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# ARCHITECTURE AND URBAN COMPOSITION: FRAMING AND FILLING

# ARCHITEKTURA I KOMPOZYCJA URBANISTYCZNA: OBRAMOWANIE I WYPEŁNIENIE

#### Abstract

In this essay, the architecture of the city is reduced to the procedures by which the elements of the urban phenomenon are recomposed into a unitary whole starting from what Gombrich defined as the foundation of any hierarchical arrangement: "framing" and "filling". The example of Giorgio Grassi's project for Lützowplatz in Berlin shows how these two actions accompany the genesis and development of the entire compositional process.

Keywords: urban composition, architectural typology, Giorgio Grassi

#### Streszczenie

Architektura miasta jest w tym eseju zredukowana do procedur, za pomocą których elementy zjawiska miejskiego zostają przekomponowane w jednolitą całość, poczynając od tego, co Gombrich uznał za podstawę każdego hierarchicznego układu: "obramowania" i "wypełnienia". Projekt Giorgio Grassiego w Lützowplatz w Berlinie pokazuje, jak te dwa działania towarzyszą genezie i rozwojowi całego procesu kompozycyjnego.

Słowa kluczowe: kompozycja urbanistyczna, typologia architektoniczna, Giorgio Grassi

### 1. INTRODUCTION

A few years ago, Routledge published a superb book by Andrew Ballantyne entitled *What is Architecture?*, in which all the essays, including one by Kenneth Frampton, focused on the relationship between construction and decoration.

In a paragraph entitled *The Structure of Architectural Composition*, Ernesto Nathan Rogers once defined "composing" as "putting together various things to make just one. But different things, taken all together, can become one precisely because a relationship is established between the components, where they influence one another, establishing a synthesis, through an internal dialectical relationship". Per se, "composition" is a more abstract and generic term of architecture to the point of having to be adjectivized, but, curiously, architecture itself has often lent its very concreteness to a representation of the most abstract terms: "structure" derives from the verb *harmozein*, which appeared for the first time in

<sup>&</sup>lt;sup>1</sup> E.N. Rogers, Esperienza dell'architettura, Skira, Milan 1997, p. 171.

Homer referring to concrete fixtures between the parts of wooden constructions. In any case, whether we are speaking of concrete or abstract elements, a composition always concerns an internal relationship, in which the connexion between the components is more important than the actual components themselves, in other words, it concerns the ordered work carried out within a regulated symbolic space, where "symbolic" is to be understood in the manner of Hugo von Hofmannsthal: "For him, a single thing is equivalent to many, since he sees it symbolically. [...] In his finest hours, he only needs to set them next to one another, and what he places side by side becomes harmonious"<sup>2</sup>.

Although rules and techniques depend on the specific nature of a particular discipline, the relative principles that govern the organization of a symbolic system can be considered universal archetypes of the "construction of the world": difference, concordance, contrariety, principle, middle, end, majority, equality, and minority. For Le Corbusier, they were nothing more than attributes of the rhythm into which a composition could be broken up: "Rhythm is a state of equilibrium which proceeds either from symmetries, simple or complex, or from delicate balancings. Rhythm is an equation; Equalization (symmetry, repetition); [...] Compensation (movement of contrary parts); [...] Modulation (the development of an original plastic invention)"<sup>3</sup>. Instead, Julia Kristeva identifies rhythm as the "most profound" quality of laws that can bring order to the world: "[...] One can conceive of rhythm not only as a classical matrix of versification, but, indeed, as a property immanent to the functioning of the deepest language of the deep structure which articulates the linear sequels"<sup>4</sup>.

Between 1912 and 1913, Wittgenstein conducted some experiments on rhythm in the laboratories of Professor Charles Myers at Cambridge<sup>5</sup>. These experiments were part of a study of so-called "subjective rhythm", which concerned the way in which different individuals perceive the same sequence of beats. The research showed that these beats, although perfectly isochronous and equitonal, that is, emitted at the same distance of time and using the same note, were perceived each time as grouped in series of two, three or four units and, in addition, in some cases, the first beat of the series was perceived as stressed while the intervals within each individual group seemed shorter than that between one group and another:

I did find out one thing, moderately interesting.

We found a machine which didn't stress any notes.

When this was done, everyone heard an accent on the last / first / of the three.

Perhaps not exactly this; but

- 1. You do hear some stresses, though the machine doesn't give them.
- 2. You can find laws which regulate what stress you hear. e.g. you try to divide into bars.

You tend not to stress 2 consecutive beats.

If you construct a rhythm in such a way that 2 tendencies conflict, a curious effect is produced – that of a constant stumbling<sup>6</sup>.

<sup>&</sup>lt;sup>2</sup> D.S. Luft (ed.), *Hugo Von Hofmannsthal and the Austrian Idea: Selected Essays and Addresses*, 1906–1927, Purdue University Press, West Lafayette 2011.

<sup>&</sup>lt;sup>3</sup> Le Corbusier, *Towards a New Architecture*, Dover, New York 1985.

<sup>&</sup>lt;sup>4</sup> J. Kristeva, *Revolution in Poetic Language*, Columbia University Press, New York 1984.

<sup>&</sup>lt;sup>5</sup> E. Guter, *The Philosophical Significance of Wittgenstein's Experiments on Rhythm, Cambridge 1912–13*, "Estetika. The European Journal of Aesthetics" 2020, vol. 57, no. 1, pp. 28–42. DOI: https://doi.org/10.33134/eeja.27.

<sup>&</sup>lt;sup>6</sup> L. Wittgenstein, *Wittgenstein: Lectures, Cambridge 1930–1933, From the notes of G. E. Moore*, Cambridge University Press, Cambridge 2016, 9:41–42. DOI: https://doi.org/10.1017/CBO9781139644600.

This "moderately interesting" discovery proved pivotal many years later when Wittgenstein dealt with what he would call "noticing an aspect", "hearing as", or "seeing as". When the same phenomenon is perceived and described differently by each individual, these different ways constitute the 'field' in which the different possibilities of existence of a necessarily ambiguous figure unfold: "But the notion of 'seeing something in something' is taken from the case where I see the figure, for example, 'phrased' differently. But in that case – and in a different sense – I really am seeing different figures, and what they have in common, aside from their similarity, is that they were caused by the same physical image"7. Within the same physical image, different configurations can be recognized, different "phrasings" which correspond to different possibilities of characterization. This is something more than the famous A New Method for Assisting the Invention in Drawing Original Compositions of Landscape by Alexander Cozens who, on the basis of Leonardo da Vinci's "stain theory", urged his students to find different landscape configurations in a stain or 'blot'8. It was, in this case, a game in which seeing something in something subsequently picked (and excluded) those elements within a specific field made up of equalities, differences, repetitions, similarities and contrasts. Of course, as in Leonardo's theory, in which intuition can be hindered by "an insufficient supply of ideas deposited in the mind", "seeing something" is not merely a descriptive technique, but corresponds to a genuine construction procedure, a symbolic activity in which one knows what is produced, knowing it and producing what he knows, in producing it.

In a volume entitled *The Sense of Order*, Ernst Gombrich defined the terms of this activity very clearly in the dialectic between *framing* and *filling*: "But any hierarchical arrangement presupposes two distinct steps, that of *framing* and that of *filling*. The one delimits the field or fields, the other organizes the resulting space"<sup>10</sup>. The first therefore addresses the definition of the field ("The field comes first", said John Hejduk), which is anything but still and is, in turn, the object of an intentional choice. In other words, "seeing something" concerns both *filling* and *framing*. Of course, the game must be knowing, and knowledge is inscribed in the rules produced by the discipline of architectural and urban composition in the course of its historical experience.

### 2. EXAMPLE

Let us take the example of Giorgio Grassi's project for Lützowplatz in Berlin (1981). In the case of *framing* it is a matter of "seeing something" inside the undifferentiated and confused space of the technical map of the Municipality of Berlin (Ill. 1); in the case *of filling*, of "seeing something" within the previously defined frame, that is, of being able to imagine different possible configurations, different ways of grouping the components together, different

<sup>&</sup>lt;sup>7</sup> L. Wittgenstein, *The Big Typescript*, C. Grant Luckhardt (ed. and transl.), Oxford: Blackwell, 2005, p. 251. DOI: https://doi.org/10.1002/9780470752906.

<sup>&</sup>lt;sup>8</sup> See L. Amistadi, *Paesaggio come rappresentazione*, Clean Edizioni, Naples 2009, pp. 29–31.

<sup>&</sup>lt;sup>9</sup> For the concepts of "descriptive technique" and "constructive procedure" see: A.G. Gargani, *Stili di analisi*, *L'unità perduta del metodo filosofico*, Feltrinelli, Milan 1993, pp. 72 et seq.

E. Gombrich, The Sense of Order, A study in the psychology of decorative art, Phaidon, London 2021; See also L. Amistadi, Ornamento e gioco [in:] L. Amistadi, I. Clemente (ed.), Adolf Loos. Soundings 2/III, Aión, Florence 2022 (currently being published), p. 55.

"phrasings" which all correspond to different characterizations, so that, as Nelson Goodman reminded us, "representing is a matter of classifying objects rather than imitating them, of characterizing rather than of copying" 11.

Drawing-description 1 (III. 2). The field remains uncertain. The configuration is simple, and the phrasing is articulated through a repetition of the arms which stretch along the trajectory of the Klingelhöferstrasse, resuming the continuity *in absentia*. The field of action (still without a background colour) is defined by the triangular limits sandwiched between this trajectory, a section of the Landwehrkanal to the north and one parallel to the Lützowplatz which is planned to continue as far as the Lützowufer. The rhythm is isochronous, starting from Lützowstrasse and expanding only at the accent placed at the group of buildings overlooking Lützowplatz, which are adopted as pre-existing. The series is accompanied by the basso continuo of a portico which emphasizes the eastern edge of the field along its entire length.

Drawing-description 2 (III. 3). The field-background is coloured and extends beyond the canal where the portico crosses a bridge to reach the museum area which houses the Bauhaus archive and the neoclassical villa that was once the residence of August von der Heydt, while to the east it includes the area adjacent to the French Gymnasium (secondary school) of Berlin. The consideration of the area beyond the southern limit of Lützowplatz generates a change in rhythm in its series of parallel arms, where the last element is now aligned with the volume of the Hotel Berlin.

Drawing-description 3 (III. 4). In this "physical image" the figure (a sort of cross with two crossbars) stands out clearly against a neutral background like a real *inventio*. The "seeing something" is sublimated in the figural theme which uses the components starting from the limits of a hypothetical field. The role of the long narrow portico which holds together the two parallel arms is no longer so much that of a basso continuo as of the guide of a periaktos, along which the same arms can slide and tauten the pre-existences asynchronously. The theme is thus decided, the field can come later.

Drawing 4 (Ill. 5). The theme is contrasted with and overlaps the context, and the limits of the field already hypothesized in drawing 2 are re-discussed. The area east of the line, which has since contracted on this side of the Landwehrkanal, extends its entire length as far as Kurfürstenstrasse.

Drawing 5 (Ill. 6). The relationship between the objects and field (objectified) or between figure and background is defined and clarified quite distinctly. Further variations derive from this confrontation: the southern arm (the façade of Hotel Berlin) detaches from the cord-portico-rod-track "just enough" to free the southern side of the pre-existing buildings overlooking Lützowplatz; the same arm slides and stops at the line of the corner building.

Drawing 6 (Ill. 7). The relationship that the buildings establish with the field as well as with the signs that punctuate it and divide it into sub-fields is mutually reinforcing and enriching: the part straddling the canal now appears joined by the bridge-building which defines its eastern limit and groups on it the two pre-existing buildings-museums; the central part corresponding to Lützowplatz is defined to the north by the arm of the in-line building which is slightly separated from the stretch of road sliding southwards and from the portico to the east; the south-eastern part, once defined in its contours, can now afford to host within it the occurrence of any pre-existence in addition to the volume of the French Gymnasium of

<sup>&</sup>lt;sup>11</sup> N. Goodman, Languages of Art, Hackett, Indianapolis/Cambridge 1976, p. 31.

Berlin; the south-western part, into which the previous one juts, is broken up by the rhythmic game established between the arms of the in-line buildings, the diagonal cut of Karl-Heinrich-Ulrichs Strasse, and the corner building.

In summary, the variations and articulations must take place within a field understood, according to Marcolli's definition, as "a space that has some constant characteristics at every point", but also, and above all, as a field of action: "and they are spaces also because certain operations are carried out within them"12. The definition of the field allows not only the different configurations produced by these operations to become comparable with one another, but also, to a certain extent, a reduction in the number of possibilities: the operations are conditioned by the dialectic relationship of the components with the limits of the field and this conditioning ensures these different configurations a certain mutual familiarity or similarity (structurally speaking). In 1899, Arthur Dow published a book entitled Composition (preceded, in the 1997 Berkeley edition, by a fascinating introduction by Joseph Masheck), which contains the exercises that Dow entrusted to his fine arts students in Brooklyn. Giving them exercises more applicable to Italian fabric makers, he urged them to invent new spatial configurations by sliding the edges of a loom towards the inside of the field: "In old Italian textiles the same pattern appears repeatedly, but varied in size, proportion, dark-and-light and colour". Or musicians: "The masters of music have shown the infinite possibilities of variation - the same theme appearing again and again with new beauty, different quality and complex accompaniment"13. On the whole, there are – as Wittgenstein would say – no right or wrong configurations, but only procedures "removed from the traffic", that is, waiting to find a suitable application. Certainly, "the proof is in the playing" <sup>14</sup>, that is, it is found in the doing itself and, in the case of an urban composition, in the appropriateness of the solution because of its "urban sense".

If we analyse the current state of the Lützowplatz area just over 40 years after Grassi's unrealized project, we can see that the city, or whoever decided on its behalf, has steered its development in a very different direction, if not totally contrary to that of "our" project, by reorganizing a large block around the French Gymnasium of Berlin in line with the buildings overlooking the square. In other words, a trapezoid playing field was picked out between Lützowplatz and Lützowstrasse to the north and Derfflingerstrasse and Kurfürstenstrasse to the south, resolutely turning its back on Lützowplatz itself, and thereby relegating it to a marginal role (Ill. 8).

What the different variants of Grassi's project all had in common was the idea of taking as a fundamental urban direction the long axis of the Klingelhöferstrasse, which links the Victory Column in the centre of the Tiergarten with Nollendorfplatz (which seen today, also seems to have suffered from a "wrong choice") and which keeps going as far as the Church of St. Matthias. In the final version of Grassi's project (Ill. 9, 10) the combs are interrupted in the direction of the aforementioned axis (in fig. 9 of the 1981 project, the Karl-Heinrich-Ulrichs-Strasse is the Einemstrasse), thus embracing the Lützowplatz to reoccupy a central role, a splendid green exception along the route that connects the Tiergarten to the Church of St. Matthias. The diverse layouts which the project for Lützowplatz assumed in Grassi's sketches

<sup>&</sup>lt;sup>12</sup> A. Marcolli, *Teoria del campo, Corso di educazione alla visione*, Sansoni, Florence 1978, p. 3.

<sup>&</sup>lt;sup>13</sup> A. Dow, Composition, A series of exercises in art structure for use of students and teachers, University of California Press, Berkeley 1997, p. 97; see also L. Amistadi, Ornamento e gioco, op. cit., p. 62.

<sup>&</sup>lt;sup>14</sup> See E. Guter, *op. cit.*, p. 33.

are all variations and subdivisions of the initial *inventio*, where the fundamental motive for their inclusion or exclusion with respect to the possibilities given by the position of the field, is always and in any event an urban motive.

## 3. CONCLUSION

Onto these topological considerations, which concern the choice of the field of action (*framing*), including and excluding with respect to a limit and its internal divisions (*filling*), is grafted the typological universe, according to which the building types in line and with balconies substantiate the geometric-spatial configuration. If we recall the definition of Carlos Martí Arís, we have to admit that the building type, like the architectural one, is "a logical statement which underlies a formal structure". Although the relationship between the components established in the building type mainly has a distributive intention, the succession of properties along a gallery undeniably has a spatial-topological and rhythmic significance: spatial, as the succession and elements bring shape to a linear volume which assumes the role of a limit within the compartment considered; topological in the sense of the fundamental relationships (front/back, above/below, inside/outside), just as it is in the nature of the balcony type to have a front that is quite distinct from the back (the long rows of balconies) and it is onto this difference that the concept of the façade has been grafted; and, manifestly, rhythmic, since it is typical of any serial composition that the regulated succession of components gives rise to a rhythmic configuration.

Though it is true that Martí Arís was speaking of the architectural type as "a limited number of profound structures" it is equally true that for Julia Kristeva rhythm represents the "deepest property of a deep structure", that is, the immanent property at the base of any symbolic order. In other words, Noam Chomsky was correct to clarify that this symbolic order (which refers to "an ordering principle by which a series of elements linked by particular relationships acquire a determined structure", to borrow Martí Arís' words again) must develop along a vertical (syntagmatic) axis which yields different levels of depth: both the surface and the deeper structure unfold in more or less superficial or deep layers which include, at different levels, both the architectural typology and the hierarchical arrangement, which are then defined by *framing* and *filling*.

It is along this axis that the course of the architectural and urban composition unfolds, except that this axis enfolds itself into a circle which allows the placing of its beginning – the *inventio* – at any level. While the principle of appropriateness because of the "urban sense" limits the number of possibilities, the final choice, the acid test, is the "harmonious figure". The legitimacy of the game is not subordinate to any absolute precept nor to any notion of truth but depends exclusively on the degree of persuasiveness of the example: "The formal test is a *paradigm*, a *harmonious figure*, from the examination of which we emerge convinced; The proof is a convincing image"<sup>18</sup>.

<sup>&</sup>lt;sup>15</sup> C. Martí Arís, Le variazioni dell'identità. Il tipo in architettura, Clup, Milan 1990, p. 97.

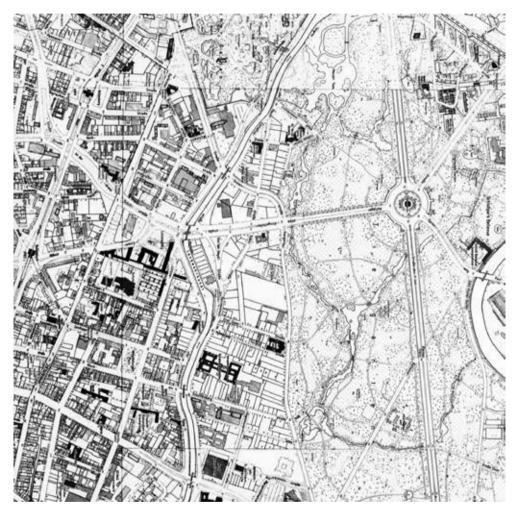
<sup>&</sup>lt;sup>16</sup> Ibidem.

<sup>&</sup>lt;sup>17</sup> See N. Chomsky, *L'analisi formale del linguaggio*, Boringhieri, Turin 1969. See especially, the concepts of "Deep Structure" and "Surface Structure".

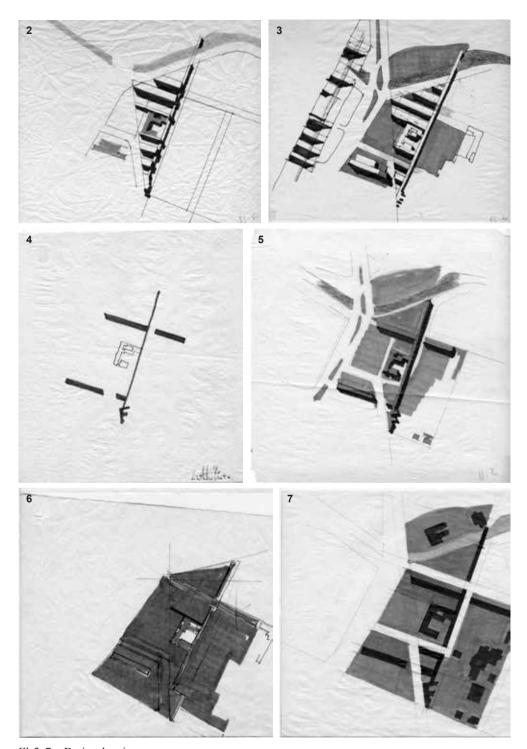
<sup>&</sup>lt;sup>18</sup> A.G. Gargani, op. cit., p. 98.

# llustration Material

Giorgio Grassi, Project for Lützowplatz in Berlin, 1981. Source: Giorgio Grassi, Opere e progetti, G. Crespi, N. Dego (ed.), Electa, Milan 2004; Divisare, Atlas of Architecture: Giorgio Grassi https://divisare.com/authors/8976-giorgio-grassi#.



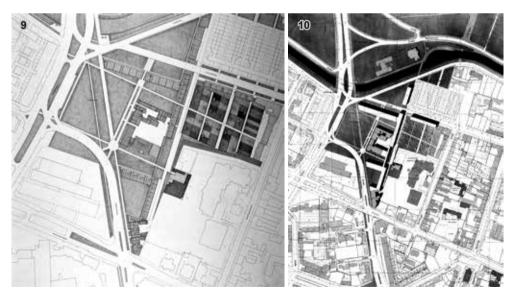
Ill. 1. Technical map of the project area.



Ill. 2–7. Design drawings.



Ill. 8. Current state.



Ill. 9–10. Final design.

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