Form After Urbanism:
The Potential of *Grossform*

Grossformen im Wohnungsbau is the title of an unassuming pamphlet that German architect O.M. Ungers published in 1966 as part of the Veröffentlichungen zur Architektur series (VzA #5) during his tenure at the TU Berlin in the 1960's.[1] In it Ungers reimagines the singular architectural intervention at a scale between architecture and urbanism as a counter measure to the rapid urbanization brought about by Europe's postwar boom. The formal coherence of *Grossform* (literally meaning "*large form*" in German)

MARTIN HÄTTASCH

University of Texas at Austin

1

Figure 1:

Where the Green Archipelago forms a federation of parts, *Grossform* can either suggest a model for multiplicity-within-unity of each island—or the reading of West-Berlin as a single 'dialectic object' (image by author)

could provide a framework within which the unplannable processes of the contemporary city could play out, while acting as stable markers of identity in an expanding urban field of increasing sameness and formlessness. Many of the ideas introduced in *Grossformen* would resurface throughout Ungers' career, and eventually find their way into the better known Green Archipelago project. But where the Green Archipelago relies on a 'federation' of islands of ideal fragments to make up the whole of a 'dialectic city', *Grossformen* suggests no less than the complexities of the archipelago condensed into a singular architectural intervention—as a 'dialectic object' constantly negotiating formal, ideological infrastructural, contextual and historical contingencies inside its formal framework. Facing a contemporary urban environment in which traditional tools of urbanism have come to be replaced by "*architecture, ever more architecture*"[2] leaving architects struggling to define a sense of agency on the urban scale, Ungers' architectural urbanism of *Grossform* appears as pertinent today as when it was first written.

BETWEEN FORM AND INFRASTRUCTURE

"This century has been a losing battle with the issue of quantity."[3]

thus announced Rem Koolhaas the death of urbanism 20 years ago and predicted an era concerned with fields, processes, expanding boundaries and flows. This prognosis has been remarkably accurate, and the last 20 years have been testament to project of the city that is primarily concerned with the informal and soft, and has relegated the architectural object to the junk pile of history. *Grossformen im Wohnungsbau* starts from a similar observation on quantity, yet draws very different conclusions. On the opening pages a small diagram illustrates a thought experiment: If the 8 Million living units built between 1950 and 1965 were given architectural form, they would cover the 500km of highway between Hamburg and Frankfurt in a building 100 stories tall. In this image, Ungers sets up a programmatic position for the relationship between architecture and infrastructure: While they can and should be comparable in scale of production and volume, he does not equate them: The central question for him is how an increase of quantity can be transformed into a new architectural quality. This new quality is for Ungers inextricably connected to a new way of thinking

architectural form: *Grossform* is to be an architectural response to the scalar jump of infra-structures caused by mass production, population growth, and increased mobility. This response, although literally translating as "large form", is less about size but about formal coherence. (For Ungers a small house can be a Grossform, *"as much as a block, a district or an entire city."*[4]) Consequently Grossform is defined through four formal categories:

> *"1. The existence of an over-accentuated element*
>
> *2. The existence of an additional binding element*
>
> *3. The existence of a figure and theme*
>
> *4. The existence of a system or an ordering principle"*[5]

Form in *Grossform* takes on the role of a stabilizer and container within which program and infrastructure play out. Ungers proceeds to lay out four basic categories of *Grossform*, "*Street*," "*Plateau*," "*Wall*," and "*Tower*." Labeled "*Functional*," the first two categories set up infrastructure as idealized abstract types—"*Street*" and "*Plateau*", as "*continuous linear element*" and "expansive ordering element" with the quality to "*bind disparate parts*."[6] An extensive catalogue of precedents illustrates each category, assembling projects by pre- and postwar modern architects (including Le Corbusier, the Smithsons, van den Broek & Bakema, Atelier 5 in addition to several of his own projects) and covers the scalar range between building (Torre Velasca, Belgiojoso, Peressuti, Rogers) and city (Linear City, B. Lavrov). The 'containment' of infrastructure within formal categories is remarkably different from the systems- and performance based approach that characterized the work of many of Ungers' contemporaries, but also much of his own thinking of this time.[7] Rather than defining a habitat in which the manipulation of infrastructures and ecologies have direct impact on human behavior, *Grossform* does not assume any correlation in this regard. Elements of infrastructure in *Grossformen* are removed from the realm of determinacy to the realm of purely conceptual form.

BETWEEN SCALE AND SIZE

Koolhaas own response to the "*losing battle with the issue of quantity*"[8] is to abandon both the pursuit of form and urbanism altogether and define Bigness as an interior condition between a building's façade and core. For him, sheer size alone—in conjunction with the potentials of content—suffices to create a condition of interior multiplicity, where "*such a mass can no longer be controlled by a singular architectural gesture, or even by any combination of architectural gestures*."[9] Ungers' by contrast is explicit about absolute size not being the exclusive qualifying criteria for *Grossform*.

> *"Indicative is not the numeric size. A house small in volume can just as well be a Grossform as a block, a district, or an entire city."*[10]

he writes and cites Adalberto Libera's Casa Malaparte as an example of a *Grossform*, in which the entire design is determined by the overaccentuated elements of stair and plateau. Form and legibility—"*the existence of a figure or a theme*"[11]—is thus more important than "gross - large", which refers less to absolute size but to the inclusive quality associated with form. Where *Bigness* rebuts the desire for a large building's exterior to truthfully express content understood as program, Ungers introduces a different kind of legibility as a quality through which *Grossform* supersedes the sum of its parts:

> *"Only when a new quality arises beyond the sum of individual parts and a higher stage of development is reached, Grossform emerges."*[12]

No less than Bigness, *Grossform* de-couples form and content. But where for Koolhaas program alone is a sufficient organizing device, the 'new quality' for Ungers is a question of recognizable "themes", a topic that should become a recurring topic in his thinking throughout the 1970's.

"Concepts such as living wall, living carpet, living funnel, living hill and living panel contain larger connections and at the same time characterize categories of a new approach to imagination in design"[13]

This metaphorical legibility—architecture as "Wall", "Funnel," "Carpet"—was by no means a self-serving tool, but intended to establish architecture as separate from the performative and managerial aspects of the city. As scaleless ideal form, the "theme" sets apart *Grossform* from what Pier Vittorio Aureli calls the field of "Urbanization"[14]. The cognitive process of "reading" *Grossform*—less in an analogy of architecture as language—but as a fundamental visual act, allows it to become a charged presence in the city in whose design intent the viewer would recognize himself. Ungers would subsequently cover the idea of "themes" in much greater depth in his 1982 book *Die Thematisierung der Architektur* (*Architecture as Theme*).

Grossform's de-coupling of form from content and its existence as scaleless ideal form enables two fundamental dialectic relationships: One between the formally defined intervention and the city around it ("Dialectic City"), and the other within the very confines of this intervention ("Dialectic Object")

BETWEEN ARCHITECTURE AND THE CITY

As *Grossformen* marks the move away from a systemic thinking about the city that characterized the late modern project, it acknowledges an increasing impossibility for cities to be planned coherently according to a single strategy, whether formal or infrastructural. *Grossform* responds to the infrastructurally-driven challenge of urbanization with a renewed focus on the discipline's core competencies and a tightening of architectural form. But importantly, it stops short of either the concern with architecture's internal processes of formation or an obsession with form as a narrative fragment. *Grossform* displays a continued belief in the agency of architecture's transformative potential. Both "form" and "theme" for Ungers are not self-reflective or symbolic, but proactive tools to engage in a dialectic exchange with its context. Not the pure autonomous object is the goal, but the architectural intervention in constant dialogue with the city's non-architectural systems as well as with each other. Initially, this dialogue focused on relating the single object to a larger coherent framework of urban systems, as

> *"[…] every building loses its importance as a self-contained unit, […] This leads to the interpretation of buildings as parts of different, but coherently interrelated systems."* [15]

Ultimately Ungers would move towards breaking the coherence of this systemic integration and intensify the dialectics between increasingly antithetical qualities of each *Grossform*. This concept of the city made of antithetical parts would be articulated as the dialectic city:

> *"The city made up of "complementary places" consists of the largest possible variety of different parts, in each of which a special urban aspect is developed with a view to the whole. In a sense it is a system of the "city within the city." Every part has its own special features, without however being complete or self-contained. {…} and therefore combines with other highly developed places to form a complex system, a kind of federation."*[16]

A project that marks this shift away from the single intervention as seamless part of a larger system towards the fragmented dialectic city is Ungers' 1972 project for the *Tiergartenviertel* in Berlin: A competition entry for the development of a linear city area along the Landwehrkanal, the team around Ungers (whose most notable member was a young Rem Koolhaas[17]) faced an urban condition marked by various degrees of disconnect: First, between the official desire to develop the area in a coherent way as a future connection between West-Berlin and the historic center in the East and its de facto location as a peripheral area adjacent to the Berlin wall. And second, between the area north of the canal with its singular volumes and the southern part with the remains of a 19th century block
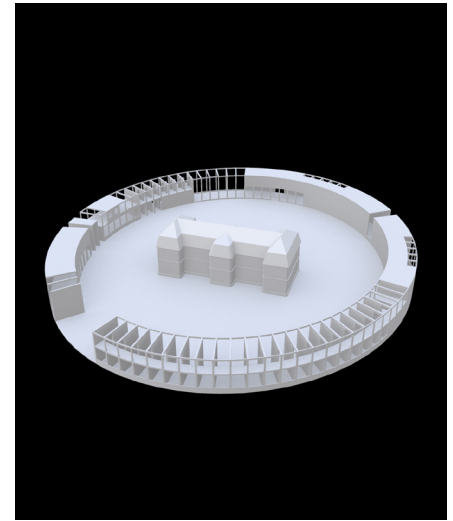
structure. The proposal consists of a series of five single interventions, each responding to and acting upon a specific urban condition: Each *Grossform* in this constellation remains highly localized and episodic. Each object aggressively transforms its immediate context: a series of perimeter blocks are placed on the interior of an existing block, densifying at the same time as confronting the existing war-torn blocks with its own ideal mirror-image. A "pedestrian cross" forces a relationship between four individual sectors by spanning across the street, and finally—almost the inverse—a gridded ideal volume is itself segmented by the existing roads. All interventions appear as if suspended between the commitment to a larger whole and the dedication to their sites. They share a language of abstract abrasiveness that sets them apart from their respective contexts, yet do not quite move beyond a collection of exemplary objects towards a larger totality. While most of these islands are tied to larger systemic networks of infrastructure (the pedestrian connects to a newly proposed subway line, a sunken building frames a subway stop as a linear volume, and the gridded multipurpose building is conceived as a hub at the crossing of two roads and two subway lines), even these systems appear disconnected and unable to provide the stable background for the floating islands. The project comments as much as it acts: The impossibility of a totalizing concept for the *Tiergartenviertel* is rendered visible, but the dystopian paralysis is countered with the transformative energy of each intervention.

BETWEEN SINGULARITY AND MULTIPLICITY

Complementary to the concept of the dialectic city, *Grossform* implies the possibility of a "dialectic object" to negotiate spatial, typological, programmatic, and ideological opposites within its confines. The balance between the stability of its formal framework and the—at times antithetical—nature of its contents is addressed on the last pages of the Pamphlet when Ungers answers his own question: "*Why Grossform?*"

> "*Grossform creates the framework, the order and the planned space for an unpredictable, unplanned for, spontaneous process—for a parasitic architecture. Without this component any planning remains strict and lifeless.*"[18]

Ungers illustrates this with an image of the medieval city of Arles using the fortified container of the Roman amphitheater "as found" to reconstruct the city after the decline of

Figure 2: Prototype of a *Grossform*: the medieval city of Arles built into the Roman amphitheater ("The amphitheatre in the 18th century", postcard of engraving by J.B. Guibert, scanned by Robert Schediwy, source: wikimedia commons, distributed under CC-PD-Mark

Figure 3: O.M. Ungers: extension of the museum-castle *Morsbroich* (first design), 1975 (image by author)

ENDNOTES

1. O.M. Ungers, *Grossformen im Wohnungsbau*, Veröffentlichungen zur Architektur Heft Nr.5 (Berlin, TU Berlin, 1966), reissued as: O.M. Ungers, Erika Mühlthaler (ed.), *Grossformen im Wohnungsbau*, (Berlin, Universitätsverlag der TU Berlin, 2007)

2. Rem Koolhaas: „What Ever Happened to Urbanism?", in O.M.A., Rem Koolhaas, and Bruce Mau, *S,M,L,XL* (New York, Monacelli, 1995), 967

3. Rem Koolhaas: „Whatever Happened to Urbanism", in *S,M,L,XL*, 961

4. O.M. Ungers, Erika Mühlthaler (ed.), *Grossformen im Wohnungsbau*, (Berlin, Universitätsverlag der TU Berlin, 2007), Introduction, not numbered

5. O.M. Ungers, „Notes on Megaform", in O.M. Ungers, Erika Mühlthaler (ed.), *Grossformen im Wohnungsbau*, 6, Ungers himself translates *Grossform* as *Megaform*. To avoid confusion with the same concept introduced by Kenneth Frampton ("Megaform as Urban Landscape"), the German term will be used here

6. O.M. Ungers, Erika Mühlthaler (ed.), *Grossformen im Wohnungsbau*, not numbered

7. see here in particular some of the other VzA Pamphlets such as Berlin 1995 (VzA # 25, 1969)

8. Koolhaas: „What Ever Happened to Urbanism", 961

9. Rem Koolhaas: „Bigness or the Problem of Large", in O.M.A., Rem Koolhaas, and Bruce Mau, *S,M,L,XL* (New York, Monacelli, 1995), 499

10. Ungers, *Grossformen im Wohnungsbau*, introduction, not numbered:

    "*Kennzeichnend ist nicht die numerische Größe. Ein im Volumen kleines Haus kann ebensogut eine Grossform sein wie ein Haeuserblock, ein Stadtteil oder eine ganze Stadt.*" translation by author

11. Ungers, „Notes on Megaform", in *Grossformen im Wohnungsbau*, 6

12. Ungers, *Grossformen im Wohnungsbau*, introduction, not numbered: "*Erst wenn zu der Summe von Einzelteilen eine neue Qualität hinzukommt und eine höhere Entwicklungsstufe erreicht wird, entsteht eine Grossform*" translation by author

13. O.M. Ungers: „The Problem of Quantity in Design", in O.M. Ungers, Erika Mühlthaler (ed.), *Grossformen im Wohnungsbau*, 5

14. In his article "Toward the archipelago", LOG 11 (Anyone Corp., winter 2008) P.V. Aureli distinguishes between "polis" and "urbs" as basic concepts of cohabitation. Urbanization is here defined as a infrastructurally driven instrument for territorial organization with roots in Roman military and colonizing operations

15. O.M. Ungers: „Form within the City", in O.M. Ungers, Erika Mühlthaler (ed.), *Grossformen im Wohnungsbau*, 5

16. O.M. Ungers, S. Viehts: *The Dialectic City* (Milan, Skira, 1997), 20

the Roman Empire. Expanding on the previously mentioned separation of form and content, the component of time is introduced here to illustrate *Grossforms* ability to remain a stable presence beyond immediate considerations of function. In this regard, *Grossform* comes close to the permanence that Also Rossi associates with "type", yet, Ungers' focus is less on morphological continuity throughout history, but as much—if not more—about the possibility of opposites to exist simultaneously within the same framework. Ungers refers to this characteristic as "coincidentia oppositorum" (coincidence of opposites), borrowing a term introduced by Nicholas of Kues' in *De Docta Ignorantia*. Certainly the Dialectic City makes the case for this model of "multiplicity-within-unity", but as much as on an urban scale this idea was explored at the scale of the object.

The quiet design for the expansion of the museum-castle of *Morsbroich* near Leverkusen of 1975 starts from the figure of a linear elliptical wall-building whose internal logic is gradually subjected to a series of transformations to accommodate difference in program (Housing, Café, Artists School) and a variety of spatial configurations in section. *Morsbroich* in some ways inverts the logic of the *Tiergartenviertel*: Where Berlin's absence of coherence prompted the overemphasis on individual dialectic islands, *Morsbroich* starts from the acceptance of the "island-ness" of the baroque museum plan, but subtly undermines its totality from the inside. Ungers explains:

> "*This conception of architecture is neither unitary nor pluralistic, neither closed nor open, neither rigid nor free. It is bound by a theme, which it varies and which is played out in its variety and its possibilities. It is not based on a dogmatic position or a political programme but on the aspiration for an architecture characterized by conceptual and thematic commitment. It is conceived to prevent the rigidity of total order but also the chaos of total independence.*"[19]

Tiergartenviertel and *Morsbroich* represent two extreme outcomes resulting from the foundations Ungers laid with *Grossformen*, the former pointing the way towards a dialectic city of opposite parts and—ultimately—the archipelago, the latter the tightening of the formal framework of a "dialectic object".

But it may be a third project that brings these seeming opposites together: Cologne's *Grünzug Süd* was conceived between 1962-65 resulting from a competition to develop a heterogeneous area between the peripheral districts of Cologne Zollstock and Raderthal. Interestingly, Ungers describes the project as an "*attempt to deduce a new order from the characteristics of both districts. This is the specific content of the project as well as the generalized one*"[20], positioning it as a prototypical experiment. The design consists of the simple linear organizing principle (the theme of the "wall"), that spans across several blocks and reinforces the edge between Cologne's southern suburb and a large park, the actual *Grünzug* or Greenbelt. Divided into six 'thematic' segments, each is treated as a distinct enclave and finds its own organizing principle within the primary theme of the wall. The wall thus undergoes a series of morphological transformations similar in operation to *Morsbroich's* transformed ellipse: as double wall, folded wall, and closed perimeter block, which itself again contains objects within its poché. Each segment interprets a morphological situation found in the surrounding context: an impressive spread as part of the competition boards assembles these urban types such as before they are embedded as transformations into the linear primary structure. The wall-object thus becomes a catalyst through which contextual clues are assembled, reinforced and ultimately shape a new context in which "*the situation as found is not only preserved, but in its historical reality interpreted and exaggerated.*"[21]

What results is a "linear city" in which not the universal grid (Leonidov) becomes the organizing agent, but a finite formal primary structure that is simple and robust enough to be adopted to a variety of uses. *Grünzug Süd* plays out two dialectic relationships at the same

time: one between the wall-object and the city, the other one between the segments within the wall. As a "not-quite-object", the project is discernible in its totality, yet simultaneously exists as a series of conceptual exchanges with the city and within itself.

Grossform is an incomplete project. While it laid the foundations for much of Ungers' subsequent thinking, its outcomes remain at times blurry and full of contradictions. It does not answer the question "How to build a *Grossform*", nor does it provide sexy images that can be re-integrated into the mechanism of fashionable rediscoveries (Pomo, anyone?). What it does, however, is to address the fundamental question of architecture's agency in the city. In 1966, *Grossform* starts to grapple with the issue of quantity and the "slipping away" of the city, which 30 years later Rem Koolhaas (as someone intimately familiar with Ungers' thinking) would lay out in "Whatever Happened to Urbanism". Since then some things have changed, other haven't: A generation of architects has taken Koolhaas by his word and embarked on a journey to irrigate "*territories with potential*", enable "*fields that accommodate processes*", "*deny boundaries*", and may even have discovered some "*unnameable hybrids*"[22] along the way. Bored by these networks, the next generation is currently setting out to resurrect a project of formal autonomy concerned with disciplinary processes, formation, representation, and to rediscover the joys of the axonometric drawing (see Fig.5). Amidst these positions *Grossform* serves as a reminder that "form" and "city" are not mutually exclusive entities. It also is a reminder that the very valid desire for a renewed cultural significance of form that fuels much of the current re-discovery of anything "object"-related, does not need to be a step back towards a total (supposed) autonomy that posits the architectural object at a critical distance from the world around it. The set of dialectic relationships which *Grossform* enables—between architectural object and city, and within the architectural object itself—can be a starting point towards an expanded understanding of the architectural object's capacities to engage rather than retreat.

At the same time, the closing image of *Grossformen* im Wohnungsbau—the medieval city of Arles growing from the ruins of the Roman Empire—may contain an analogy that is equally haunting and soothing: *Grossform* at the center of the renaissance of the "polis" after urbanization has run its course. Grossform as a new beginning. The dialectic object as city.

17. The similarities between the urban islands of the *Tiergartenviertel* and the blocks of Koolhaas' City of the Captive Globe have been commented upon by several authors, including Andre Bideau in *Architektur und symbolisches Kapital: Bilderzählungen und Identitätsproduktion bei O. M. Ungers*, Bauwelt Fundamente (Birkhäuser, 2011)

18. O.M. Ungers, *Grossformen im Wohnungsbau*, not numbered, translation by author

19. O.M. Ungers, Die Thematisierung der Architektur (Stuttgart, DVA, 1983), 19

    "*Diese Architekturauffassung ist weder einheitlich noch pluralistisch, weder geschlossen noch offen, weder starr noch frei. Sie ist gebunden durch ein Thema, das sie variiert und das in seiner Vielfalt und seinen Möglichkeiten durchgespielt wird. Ihr liegt weder ein dogmatisches noch ein politisches Manifest zugrunde, sondern die Bemühung um eine Architektur mit einer geistigen und thematischen Bindung. Sie vermeidet die Erstarrung in einer totalen Ordnung, aber auch das Chaos völliger Ungebundenheit.*" (re-translated by author, for the original translation see O.M. Ungers: *Architettura come Tema = Architecture as Theme* (Milano: Rizzoli, Electa, 1982)

20. Heinrich Klotz (ed.): *O.M. Ungers 1951–1984 Bauten und Projekte* (Braunschweig/Wiesbaden, Vieweg, 1985), 77, "*[…] ist der Versuch, aus der Besonderheit der beiden Stadtteile […] eine neue Ordnung zu finden. Das ist der exemplarische Inhalt des Projekts und gleichzeitig der zu verallgemeinernde.*" , translation by author

21. Ungers, *Die Thematisierung der Architektur*, 27: "*das differenzierte Eingehen auf den Kontext, bei dem das Vorgefundene nicht nur erhalten, sondern in seiner geschichtlichen Realität interpretiert und überhöht wird*", translation by author

22. Koolhaas: „What Ever Happened to Urbanism?", in S,M,L,XL, 969

4
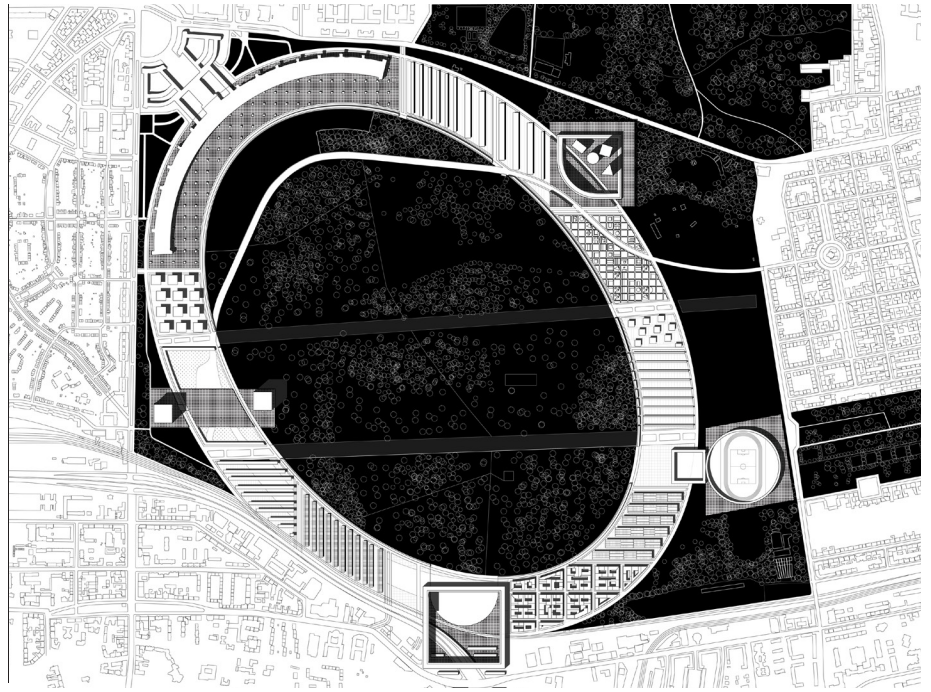
Figures 4 & 5:

Martin Hättasch:

Project for the Reuse of the Decommissioned Airport Berlin Tempelhof: Tempelhof's historically charged void is interpreted as an "accidental" *Grossform*. The functional "birth defect" of the neo-baroque plan and resulting disconnect between form and function is transformed into an asset as the formal framework for a new district. Embedded in this new city-object is a dual set of dialectic relationships: between different types of housing fabric and between monument and fabric. The resulting relationship is less one between fragments, but rather one in which different parts contribute to a legible larger whole (images by the author / OFFICE mha)

5

The Potential of *Grossform*