) concentrating on practices understood as material bodies of work; (4) giving equal weight to all things; (5) being experimental; (6) stressing affects and sensation; and (7) space playing a key role (Thrift, 2008, pp. 5–18). The conclusion, in both theoretical instances, is that space needs to be activated, and not only by “practices.”

Multi-Directional Multi-Dimensionality

Las Meninas is scholarly considered an emblem of the baroque, during which period the clarity, surficial focus, and centrally oriented architectural space of the Renaissance was replaced by the peripherality, dispersive, infiniteness, and depth of Baroque space (Vidler, 2000, p. 82). Yet, as stated, the inherent critique from a contemporary understanding of spatiality remains too much locked within an orthogonal spatial set-up. The painting *Jean de Dinteville and Georges de Selve*, also known as *The Ambassadors*, by Hans Holbein the Younger from 1533 (Foister, Roy and Wyld, 1997), is taken here as a better example towards the final proposition of this argument (even if the painting contradicts the aforementioned characterisation of Renaissance space). The scholarly interpretation of the painting has dealt mostly with, firstly, explaining the depicted objects and instruments and what these might possibly signify. The two Ambassadors depicted are regarded as “representatives of worldly wealth and power in State and Church,” with the Quadrivium located at the top shelf, referring to the mastering of the subjects through the higher arts, namely Music, Arithmetic, Geometry, and Astronomy (though some have also pointed out that these instruments are all somehow related to the movement of time) (Samuel, 1963, p. 441). And at the bottom shelf, slightly broken music instruments are located, indicating an awareness of the relativity of life and the inevitability of death. The second issue mentioned in art historical analyses focuses on the anamorphic presence of the skull, which is a great feature of the painting and gives rise to an array of different theories, addressing either its spatial-pictorial workings or its signification. Apart from an obvious Memento Mori, the skull is also seen in relation to the small fragment of the Jesus statue in the top left corner of the painting, indicating a relationship between life and death, hope and despair. And, much less obvious, the additional presence of the skull on Jean de Dinteville’s hat, which introduces a direct relation to the anamorphic skull but would presuppose some kind of device mediating the two images.

The ephemeral and referential presence (or dimension) of skull/death and statue/messiah in *The Ambassadors*, this combination of the tangible aspects of matter and the non-tangible features of space, offers an intriguing tableau of the spatial-material aspects of, or even implications for, architecture. For this discussion on mapping, however, the multi-dimensionality indicated (or better suggested) in the painting needs to be emphasised. Conventionally, the presence of the vanishing point is important in perspective drawing. In a regular orthogonal setting, two or three of those vanishing points are sufficient to construct a proper spatial understanding (even if it is also understood that there can be an infinite

number of vanishing points in perspective drawing). In *The Ambassadors*, one cannot speak of “visual indeterminacy,” as Kenaan (2002) has argued, nor does it introduce a “horizon” or another “center,” nor does it conceal anything specific, rather the contrary. What the anamorphic skull does is the opening up of the space of the depicted scene towards other dimensions, one that defies (or extends) the Euclidean three-dimensionality of the scenery, offering several obliquenesses that are, in fact, not really oblique but pointing, curving, or tweaking out of (or into) the space. The painting directs and sometimes just reveals these other dimensions: the painterly anamorphic act, and the relations it introduces in the scenery, introducing a beyond-three-dimensionality into the depicted space.

The overall intent of this argument was to briefly discuss the potential of mapping as a design tool in architecture, followed by a more extensive indication of the kind of measured dimensionality mapping practices propel. Architectural production is anyway a complex endeavour because it entails the spatial ordering of a differentiated plurality, which also constitutes the reason why mapping techniques are a helpful tool in architectural design processes. The contextual field in which architecture operates is inevitably complicated, complex, and full of contradictions and conflicts. Mapping such contextual fields addresses these pluralities of differences while simultaneously producing multiple geographies of difference within the mapping. In theoretical terms, and as argued, mapping is a projective act that propounds a montaged ordering of hetero-topological place-time discontinuities. And in more concrete terms, when activating cartographically delineated constellations of spatial relations towards architectural construct, a multi-dimensional understanding of space comes into play. The sets of relations constructed within the mapping can be twisted, folded, superimposed, stretched, warped, etc., each indicating specific representational techniques mediating observed and/or experienced material-spatial constellations. A profound example to underline this argument is constituted by the intriguing mappings that are presented in *Terra Forma* (Aït-Touati, Arènes and Grégoire, 2022). Emphasising the need to get engaged with “thicknesses” in contemporary cartographic practices, these mappings are focused on bodies rather than locations, which simultaneously changes the conceptualisation of space as “it is no longer a simple container, but rather a living, resonant milieu, composed of thousands of superimpositions and actions of the beings that surround us, constantly and indefinitely produced by the movements and perceptions of those who create it” (Aït-Touati, Arènes and Grégoire, 2022, p. 12).

The Hetero-Topological in/of Mapping

Even if “maps have no ontological security,” meaning “they are of-the-moment; transitory, fleeting, contingent, relational and context-dependent” (Kitchin and Dodge, 2007, p. 340), one could still try to unpack this multi-dimensionality more precisely by indicating the main additional considerations at play in mapping. To this end, firstly, the issue of directionality “in” and “out of” space could be indicated, i.e., by making a distinction between mapping’s “internal” and “external” hetero-topology. In *The Ambassadors*, one cannot speak about the destruction of

space, nor about the closing off, or in itself, of space. When other dimensions are introduced, fundamentally at odds with conventional perspectival space, the cartographic act of bringing “things, concepts, conditions, processes or events” (Harley and Woodward, 1987, p. xvi) together produces within the mapping both defining sets of (spatial) relationships (i.e., an internal hetero-topology) and activating sets of (spatial) relationships (i.e., an external hetero-topology). In his discussion on “Lines,” Tim Ingold (2016/2007) similarly describes the very nature of maps by discussing the difference between way-faring (or trail-following) and navigation. In essence, navigation is considered, by Ingold, as a pre-determined act, a laying out of routes across a plane that excludes surprises and discoveries and ensures a defined course across a known territory. Way-faring, on the other hand, is more open-ended, with the demarcation of signposts to indicate possible moments or reference points in the landscape, placed within a meshwork of different trajectories.² As argued previously, it is clear that contemporary “mappings as practices” actually combine both directionalities, as the mapping is both a “taking in” and an “acting out” (Ingold, 2016/2007, p. 18).

The second additional consideration towards a certain specificity regarding mappings’ multi-dimensionality in this argument involves the role of the reader. Mapping processes, following David Pinder, have “multiple aspects, multiple possibilities” (1996, p. 424) and constitute a specific type of complexity. The proposed aspect of discontinuity embedded in mappings enables or even enhances this multiplicity and complexity. Discontinuity of both place and time within the mapping presupposes an opening up to forms of taking measure that are subjective, different, non-linear, indeterminate, non-chronological and/or non-numerical. But taking measure connects two entities, namely the measured and the measuring, the object and the subject. Whilst most parts of the argument thus far have been dealing with the object (i.e., the mapping), the subject (i.e., the observer/reader of the mapping) has only been marginally discussed. As Gerlach stated, the performative nature of mapping is “concerned with animating the world in an infinite number of ways,” and the reader (or interpreter) of the mapping has a crucial role in this animating act (2018, p. 90). Explicating the role of the observer in the culture of vision in modernity, Jonathan Crary has indicated that when discipline emerges to guarantee socio-economic control through the technologies of “vision,” vision is simultaneously liberated and no longer pre-determined as the masses have become self-aware (Crary, 1992). Returning to one of the initial questions in this chapter: are there thus as many dimensions as there are mapping practices?

As was argued in a previous section, the manner in which maps are understood in post-representational cartography is to bring “being and knowing, ontology and epistemology, into new kinds of relations” (Lury, Parisi, Terranova, 2012, p. 4). Mapping is, in a way, anti-fragmentary. It collects and produces a set of possibilities, in terms of reading, interpretation, and, more importantly, in this context, of projection and production. Mappings reshuffle and reorient the conventions of representation, disrupting (if not annihilating) their past roles and reconfiguring them in “new” sets of relationships. There is flatness and depth here, simultaneously. This then also implies that multi-dimensionality has nothing to do

with infinity or infinite space, and neither with endless depth. Each mapping will always have its constraints, but then with respect to its “extent,” not with respect to its plurality. Hence, it becomes possible to perceive and conceive a multiplicity of “content” in the same mapping configuration. A spatial constellation, so to speak, a spatiality that flows, that is not necessarily unstable but stabilised by some force other than gravity, or perhaps a multiplicity of gravities, labyrinthine in a multi-dimensional way, or as a multi-dimensional construct. As argued, the multiplicity and complexity of the world cannot be seen nor depicted from a single direction and as a single dimension: both exploration and representation of the world entail a constant transposition from visual trace to represented notation and the hiatus caused by these transpositions from one form of information to the next. This suggests that “we never leave the real for the formal” (Latour & Hermant, 1998, pp. 25–28), rather we remain caught within the construct of a larger, synthetic whole, whether this is “reality” or the mapping of it. As a result, the distinction between the mapping and the territory is increasingly difficult to make (Figure 12.1).

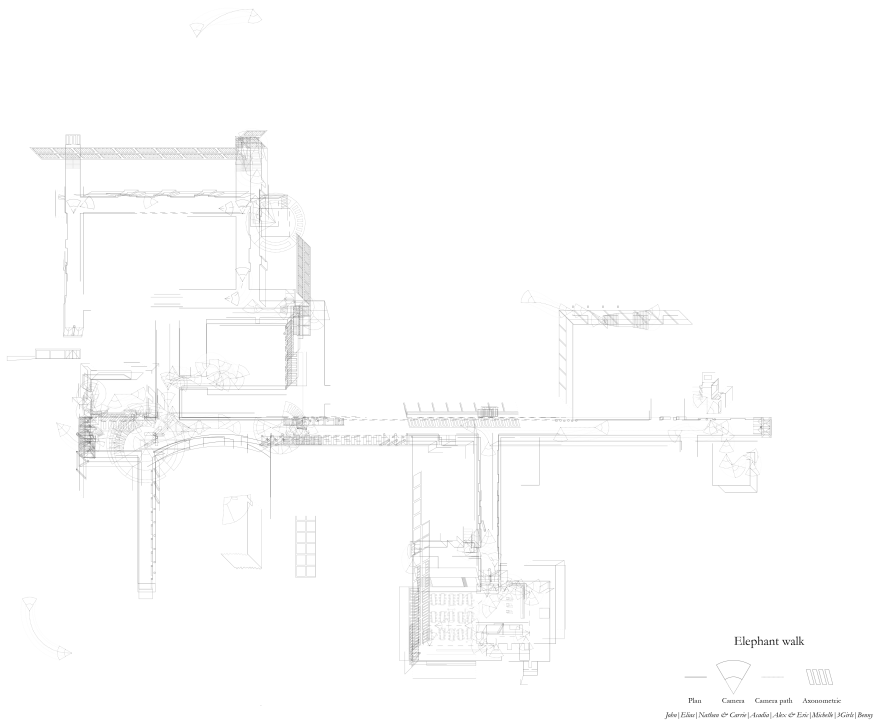


Figure 12.1 Gus van Sant’s *Elephant Mapping*

Mapping by Guillaume Guerrier. Context: part of B&T’s research project “Mapping Walks that Changed the Course of History”

Gus van Sant’s *Elephant* follows eight wanderings of teenagers through a high school’s corridors during a mass shooting. Every path is interwoven, all destinies

are undeniably linked, and all walks are depicted as fluid and smooth. Yet another element is added to space, namely the elasticity of time. Time is not unfolding similarly for every path, and the introduction of slow motion allows space and time to be bent with the intent to immortalise a specific moment. Rather than being a narrative map focusing on specific events occurring in the movie, the mapping elaborates a dialectic between the different paths (as a plan) taken by the characters and the various angles of the camera (as an axonometric). Moving away from the set-up of the movie with its circular narrative and accumulation of long takes, the mapping is the re-collection of the different single paths taken by the characters, to which is added the various orientations of the camera. The map is not scaled and is partly subjectively drawn. The spatial perception is very different in each long take. Thus, the same spaces appear open or closed, smaller or bigger, longer or shorter, narrower or wider, ... according to the sequence in which they appear (Figure 12.2).

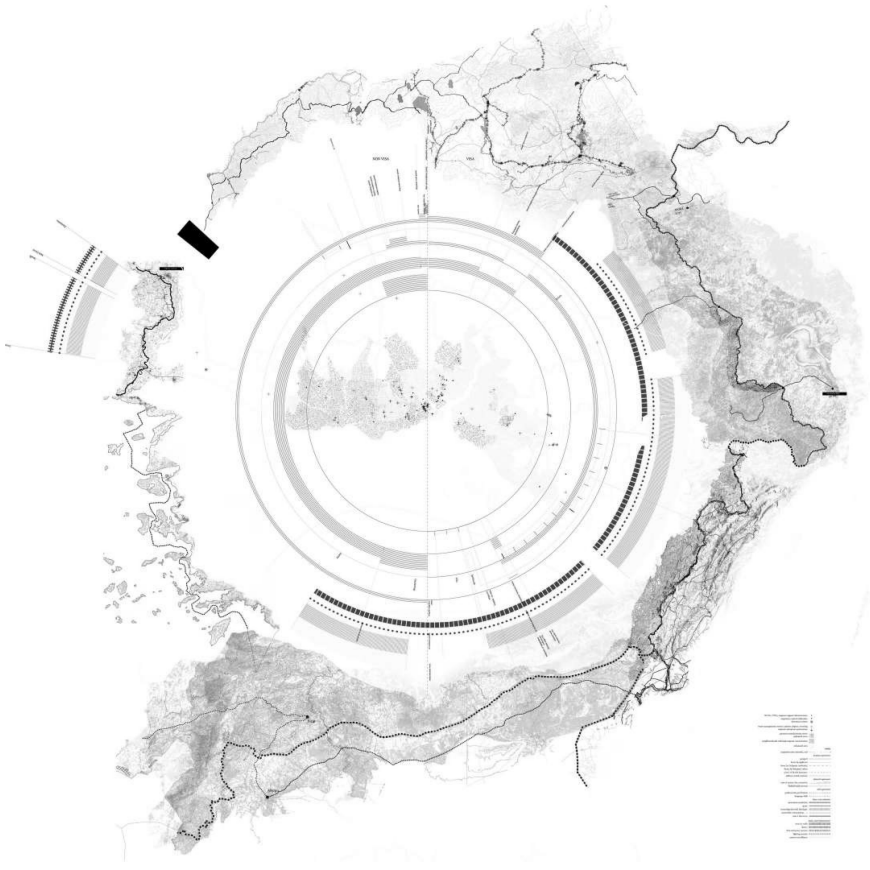


Figure 12.2 Migration: the Mechanisms of Border Control

Mapping by: Chuanlin Gao, Marilou van Dalen, Mathew Tong, Myrto Klimi, Valentin Gies, and Virginia Lazarou. Context: B&T's graduation studio "Dardanelles Strait—Sea of Marmara—Bosphorus Strait"

Due to its strategic location on the so-called Eastern Mediterranean route, Turkey continues to be a pivotal country for migratory movements. The aim of this research was to map the control mechanisms of migration in relation to the Istanbul region. Transit spaces of migration, like Istanbul, are also connected to other parts of the world through waiting and hope, especially for migrants from war regions or restrictive regimes who are waiting in safer places for a potential return located in an unknown future. Migration flows are a global system which cannot be studied locally in isolation. For this reason, the map addresses connections to selected countries of origin and destination of migratory movements, and the borders that migrants face before or after their stay in Turkey. Over the years, the control of migration has been increasingly intensified through surveillance mechanisms, with Turkey building up walls to prevent the massive flow of refugees trying to flee war, conflict, or poverty. Such are the cases with respect to its neighbouring countries Syria and Iran, with borders being controlled to a maximum degree and with guards even shooting at undocumented refugees trying to cross. As a first step, relevant features of the control systems are identified, quantified, and localised. In addition, the relation between these different physical and virtual features is analysed in order to understand them as a system (Figure 12.3).

Drawing of the Interval

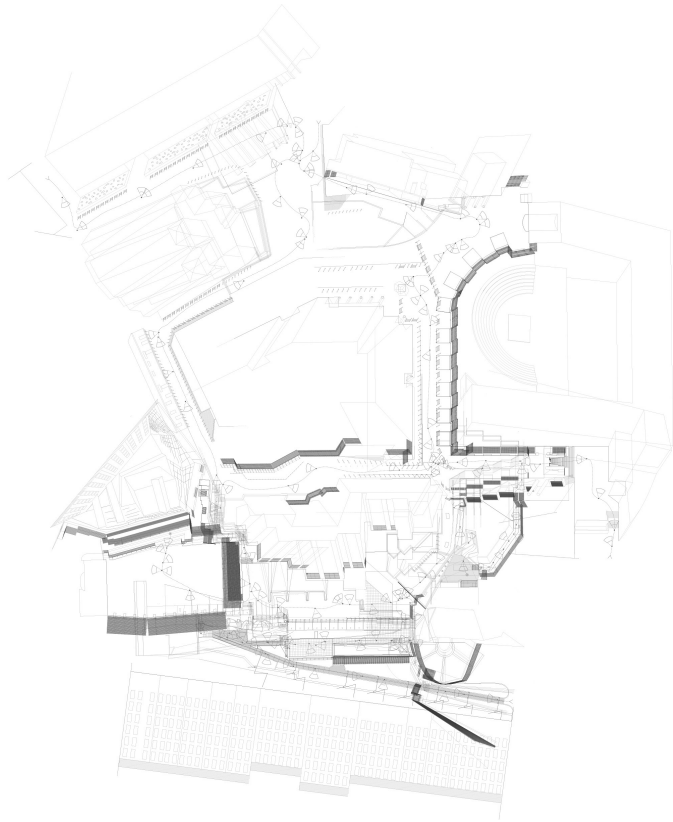


Figure 12.3 Mapping of Interval Spaces

Mapping by: Zofia Sosnierz. Context: B&T's graduation studio "Marseille"

The neighbourhood near the Colbert subway station in Marseille, a site located in the north part of the city centre, is a space in between residential buildings located on a hill. The space is highly heterogeneous and consists of various level changes, stairs, materials, subdivisions, fencing, smaller voids and intervals, and other elements. The mapping conceptualises these spaces as “interval spaces,” which are defined as left-over or side-effect spaces, which contain many programmes but are not programmed a priori. They have emerged over time as a result of inserted architectural objects and then become part of the everyday spatial practices. The Interval Spaces are used by different agents, and due to their undefined nature, they become places of possibilities, change, freedom, and availability, thus forming a patchwork of many layers of time intervals and everyday spatial practices. The mapping showcases four trajectories in which viewpoints and gaze directions are shown, corresponding to the way the elements in the mapping are shown. Different modes of representation are used for each element to show the essence of each one, including the use of different colours and line weights. In places where it was important, the materiality is indicated (Figure 12.4).

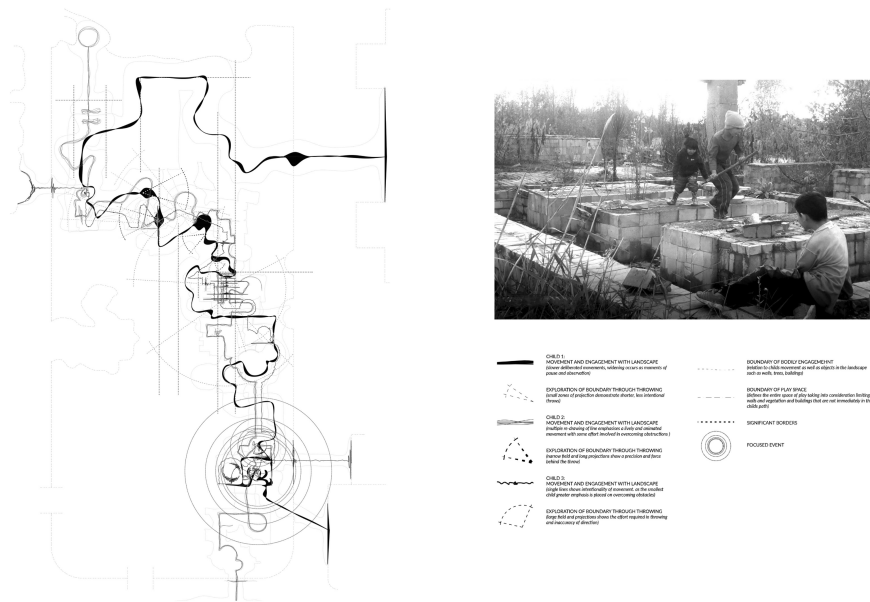


Figure 12.4 The Child's Gaze

Mapping by: Reena Ardeshtana. Context: B&T's graduation studio "Bucharest," see also: <https://www.modi-operandi.space/n02/>

The chemical plant of Chimopar is located in South-East Bucharest, at the periphery of the municipal border. The industrial zone spreads over several hectares and is sandwiched between the Dâmbovița River to the south and Bulevardul Theodor Pallady to the north. The site offers a rich ground for observation of not only

the existing structures and their spatial qualities, but also the constructed stories from traces of past inhabitants, however temporal. Their movements, actions, and behaviours become part of the site and offer a re-reading of the site through their eyes. In order to develop an appreciation of the complexities of the systems at work within this site, four specific lenses were introduced through which the site is seen. The Child's gaze is one of these gazes, allowing one to explore the playful experience(s) and spatial characteristics of the site. When visiting the site, three children had made a game of throwing objects, with each throw uncovering a new, non-physical boundary. As they moved across the landscape, they engaged differently with the space and elements in the landscape, such as walls, platforms, buildings, and trees. Each child offered a different interpretation of the space and expression of movement; slow, animated, exaggerated. The mapping documents their movements and begins to redescribe their environment through their actions within the space (Figure 12.5).

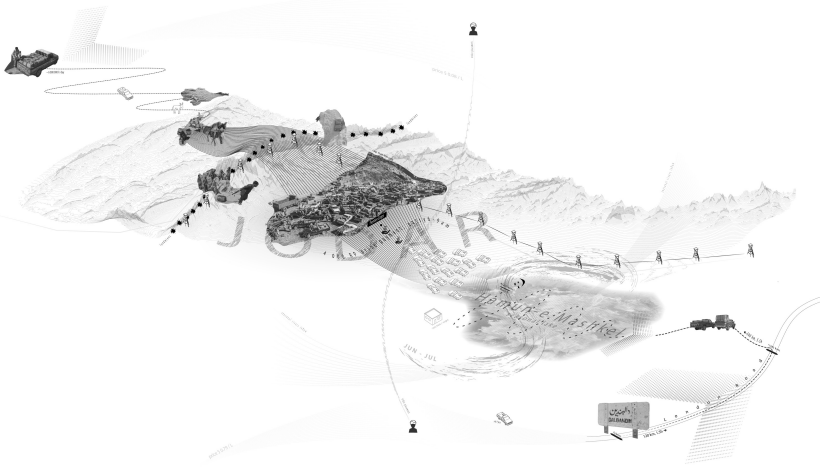


Figure 12.5 Fluxus

Mapping by: Maciej Moszant. Context: B&T's graduation studio "Gwadar," see also: <https://www.modi-operandi.space/n08/>

Investigating a multiplicity of fluxes, practices, and conditions around the mountainous border separating Iran and Pakistan, the mapping traces smuggling practices within the regional scale of the Iran–Pakistan and Pakistan–Afghanistan border areas. The study of this strategically important border zone in the Balochistan region suggests a neglected territory that has been the scene for oil and diesel smuggling, proxy wars, sectarian conflict, state extractivist operations, and broken ecosystems. Through a series of mappings, the spatial, territorial, logistical, and material aspects of smuggling operations and the border infrastructure are investigated, as a result of which a series of “hide and seek” tactics are concluded as a game being played between smugglers and the border police. The presented

mapping of the Jodar area concerns the most representative oil smuggling route, which is used mainly by the biggest oil mafias. It illustrates the consecutive steps that sum up the smuggling process: remote orders, smugglers' groups formation, departing from villages located by the road such as Dalbandin village, driving the locally famous London Road, entering the desert of Hamun-e-Mashkel, queuing to enter the Jodar market, bribing frontier corps, and finally committing trades with other smugglers who arrived from the other side of the border, carrying oil barrels with their donkeys and blue pickups on the mountainous path.

Notes

- 1 The mixing of foreground and background, of figure and ground, can thus be regarded as the predecessor of the Benjaminian claim of the collapse of perspectival distance. See Walter Benjamin's *The Origin of German Tragic Drama*, discussing German Baroque theatre.
- 2 In the same line of reasoning, Ingold also made a distinction between an assembly (of connecting elements) and a walk (or way-faring, "threading a path"), giving preference to the latter, which he considers less pre-conceived and therefore more open to unfolding possibilities (along the way).

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