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CHARACTER & FEATURES: REFRAMING THE EVERYDAY THROUGH WHAT IT'S NOT AND WHAT IT'S NEAR

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ARC 505 Undergraduate Thesis Preparation Book, December 2016
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Syracuse University School of Architecture

I.	*Contention*	4
II.	*From Quatremère to Somol: From Type to Features*	6
III.	*Image and Media: Singular Realities*	22
IV.	*Reframing the Everyday: Features Catalogue*	34
V.	*Trajectory*	44
VI.	*Footnotes and Figures*	54
VII.	*Glossary*	57
VIII.	*Annotated bibliography*	58
IV.	*Archive, or what this thesis once was*	*60*

I. CONTENTION

This thesis reconsiders Quatremère de Quincy's definitions of character from his Encyclopedia by synthesizing it with discussions of character in the discourse today, specifically as written by Bob Somol and Andrew Zago. Using these recontextualized definitions, this thesis takes a second look at the photographic series of Bernd & Hilla Becher to reframe the everyday with digital media. This thesis proposes to analyze and design architecture through a focus on architecture's features as opposed to its formal and spatial composition. Quatremère described character in architecture as "the idea of an alphabet composed of abstract units that can endlessly be combined to create specific meaning[1]." Re-contextualized into our postmodern world, this definition becomes not about reading specific meanings but about perceiving projective associations.[2] This thesis is a collection, classification, and curation of architectural features through images that then operationalizes character by designing with said features through experimental digital media and techniques, proposing alternate understandings and perceptions of architecture.

Bernd & Hilla Becher's image series are powerful in that they were photographing disappearing industrial and vernacular landscapes in Germany[3]. These series are usually considered typological as they are formatted by their similarities. However, they not only display resonating types but also present distinguishing features. Typology is an image. Jacques Rancière states that an image provides an autonomous and alternate reality. In this way, the Bechers used the medium of photography to present a very specific reality and identity of the German landscape. Thus the Bechers' image series offers a useful precedent from which to create an alternate image series through digital and multimedia techniques in order to present an alternate expression of the identity of these German landscapes. This endeavor uses media to unlink perceptions[4] of the architectural image from singular readings to multiple understandings of what architecture is not, what it reminds us of, and what it might be.

By reframing the everyday through its character and its features, we arrive not at incorrect readings of architecture, but rather "not-correct" uses of architectural expertise, architectural mastery, as they are applied to the wrong things[5]. The result of this thesis is not exact meanings to unstable architectural perceptions. Rather, it offers a way to see, analyze, and classify these inexact meanings through a new understanding of architecture beyond our traditional mastery of formal structure, spatial composition, and typology and utilizes architectural features as a design tool through characterization.

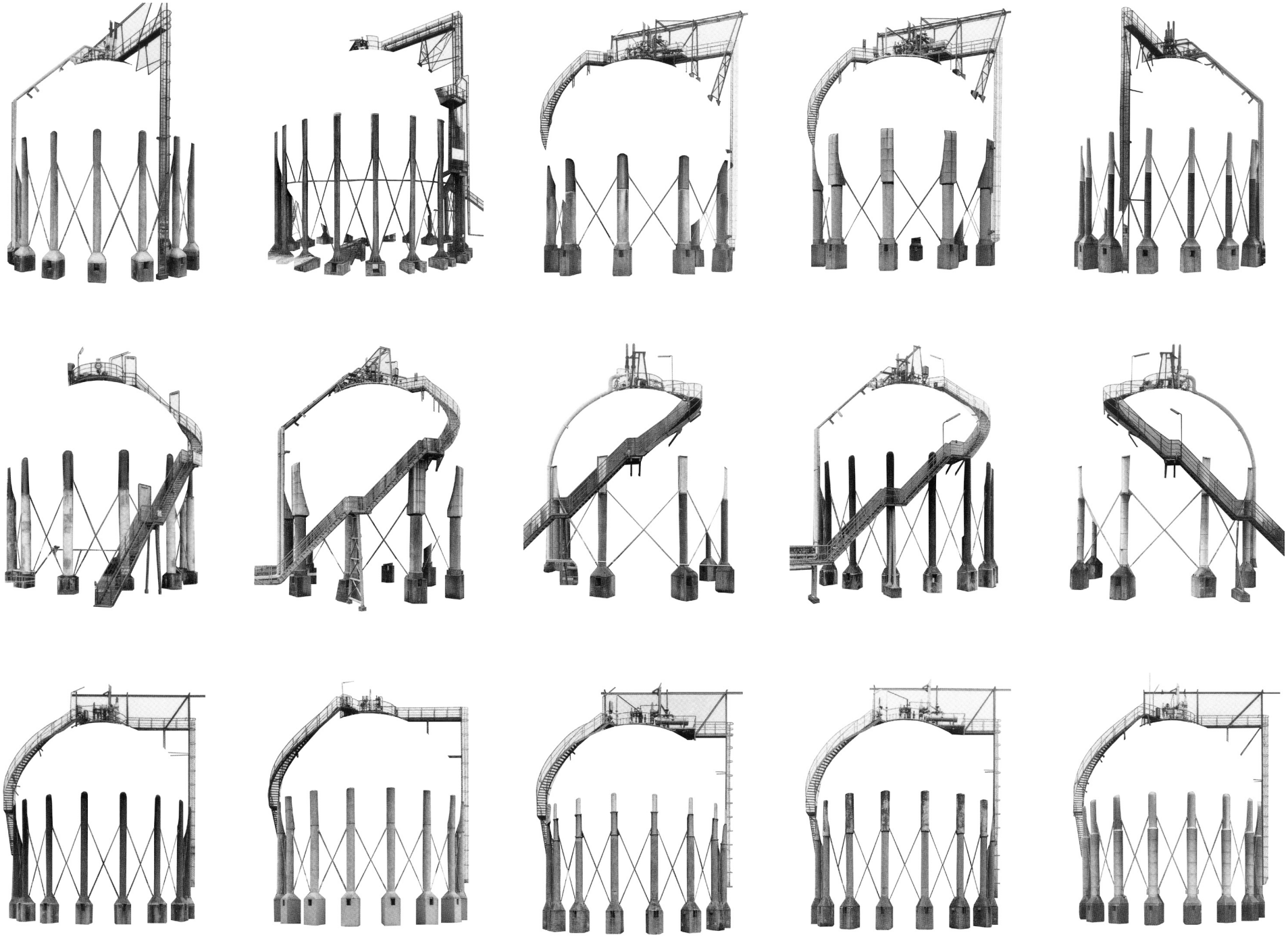
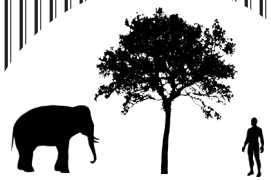


Figure 1: *Erasure 1: Blast Furnaces*, Produced by Author

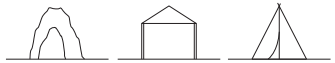
II. character: from Quatremere to Somol

QUATREMERE'S DEFINTIONS OF CHARACTER

ESSENTIAL CHARACTER



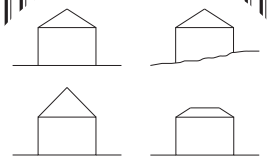
Natural species. The categories of the three reigns of nature (animal, vegetable, and mineral) and more particular nuances specific of age, sex – all marks externally apparent which prevent the confusion of species.



Quatremère theorized that all architecture came from three primitive types: the cave, the hut, and the tent. However he also admitted that modern architecture (at that time) was no longer so primitive for these original types to be read and since architecture is entirely man-made, concluded that architecture has no essential character.

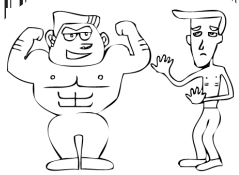
DISTINCTIVE CHARACTER

A particularization of essential character entirely the result of external influences. It depends on the accidents and varieties of development that imprint on the same species according to differences in location or on the individuals of the same species according to the different elements that modify their forms. A permanent example is mutation and a temporary example is physiognomy.

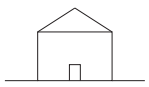


Quatremère defined distinctive character in architecture as its response to site. If two of the same building types were built on flat ground versus a hillside, the distinctive character would be how the two meet the ground differently, or if the original type is materialized differently because of a vernacular language or a response to a different climate. This resulted in the physiognomy and originality as a deviation of the type.

RELATIVE CHARACTER



Manifestation of function in an object's or a being's outward appearance. It consists in the way particular strengths or abilities are associated with those different kinds of features, both natural and developed, to certain species or individuals, and which make clear the use for which these features are more specifically destined.



House

Imitative:

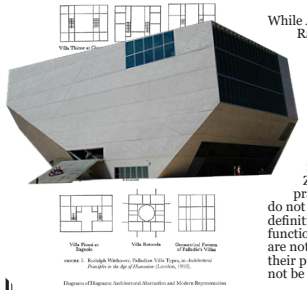
Can be judged in any built work. It is the ability for a building to convey its purpose or function through its external language (form, scale, proportions, ornament, etc.).

Ideal:

An expression of society's intellect through idealized and collectively accepted proportions and harmonies. Quatremère would only give this name to the best architectural works. His main example was the Greek Temple. It wasn't subjugated to only conveying function because it was an expression of divinity.

SOMOL'S COOLING DOWN

Between now and when Quatremère's essay on character was first written in 1788, there were two major occurrences that force his definitions to be reconsidered. One is the death of typology as a design tool, and the second is the phenomenon of a bottom-up collective.

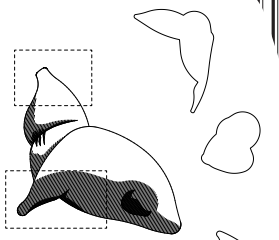


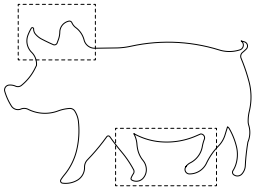
Diagrams of Diagrams: Architectural Abstraction and Modern Representation

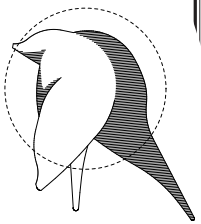
While Aldo Rossi and Rafael Moneo claim that type and typology are the very essence of architecture, type and typology as a means of understanding and designing architecture is not all-encompassing nor comprehensive. Bob Somol describes the work of OMA, MVRDV, Herzog & de Meuron, amongst others, amongst others, as practices that design with the cool diagram, with mass, and the graphic in mind, or what Andrew Zago considers alternate modes of expertise. These practices privilege these methods and their projects do not benefit from a typological analysis. Quatremère's definition of relative character is the reading of a function or formal language. However if these practices are not critically engaging typology and geometry in their practices, then a building's exact function may not be read through its relative character.

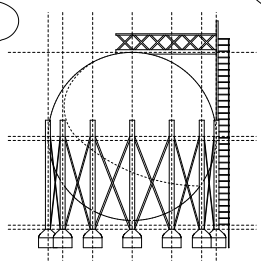
With the denial of typology and geometry and with no essential character to reference, what is left is distinctive character without any reference, or features without any type, physiognomy without a face... as is seen in the altered series of the Bechers' photographs or in Andrew Holder's 48 characters that have legs and cleavages but lack specific specificity.

The second occurrence is the notion of the bottom-up collective. Bob Somol calls for a projective practice emerging from the roots of Post-modernism. Quatremère wrote his Encyclopedia to educate society in the classical language of architecture to become visually literate, a top-down endeavor. However, when looking at these practices who don't use typology and geometry as a design tool, Quatremère's definition of relative character, is no longer read but perceived, meaning is no longer exact but projective.









Relative Character today is less about critical analyses and rather about the projective and inexact associations. For example, Holder's characters are not pigs but we read the fat underbelly and protruding legs as pigs... and if we are considering a fat underbelly with legs, it might remind us of... a Blast Furnace. Holder's character and the Blast Furnace do not have legs, but we associate their figure, configuration, and function as legs.

Palladio, from Geometry and Typology to Features and Character

In 1952, Rudolph Wittkower published his book titled *Architectural Principles in the Age of Humanism*. In this book, he analyzed eleven villas designed by Andrea Palladio and compared them by their geometry, formal structure, and spatial composition. In concluding his analysis, he created the plan of a twelfth villa based on his findings, or Palladio's ideal geometry. Once Palladio found his ideal geometry, he utilized it over and over again in each new villa operationalizing geometry as a spatial tool, operationalizing typology.

This puts forth a problem. Typology here as an image drawn in orthographic projection only offers a singular understanding and reality of these villas. What Wittkower ignores is their differences, their distinguishing features, or what Quatremère de Quincy defined as Distinctive Character. Thus an alternate set of images can be put forth to offer another understanding of these villas, images that focus on their different qualities. This sets up the first question in this thesis. How do we distinguish between reading architecture through its type and reading its character?

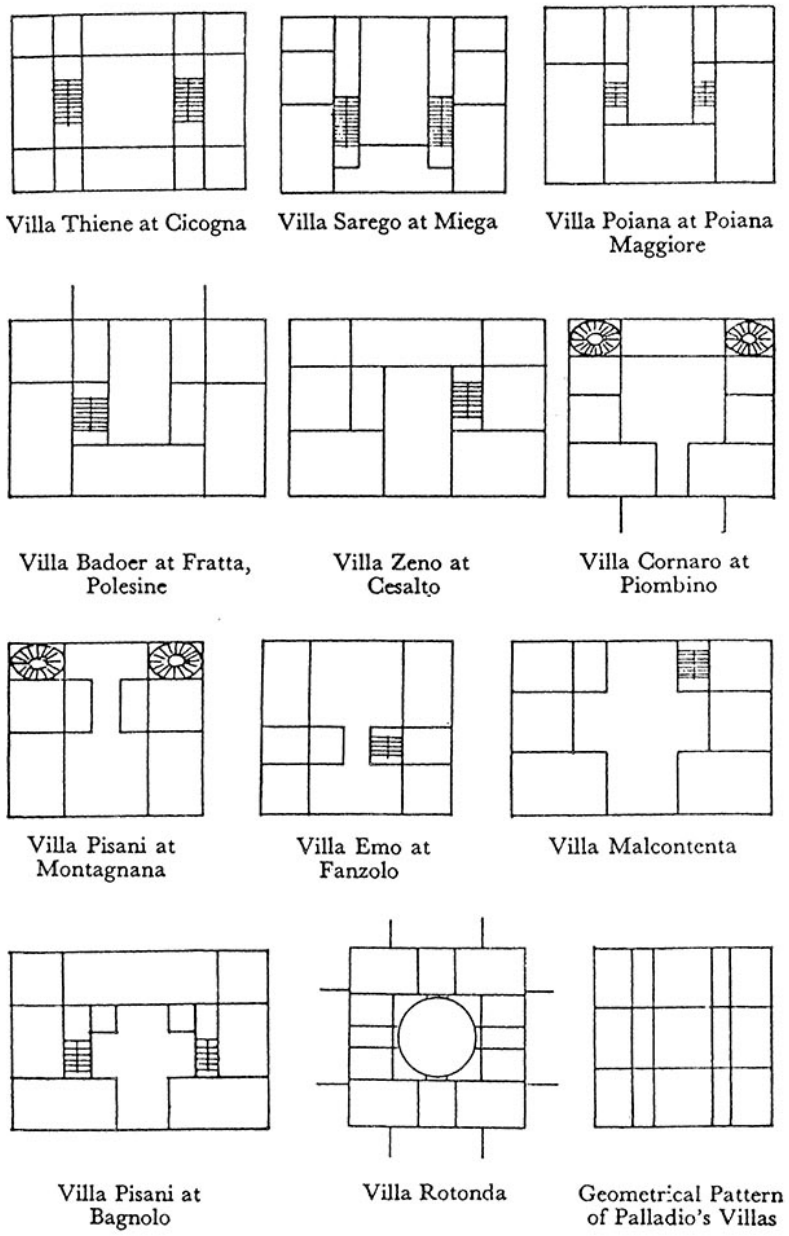


FIGURE 7. Rudolph Wittkower, Palladian Villa Types, in *Architectural Principles in the Age of Humanism* (London, 1952).

Figure 2: Schematized Plans of Eleven of Palladio's Villas by Rudolph Wittkower, taken from his book *Architectural Principles in the Age of Humanism*

Figure 3: Images conveying the features of Eleven Villas of Palladio, formatted and organized by Author

TYPE

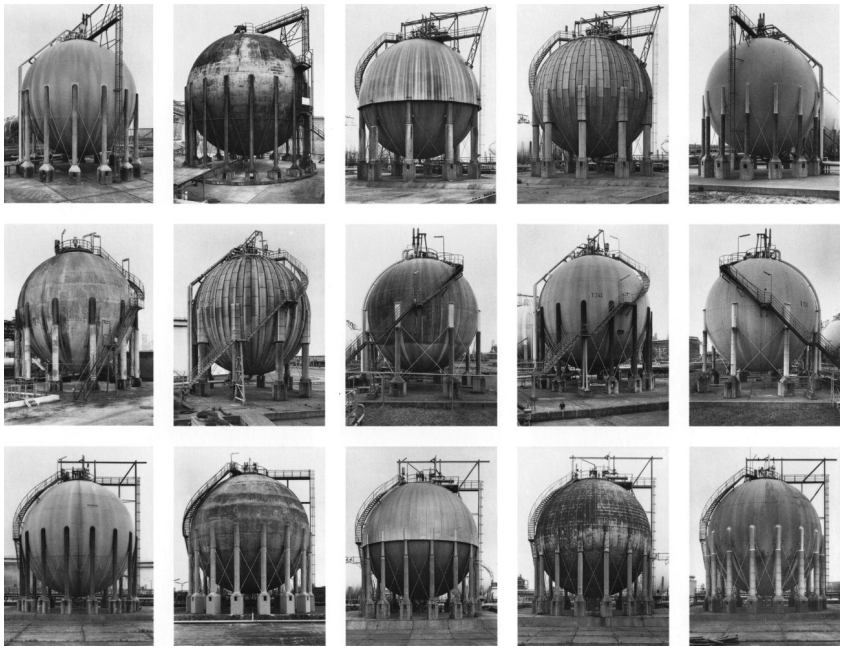


Figure 4: *Blast Furnaces* (1980-88) by Bernd & Hilla Becher

Figure 5: *Twin Water Towers* by Bernd & Hilla Becher

Using the Bernd and Hilla Becher photo series, a spectrum can be drawn illustrate architectural objects as they are read from their resounding types to their distinguishing features.

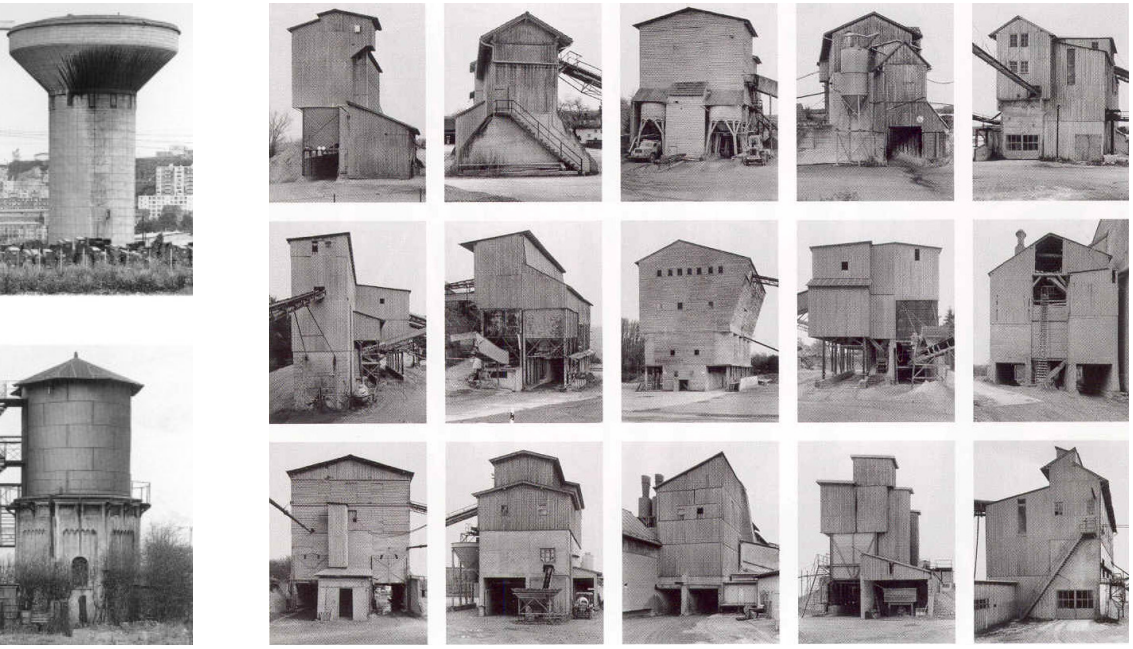


Figure 6: *Stoneworks* (1982-1992) by Bernd & Hilla Becher

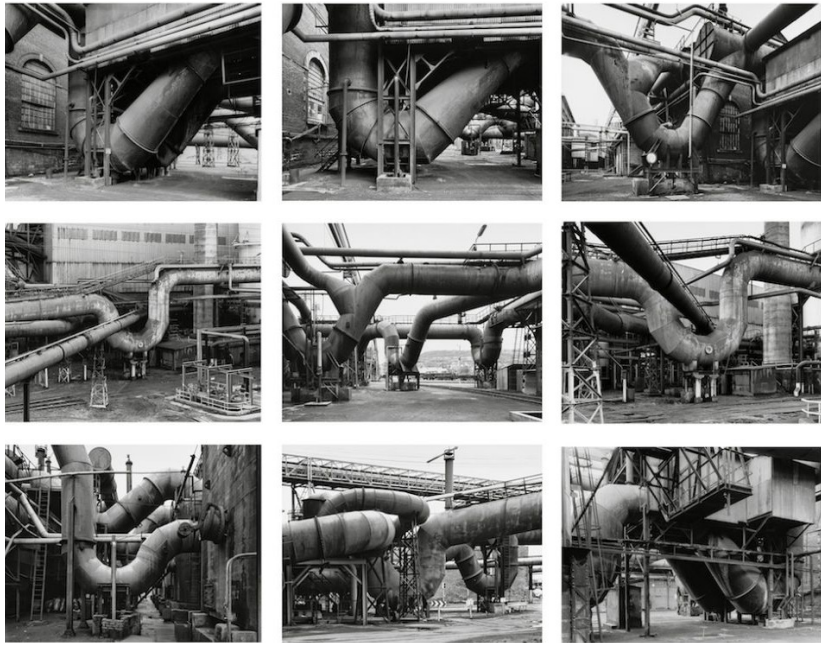


Figure 7: *Neuves Maisons, Lorraine* (1986), by Bernd & Hilla Becher

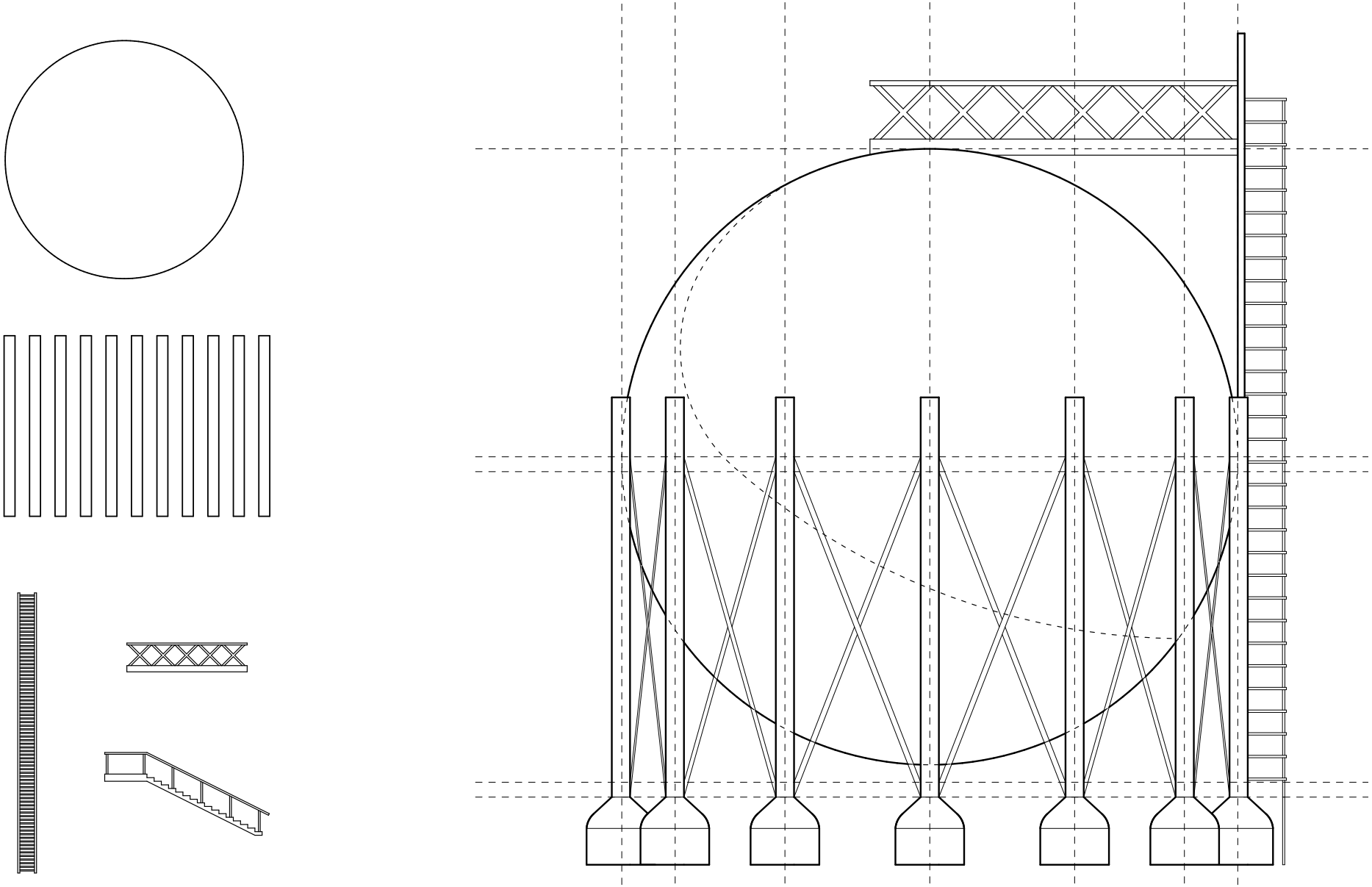


Figure 8: Analysis of Bernd & Hilla Becher's *Blast Furnaces*, Drawn by Author

In this photo series, the resonating type is the sphere in the middle from which all the other elements are organized around. Of all the Bechers' photo series, this one illustrates most clearly a recurring type. Or in Quatremère's terms, the sphere and kit of parts can be considered the essential character, and the configuration of parts the distinctive character, and our reading of column as leg, or understanding the stair through its function as the relative character.

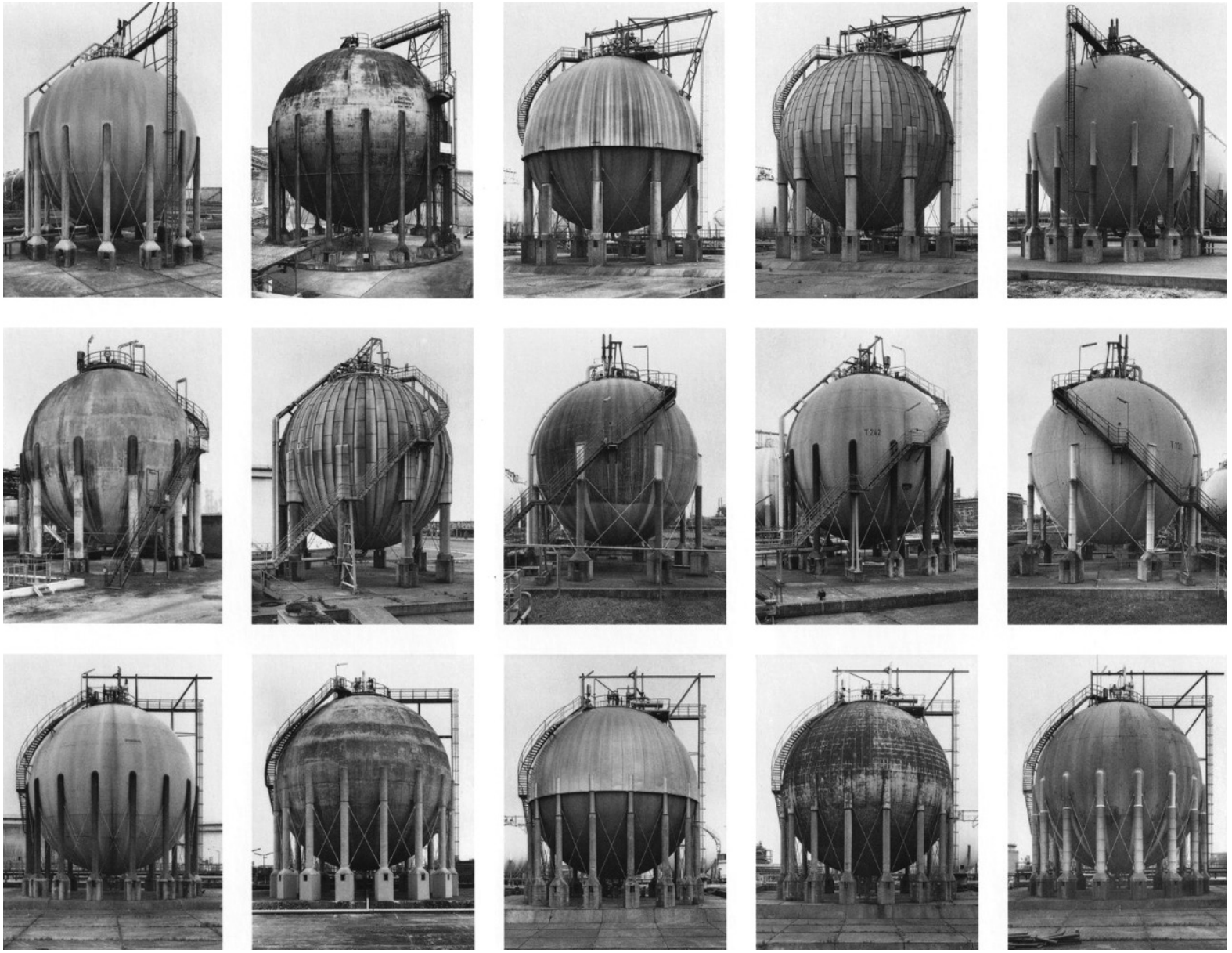


Figure 9: *Blast Furnaces* (1980-88) by Bernd & Hilla Becher

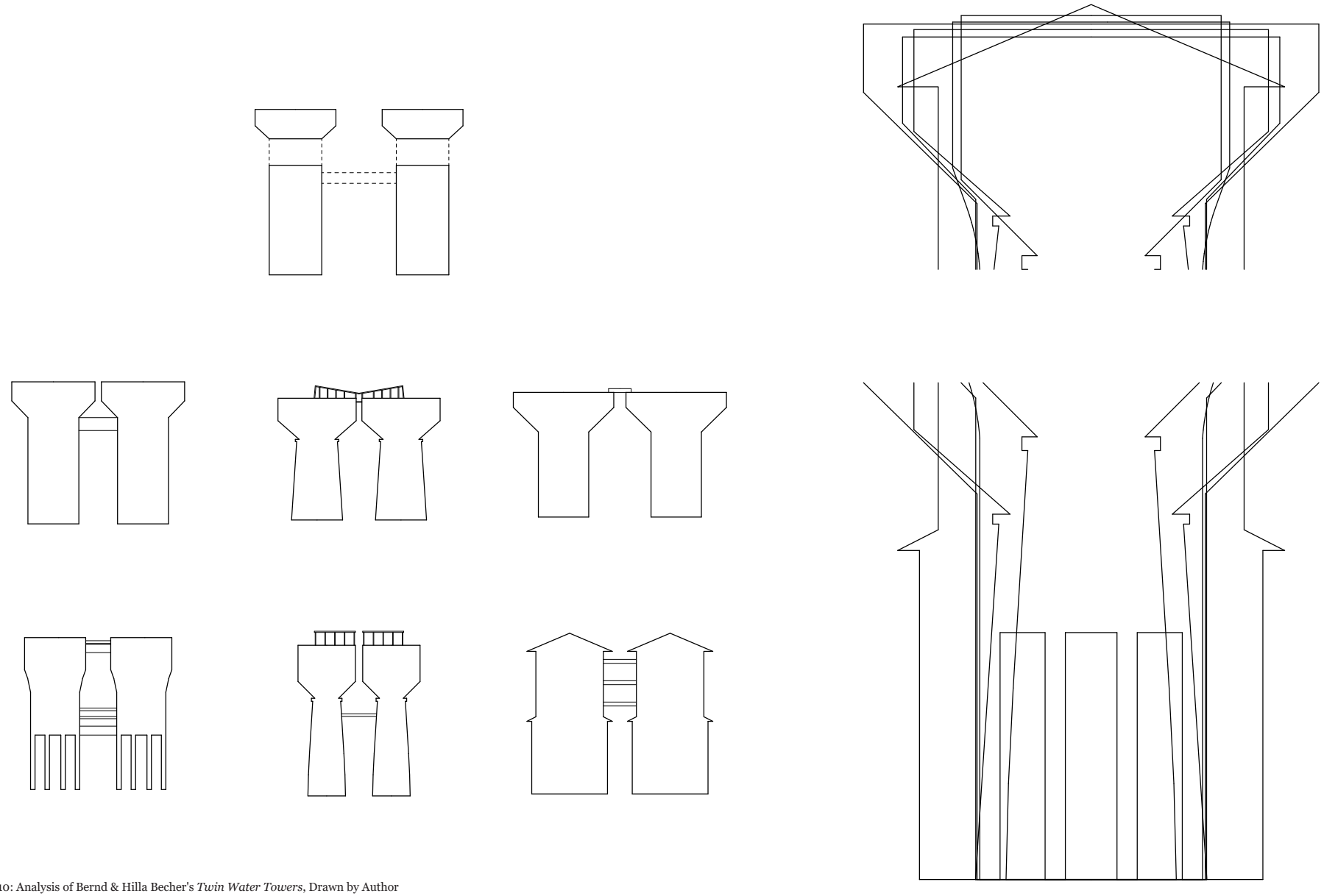


Figure 10: Analysis of Bernd & Hilla Becher's *Twin Water Towers*, Drawn by Author

In this second series, essential character can be considered numerical as opposed to visual; the type is a definition of two towers as opposed to a specific shape. What then is read more is the distinctive character, how each set of towers differentiates itself from the other. They not only differ in shape and posture, but also in how they meet the ground, how they are materialized, and how their two towers are connected to each other.

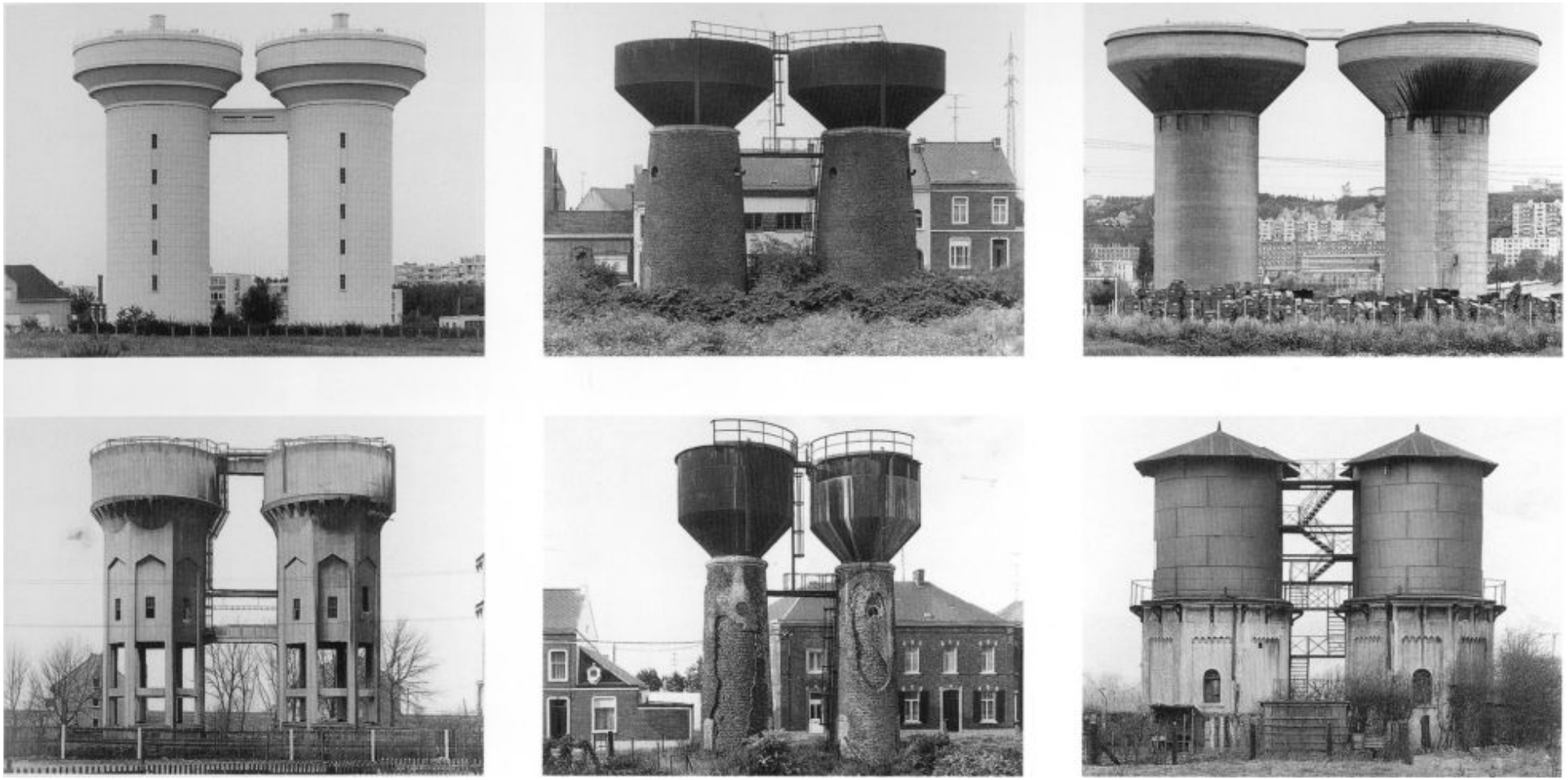


Figure 11: *Twin Water Towers* by Bernd & Hilla Becher

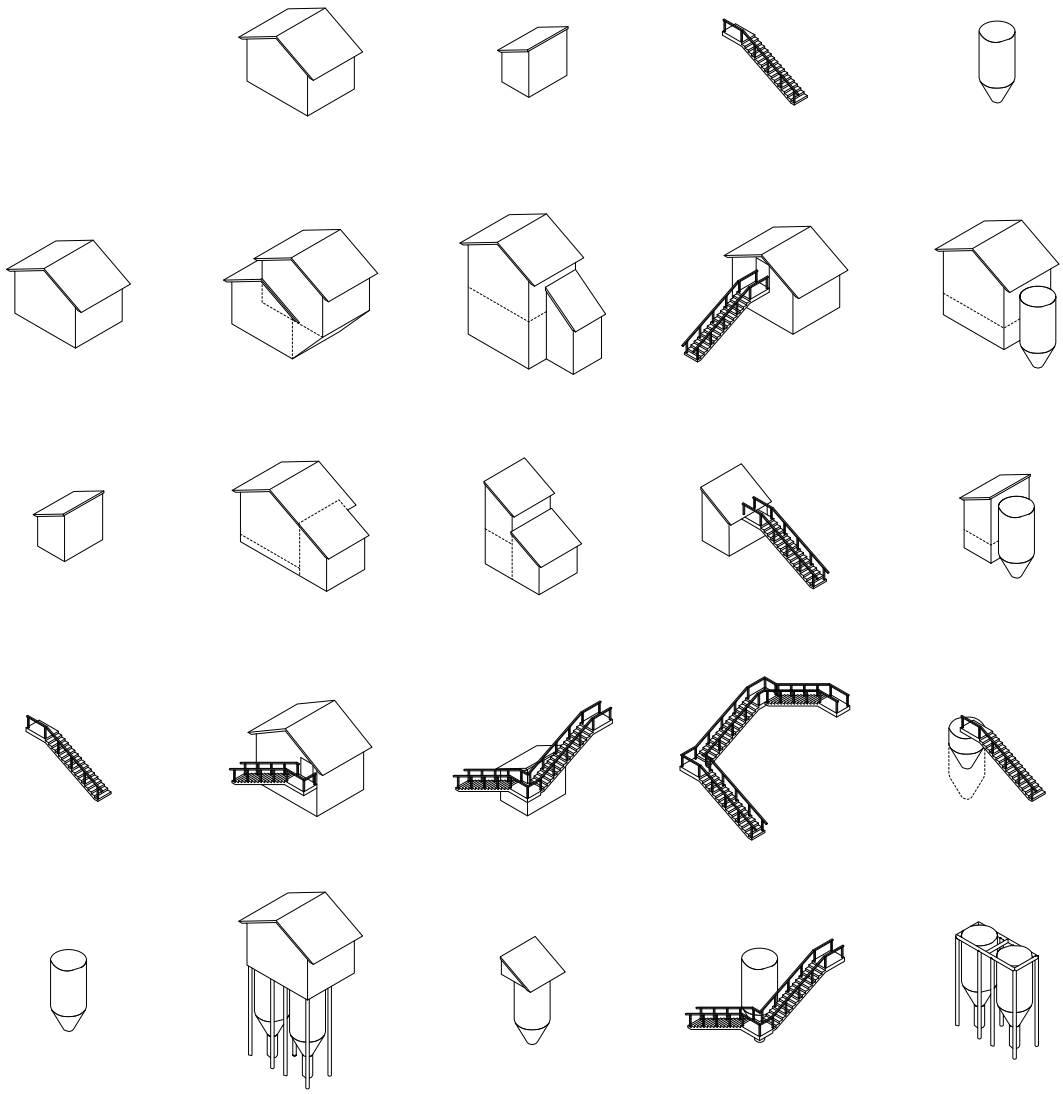


Figure 12: Analysis of Bernd & Hilla Becher's Stoneworks, Drawn by Author

Here, elements from a kit of parts are combined to make new configurations each time. The type is not read as a whole, but remnants of the original parts, the shed, the gable roof, and the water tank are recognized and seen in relationship to one another. There is no whole or formal logic that controls how these parts are configured together; the order seems random. Thus there is a reading of distinctive character between each built work without a shared essential character.

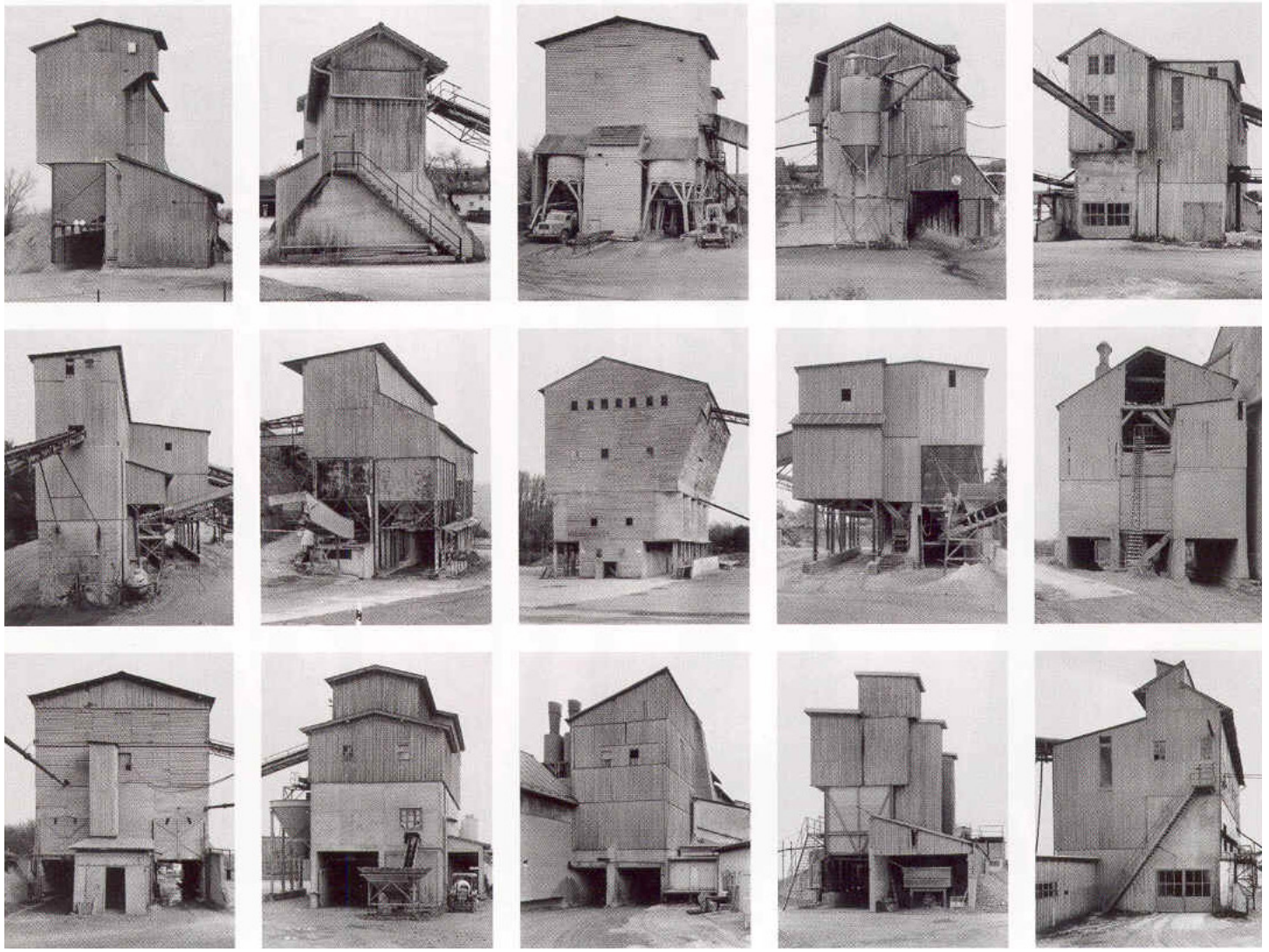


Figure 13: *Stoneworks* (1982-1992) by Bernd & Hilla Becher

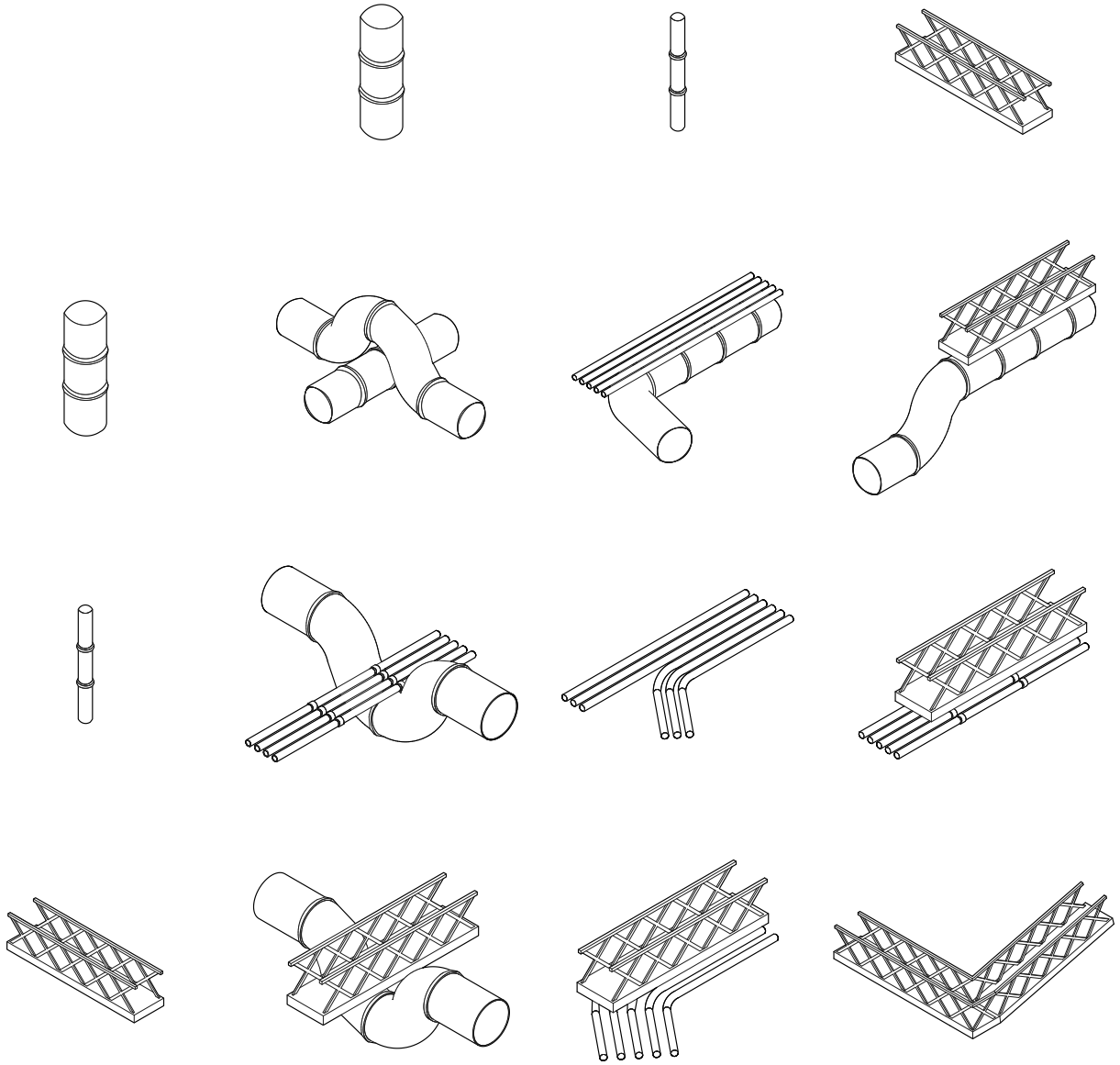


Figure 14: Analysis of Bernd & Hilla Becher's *Newes Maisons, Lorraine*, Drawn by Author

In this last set, there is no readable type or essential character. Rather there are only pipes and pieces that interact with each other, similar to the previous set. However, where this set differs is in that the parts never completely attach to one another, the only react and maneuver around one another. There is a legibility of distinctive character without any essential character.

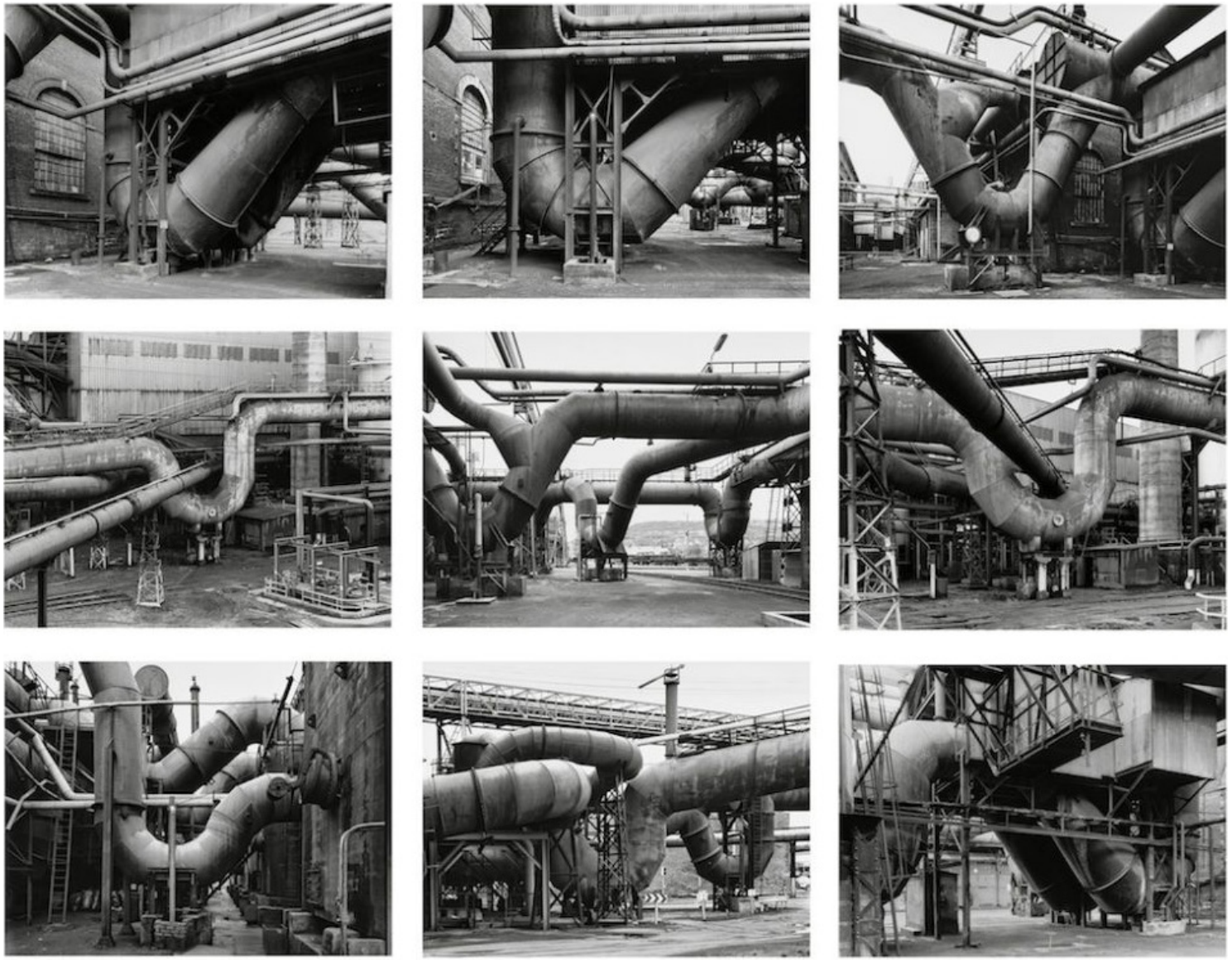


Figure 15: *Neuves Maisons, Lorraine* (1986) by Bernd & Hilla Becher

In understanding a re-contextualized version of Quatremère's definitions of character based on contemporary discussions, the work of Andrew Holder becomes very useful. Essential character is nonexistent in his 48 characters, rather there are a set of tools and corresponding rules from which he creates objects that are only understood through their distinctive character. Amy Kulper describes his project in her essay "Out of Character":

"They are bodies without any specific body parts (distinctive character without essential character). They are animate in their comportment (distinctive character as behavior and physiognomy). They sprawl, nestle, suckle, snuggle. Holder describes them in terms of their factual presence: “We can produce a visual evidence first and infer our way back to the thing that make generated that evidence.” In moving from evidence to inference, all roads lead to architectural character, and Holder adeptly steers us to this conclusion through the invention of a “necessary fiction” of “the interior life of a pig – the pig as a character with agency” (relative character as an allegory). Holder’s plaster figures have no backstory, they lack a plot, but in crafting a necessary fiction the architect has created a reservoir of architectural character to animate his characters. Vidler compares Quatremère's language of character to the operations of the periodic table in chemistry when he writes, “Quatremère spoke of the general forms of architecture much in the same way as the scientist Lavoisier, speaking of the need for nomenclature in chemistry, defined ‘a well-made language’ composed of geometric signs; the geometric conformations of architecture could, as Quatremère claimed, ‘with these simple and varied means… at little cost and within the circle of a small number of elements, change the physiognomy of all objects.” Holder’s 48 characters are the very embodiment of what Quatremère calls “the art of characterizing,” and his work certainly “renders sensible, by means of material forms” this disciplinary category. Holder operationalizes architectural character, evoking the recombinatory sense of unity and diversity within the scientific realm and tapping into the potential of infinite variation through repetition and difference[6]."

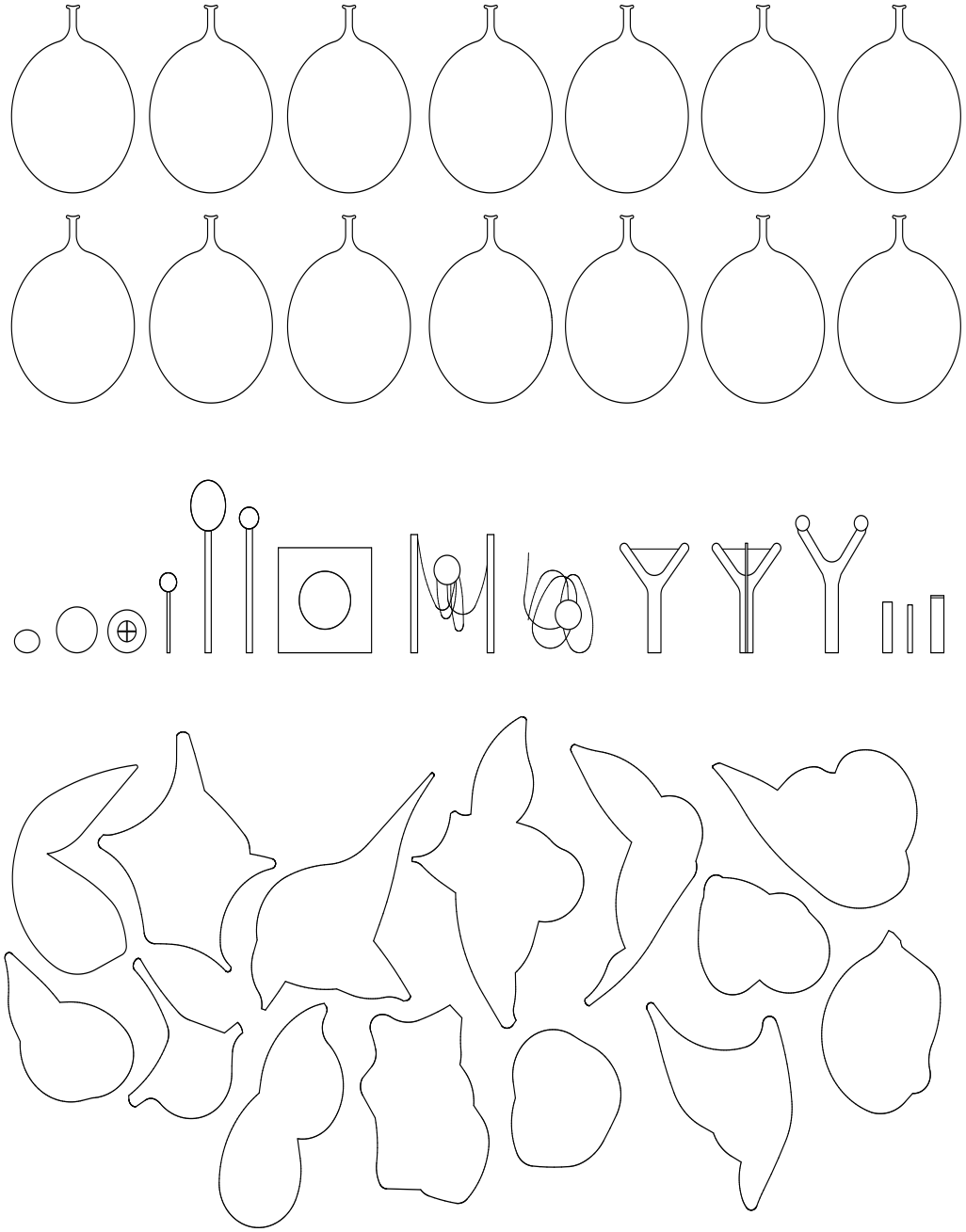


Figure 16: Holder's Parts, Tools, and Resulting Characters, Drawn by the Author

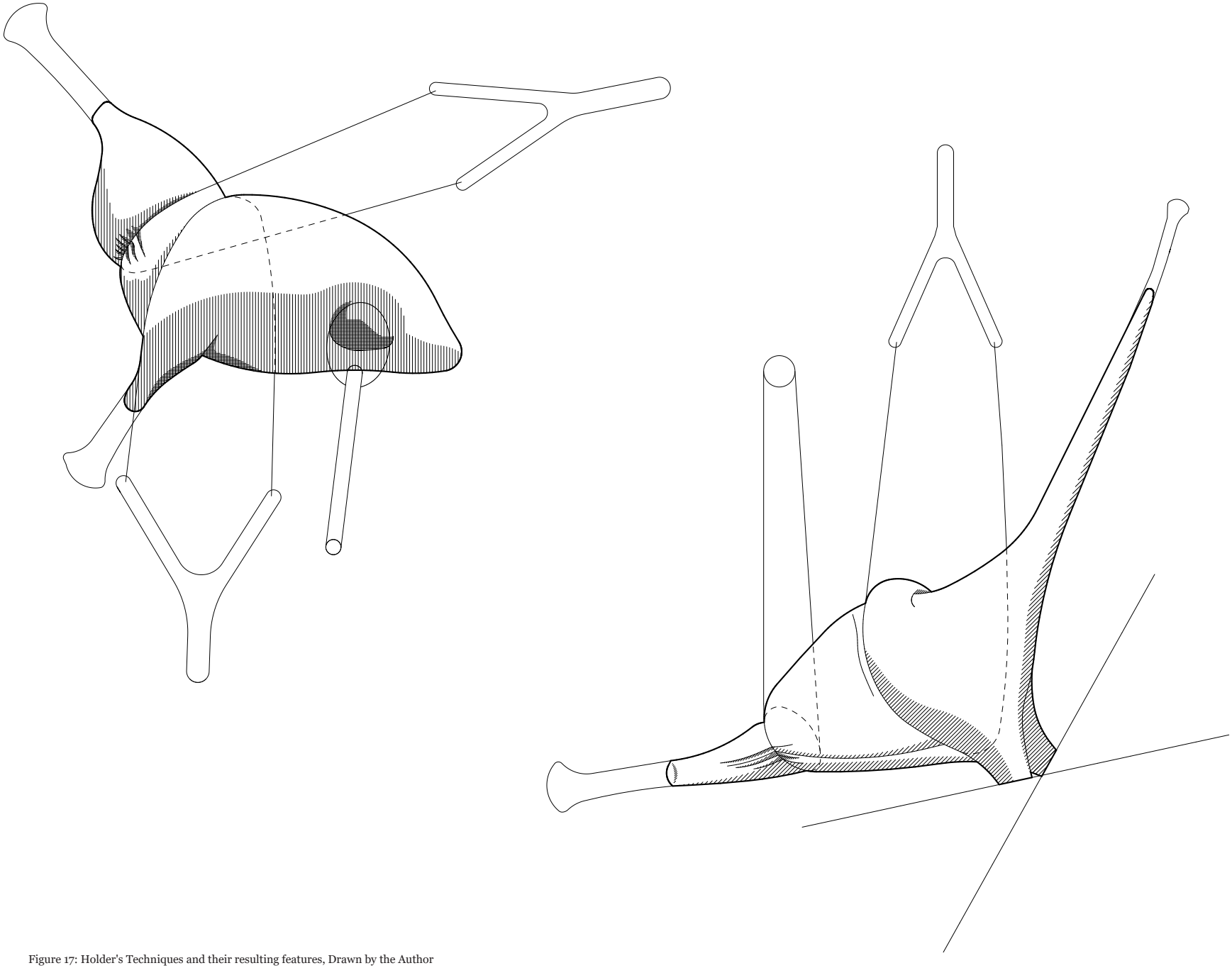


Figure 17: Holder's Techniques and their resulting features, Drawn by the Author

III. IMAGES AND MEDIA: SINGULAR REALITIES

In describing the opening scene of *Au Balthazar* directed by Robert Bresson, Jacques Rancière writes about the director's technique to defamiliarize an experience through cinematography with techniques of framing, pace, and speech, to name a few. He writes,

"They are operations that couple and uncouple the visible and its signification or speech and its effect, which create and frustrate expectations... by separating the hands from the facial expression, it reduces the action to its essence: a baptism consists in words and hands pouring water over a head... It forms... an ambivalence in which the same procedures create and retract meaning, ensure and undo the link between perceptions, actions, and affects[7]".

Rancière writes of the alterity of images, that each image is never an exact copy for what the image is representing. Rather, each image presents an autonomous and alternate reality.

"Television broadcasting likewise has its Other: the effective performance of the set... It is simply that when we speak of Bresson's images we not referring to the relationship between what has happened elsewhere and what is happening before our eyes, but to operations that make up the artistic nature of what we are seeing... images... refer to two different things... that produce the likeness of an original: not... its faithful copy, but simply what suffices to stand in for it... and... an alteration of resemblance. A turn of language that accentuates the expression of a feeling or renders the perception of an idea more complex.[8]"

If we consider the photographic series of Bernd & Hilla Becher in the way that Rancière writes of media and images, then the Bechers used photography as a medium to present a singular and specific reality of the disappearing industrial and vernacular landscapes of Germany. Each image is taken as close as possible to an architectural elevation, and by formatting them in a series to articulate their similarities, offers only a typological perception of said landscapes. Thus, just as the Bechers used media to create specific identities through images, this thesis uses media and digital techniques to produce alternate images that result in other readings of the same built works, readings that focuses on features and character.

When the Bechers received an award from at the Venice Biennial in 1991, it was neither an award for photography nor for architecture. Rather, the award for their image series was in sculpture[9]. They were not given an award in photography because their photographs are without style, objective images, and the objects in their images didn't qualify as capital "A" Architecture. These machine-like objects were built during the industrial revolution before the modern language of architecture came about, given Le Corbusier's "Towards an Architecture" and not "Towards a New Architecture". However their photographic series are architectural, undoubtedly.

In Rosalind Krauss's essay "Sculpture in an Expanded Field," she theorizes about emerging modes of sculpture and how they question the traditional notion of what sculpture is. Traditionally, sculpture was considered anything not landscape and not architecture. However Krauss writes about new forms of sculpture as practiced by new artists that cannot be categorized simply as not landscape and not architecture, but rather enter into liminal states between architecture, not architecture, landscape, and not landscape, resulting in what she would claim as sculpture, marked sites, site-construction, and axiomatic structures[10].

While the jury of the Venice Biennial might not consider the photo series of the Bechers as architecture, Krauss would consider these structures themselves closer to architecture than initially considered, axiomatic structures in between architecture and not architecture. Given this, the Bechers use of media creates series that are viewed and read architecturally and provide an opportunity for an architectural project that utilizes media to produce alternate readings.

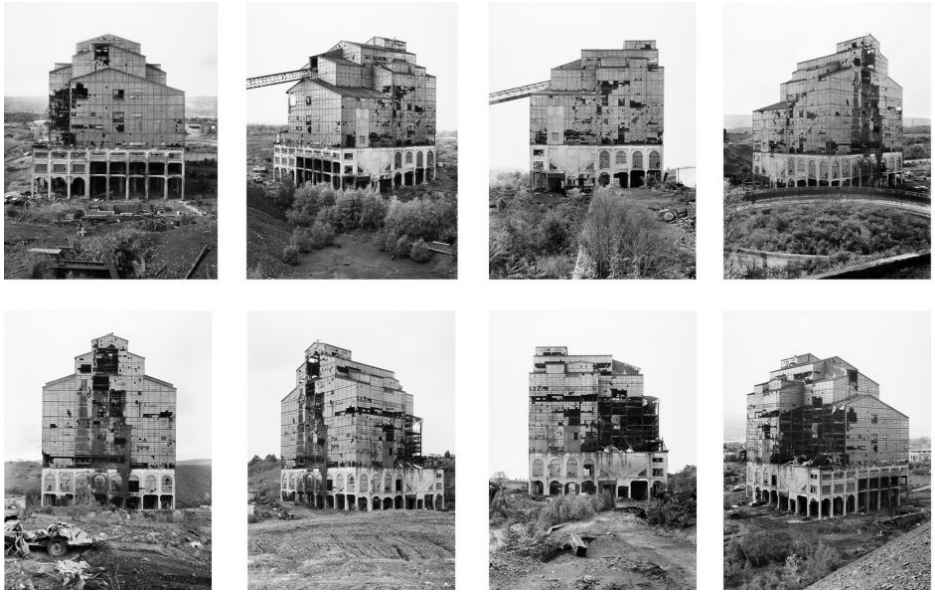


Figure 18: Bernd & Hilla Becher

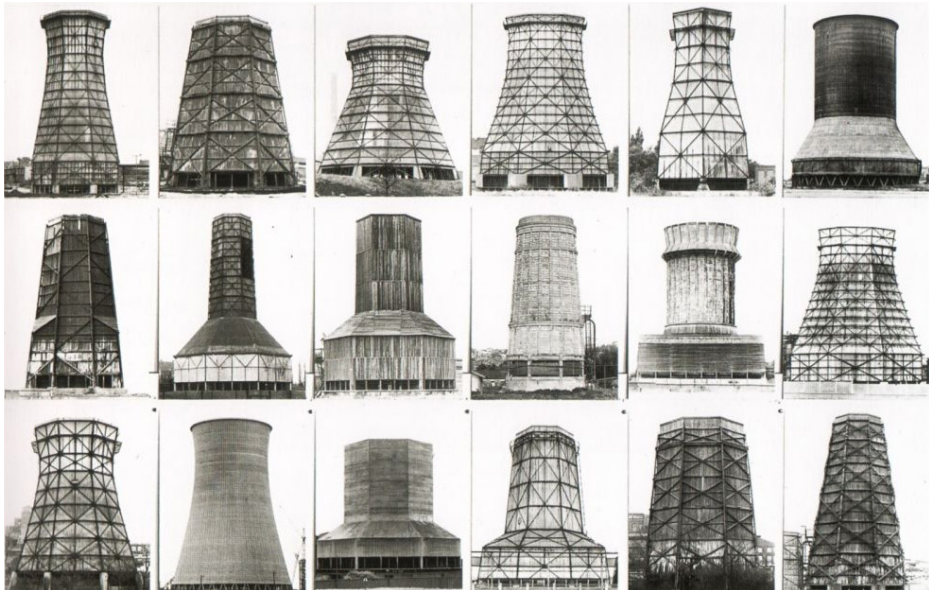


Figure 19: Bernd & Hilla Becher

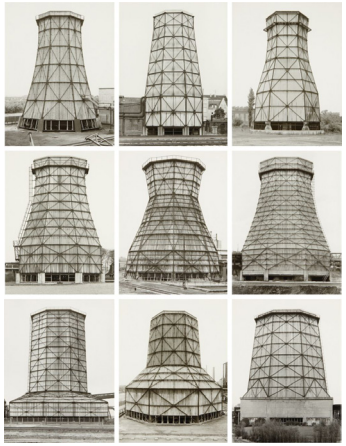


Figure 20: *Cooling Towers* (1969-1992), Bernd & Hilla Becher

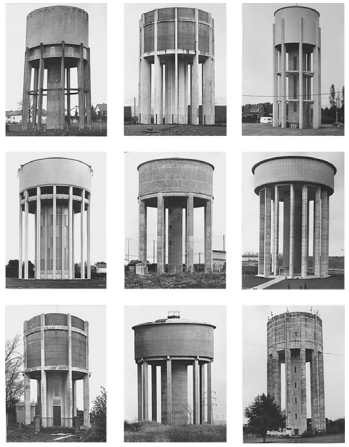


Figure 21: *Water Towers*, Bernd & Hilla Becher

Figure 22: Bernd & Hilla Becher

Figure 23: Bernd & Hilla Becher

Figure 24: Bernd & Hilla Becher

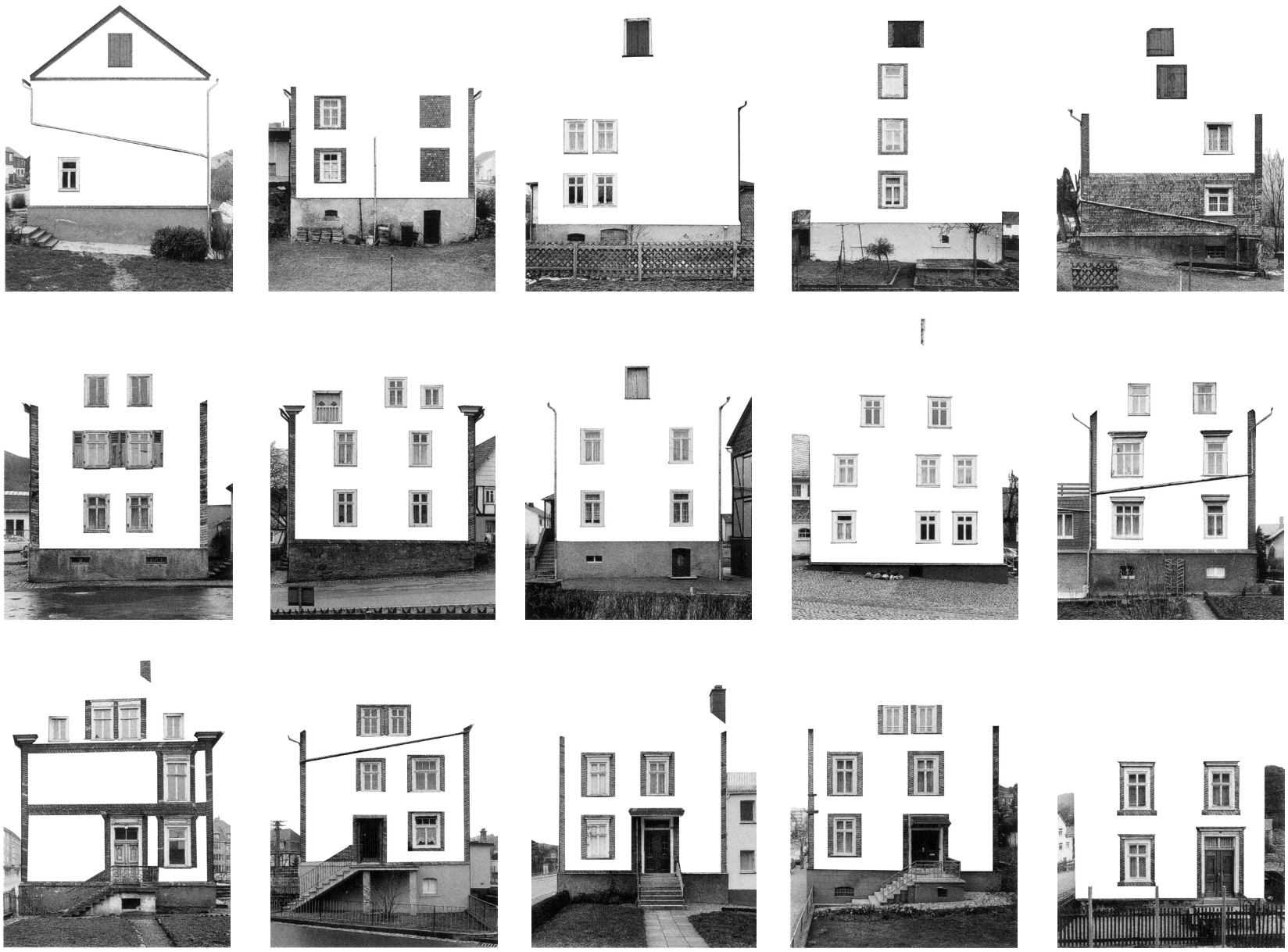


Figure 25: *Erasure 2: Houses*, Produced by Author

The main typological element, in this series the gable roof house type, is erased. What results is the background elements coming to the front, the thresholds and different materials describe the originality of each image in relation to the others, the physiognomy without a face, distinctive character without essential character.

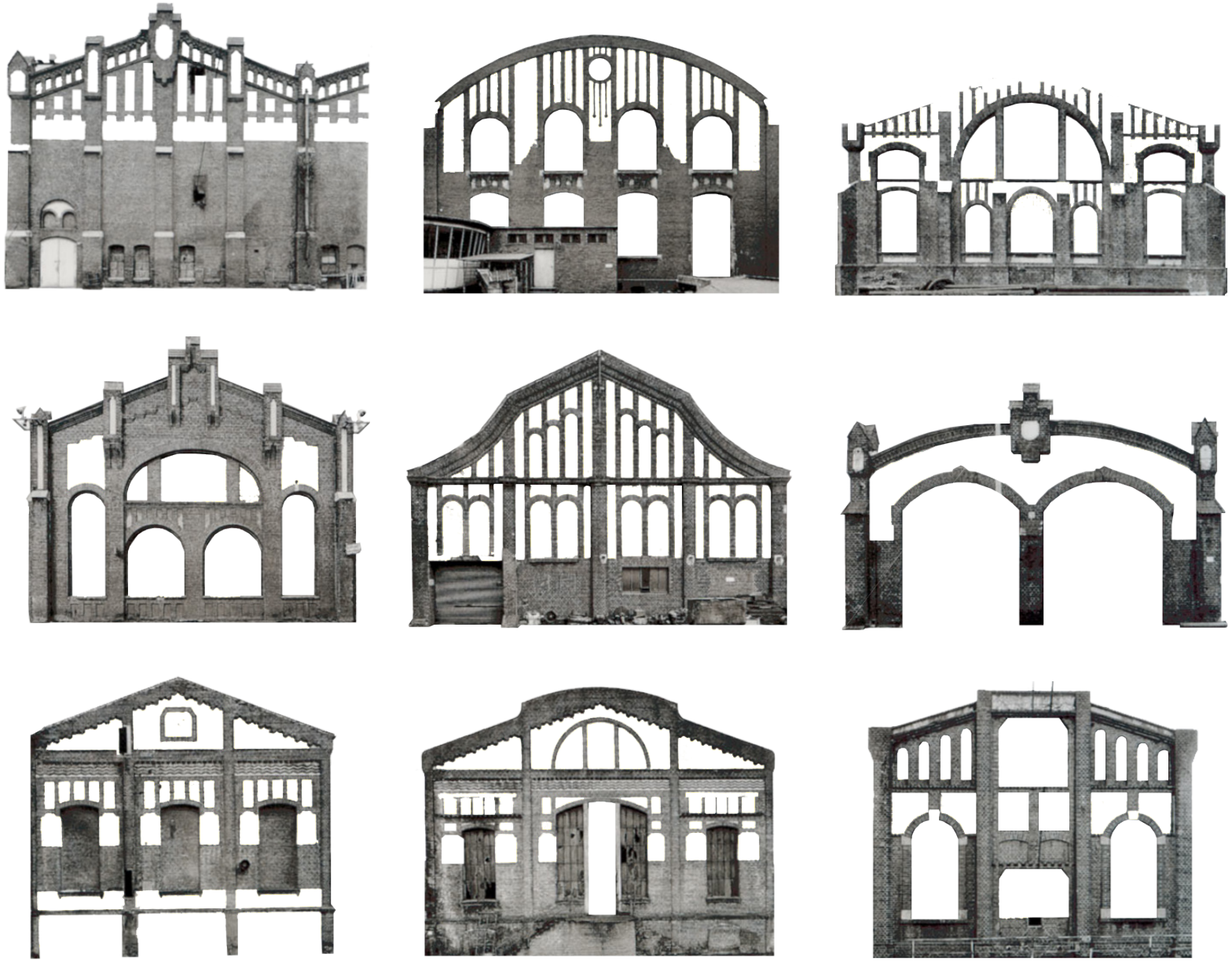


Figure 26: *Erasure 3: Patterns*, Produced by Author

Here what remains is the materials, textures, and thresholds of the original buildings. But without anything to texturize, the images read as independent patterns.

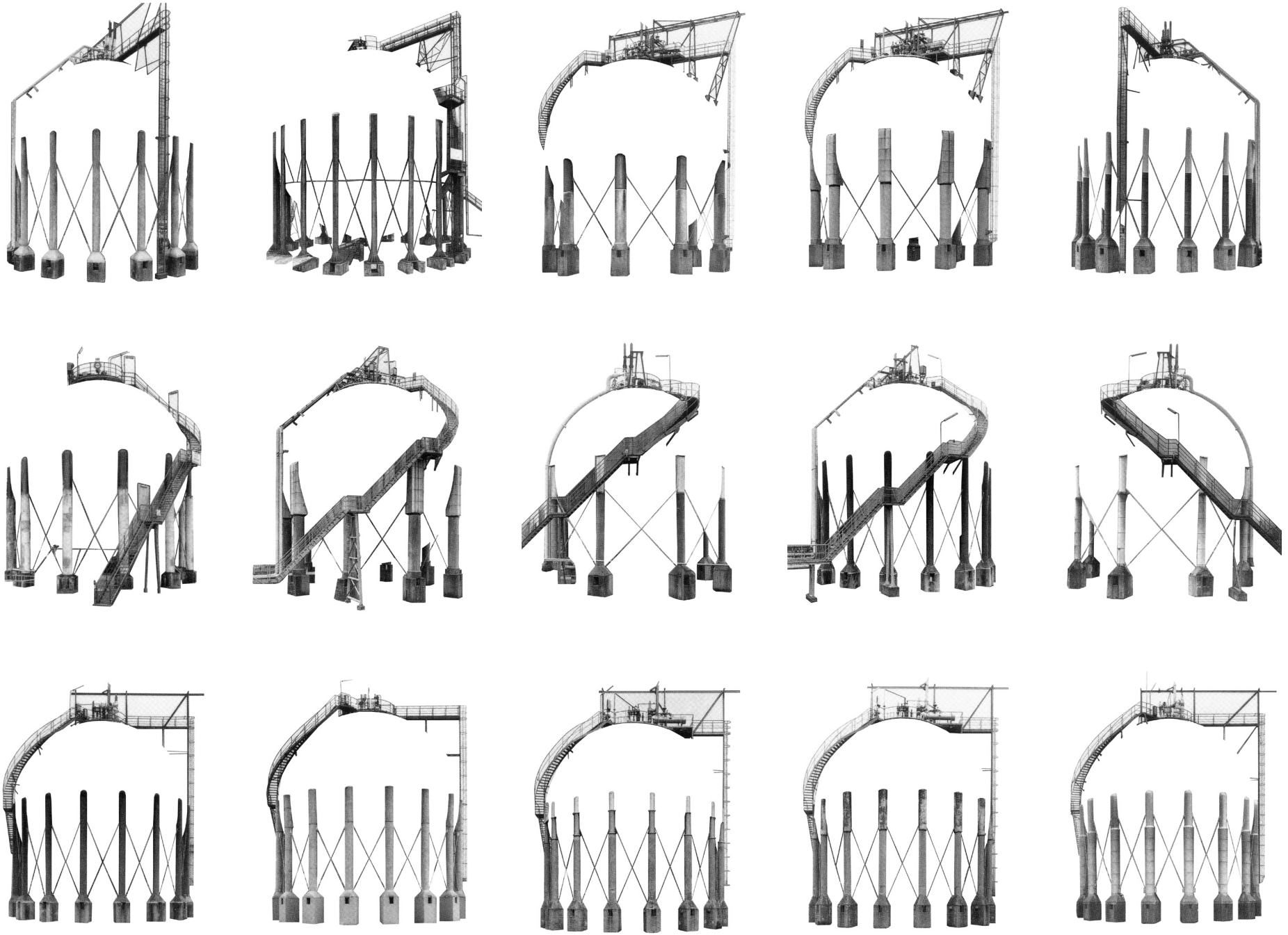


Figure 27: *Erasure 1: Blast Furnaces*

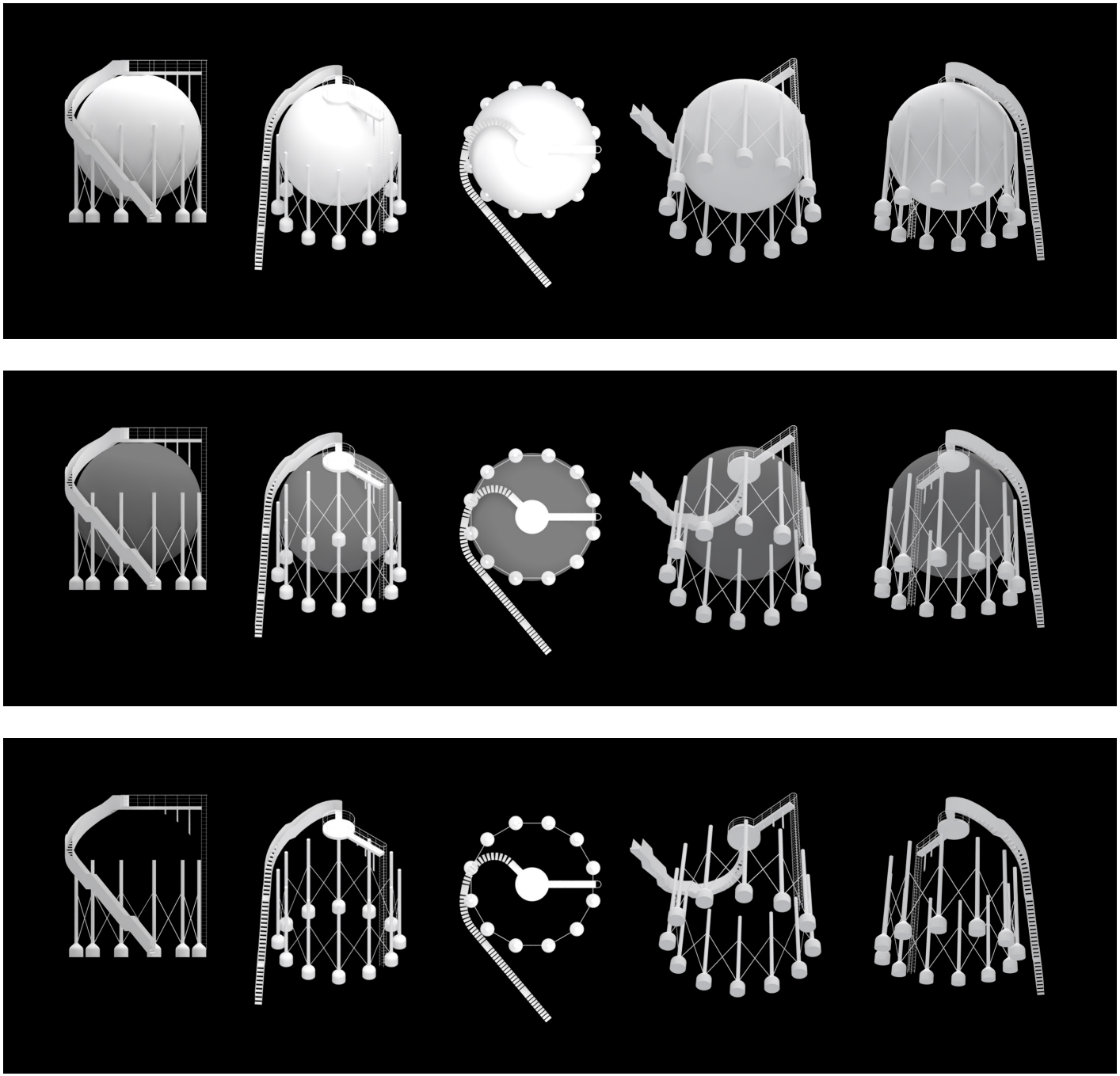


Figure 28: Still Frames from Erasure Animation, Produced by Author

In erasing the spherical center of each blast furnace, we see that the objects are not as similar to one another as initially thought. Each have a different amount of columns with different spacing, some have stairs, some have ladders, and some have both, and nearly all the stairs and ladders are configured differently. And yet their configuration still allows us to read the original type in its absence. This new blast furnace is not a sphere, no matter how much our perception tells us it is.

In viewing the erasure of the spherical center from multiple view points, it reveals new relationships, previously unknown facts about the different parts in conjunction with each other. Had the Bechers photographed in subjective instead of objective ways instead, the formatting by similarities would produce new associations between these machines and vernacular buildings in the landscapes.

To study these relationships, we can then operate on the isolated features alone.

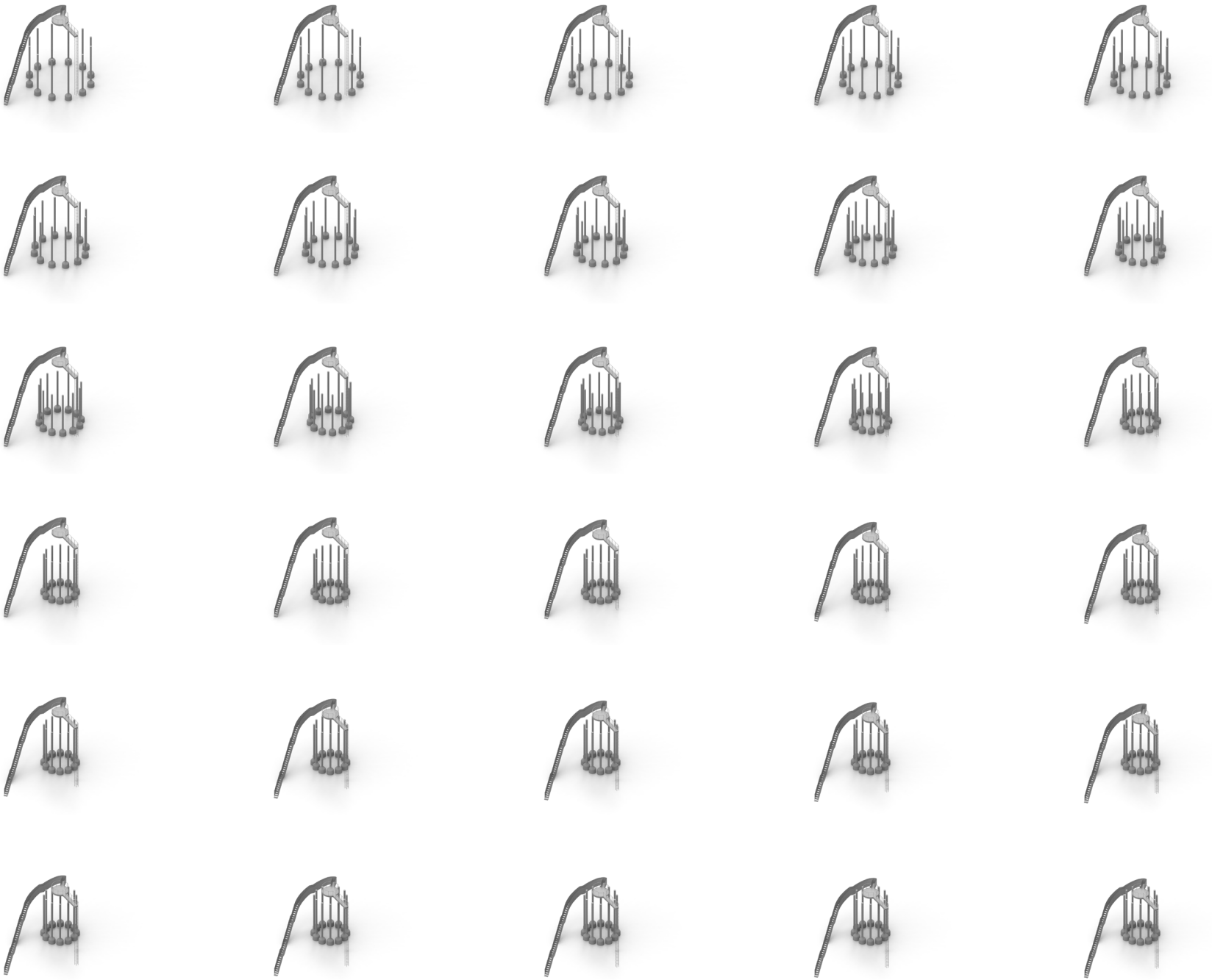


Figure 29: Still Frames from Moving Parts Animation 1.12, Produced by Author

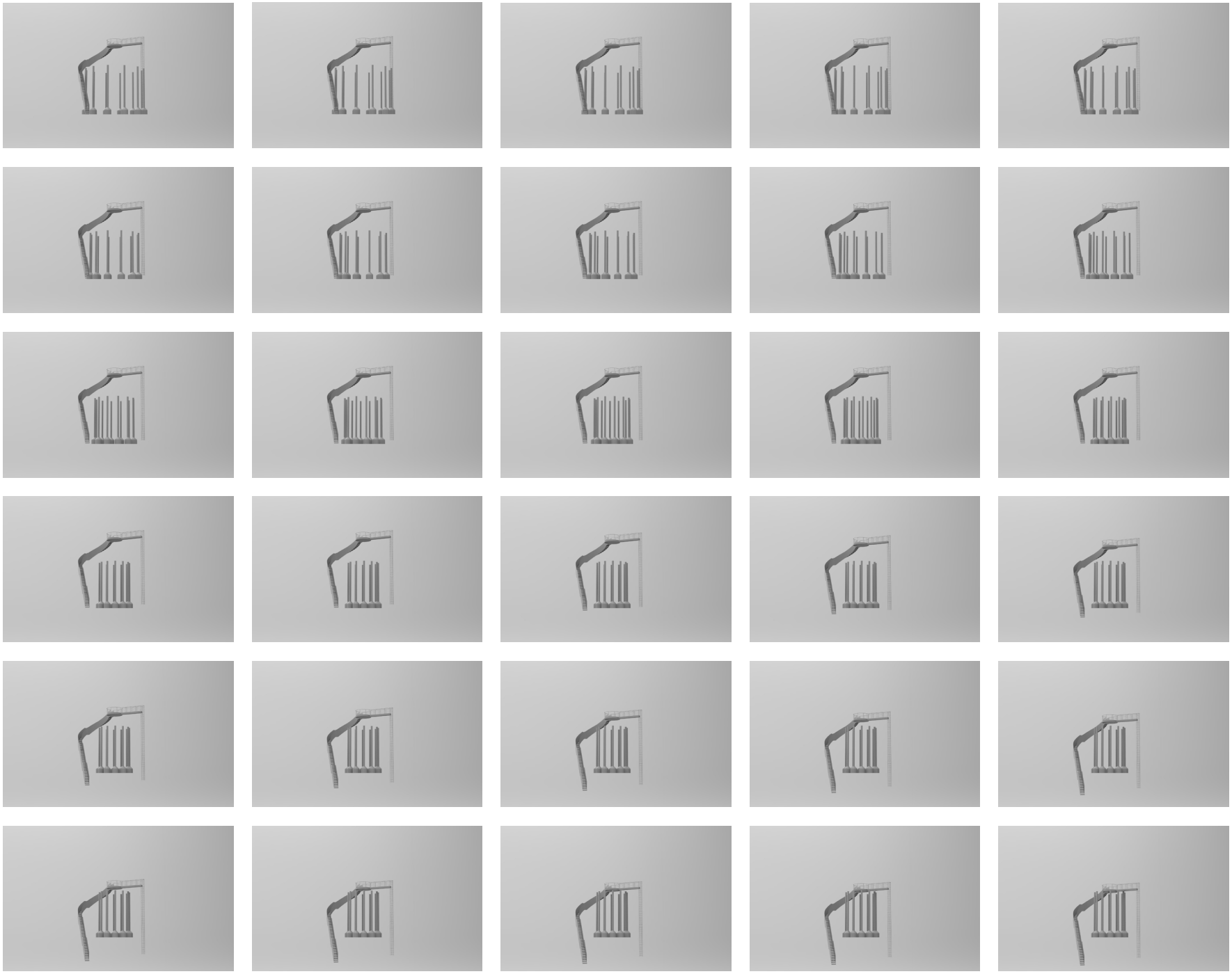


Figure 30: Still Frames from Moving Parts Animation 1.13, Produced by Author

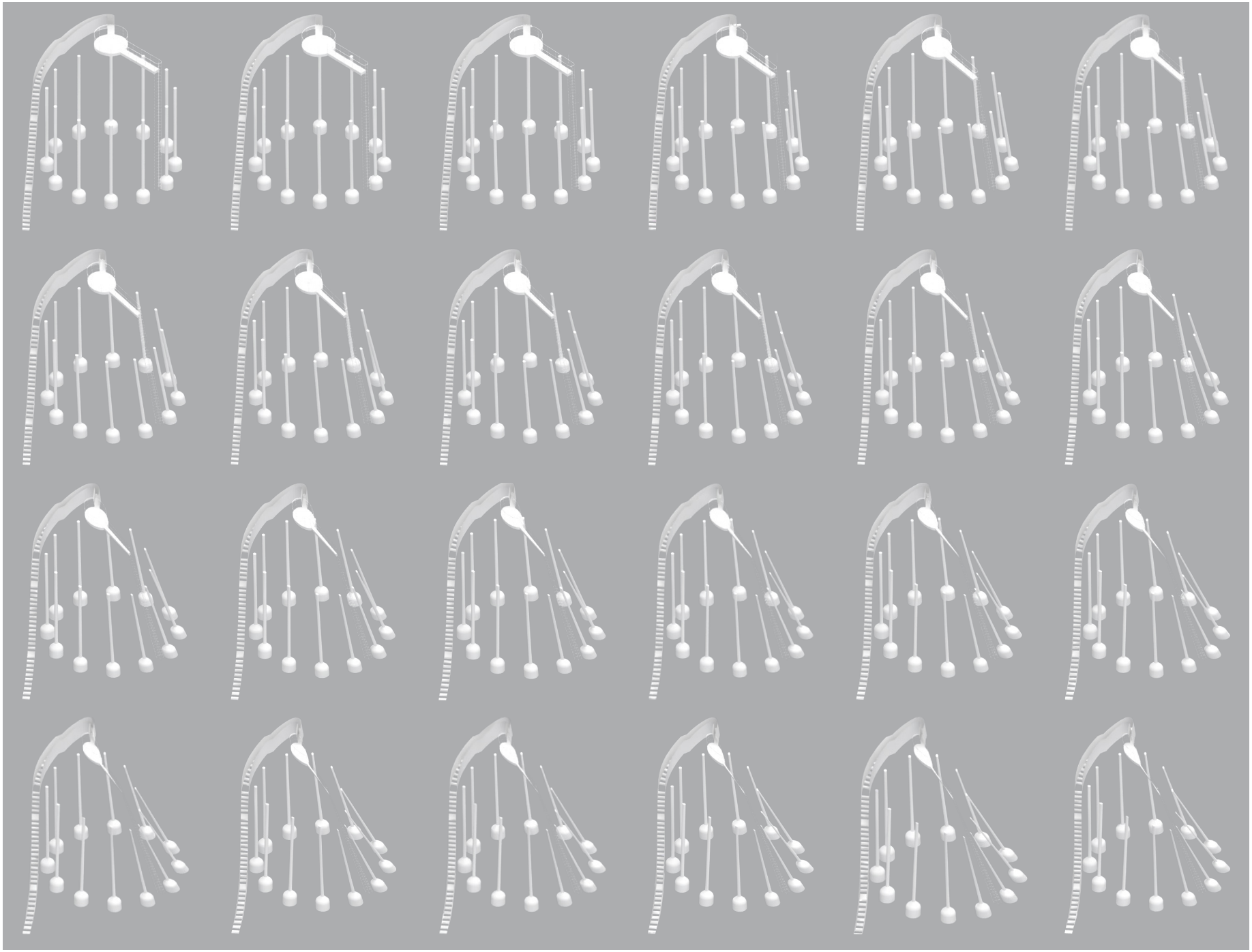


Figure 31: Still Frames from Deformation Animation, Produced by Author

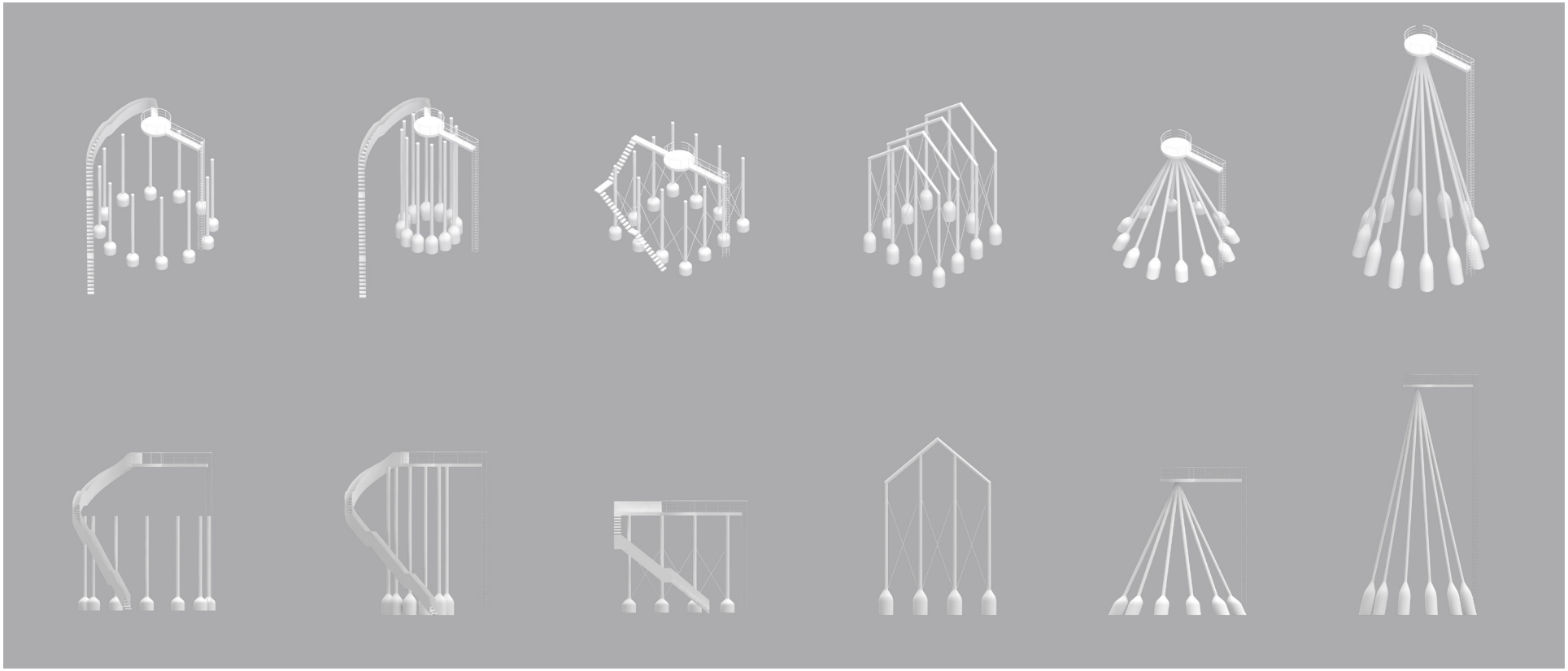


Figure 32: Blast Furnace Parts Applied to Platonic Forms, Produced by Author

In the above image, the parts from the blast furnaces are taken and applied to platonic forms, or our most inherent and rational understanding of a whole. This series displays how the background features of a built work can serve to characterize different figures. While the figures are of different shapes, they read as similar solely through common parts and features.

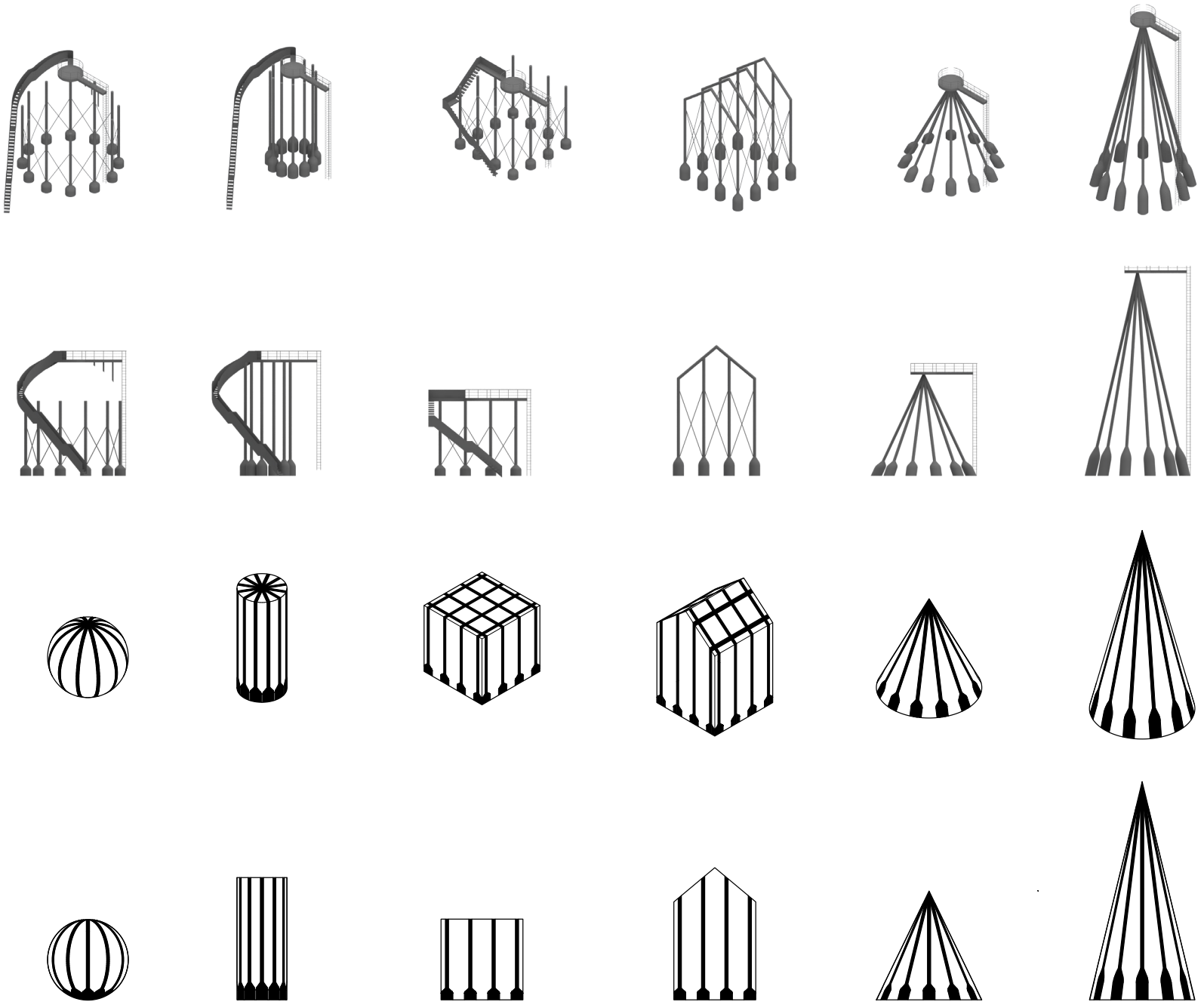


Figure 33: Blast Furnace Parts Applied to Platonic Forms 2, Produced by Author

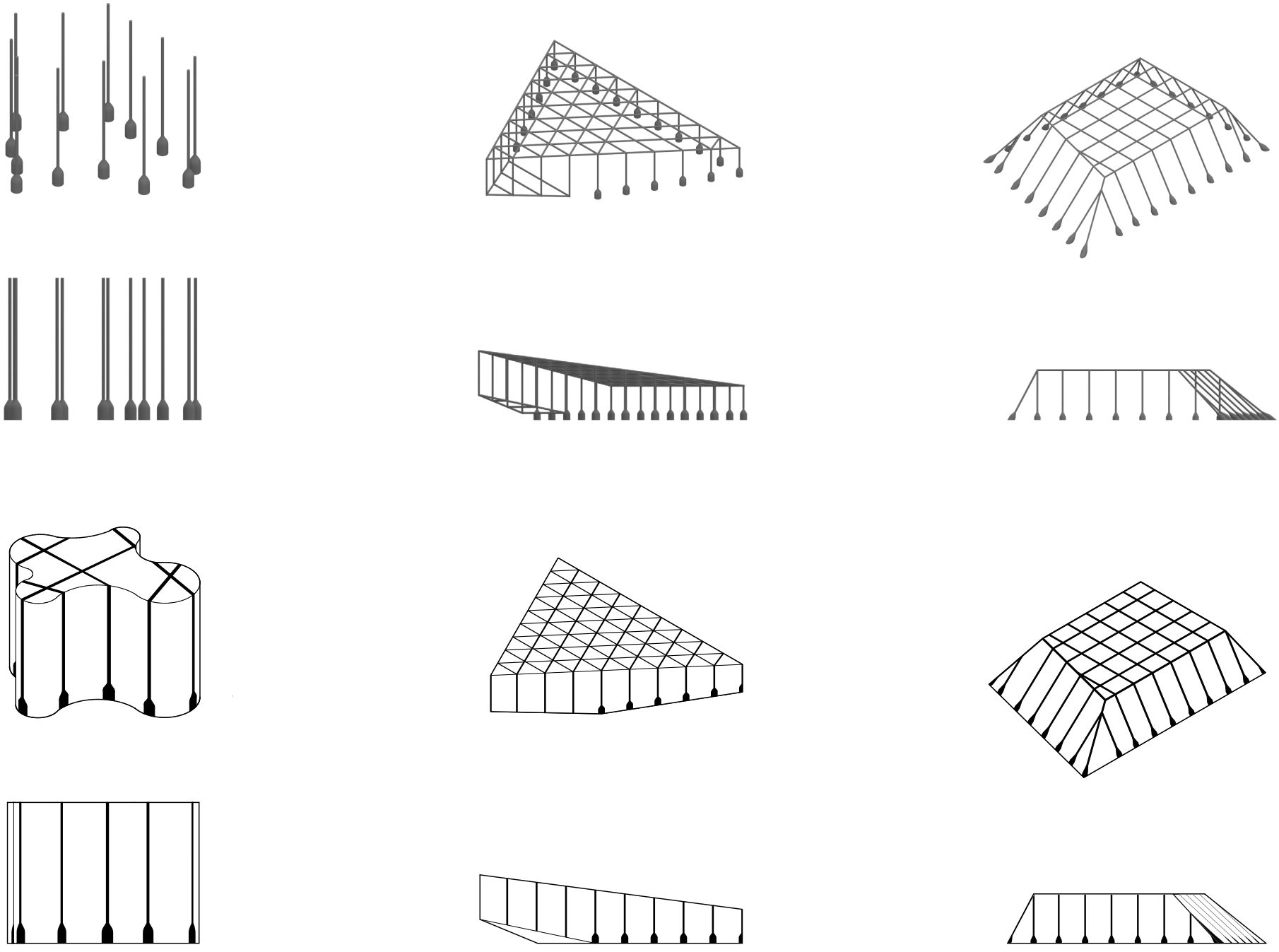


Figure 34: Blast Furnace Parts Applied to Postures, Produced by Author

IV. REFRAMING THE EVERYDAY: FEATURES CATALOGUE

In a pursuit of privileging character over typology as the means and ends of analyzing, seeing, and perceiving architecture, this thesis has brought background elements to the forefront, vaguely named architectural features. Thus to clarify, I will define an architectural feature as "any architectural element that makes up the perception of architecture that isn't inherently tied to a critical or typological understanding." Features are isolated from critical readings and typologies.

Revisiting a quote, Quatremère described character in architecture as “the idea of an alphabet composed of abstract units that can endlessly be combined to create specific meaning[11].” He conceptualized architecture as a language and Anthony Vidler would compare this conceptualization to the periodic table in chemistry[12]. In this specific quote, Quatremère is talking about the kit of parts from a type (abstract units, essential character) that are placed in relationship to one another through its configuration (endlessly combined, distinctive character) that results in its reading (specific meaning, relative character). For canonical works, this specific meaning is its ideal proportions and formal composition. Inversely, for everyday buildings this specific meaning is its function. Operationalizing Quatremère's distinctive and relative character in our postmodern world, everyday features offer an opportunity to focus on removing the functional understanding of features and rather produce projective associations.

The focus on the everyday is twofold. Firstly, everyday features are already removed from critical and typological understandings in that they are typically only understood through their function or low-brow decoration. And secondly, features are easily recognizable. The best example is in recognizing a vernacular architecture. Features are often the way that we remember everyday buildings, not the type. In a pursuit of creating projective associations, this thesis leverages this easy legibility.

Bernd & Hilla Becher’s image series elevated everyday built works to the level of art. They became meaningful in the way they were framed and presented, through their classification resulting relationships to one another. The following is a collection of features that takes advantage of the absurd results of any classification system[13]. Features are categorized into uncritical, speculative, rational, and yet arbitrary classifications to reveal new, previously unconsidered relationships and associations. This features catalogue uses media to reframe the architectural image from singular readings to multiple understandings of what architecture is not, what it reminds us of, and what it might be.

In his essay "Awkward Position ", Andrew Zago claims that the awkward as a tactic in architecture doesn't deploy traditional architectural mastery and expertise, but doesn't critique it either. And the result is unpredictable, but nonetheless new and speculative. This thesis does not completely abandon the architect's traditional set of skills and mastery, but rather selectively filters and edits them. For example, this thesis questions the validity of designing with geometry that produces recurring typologies, but still applies the architect's mastery of imaging, drawing, precedent, reading, and classifying to the wrong things, or everyday features.

Figure 35: Villa Pisani in Bagnolo, Andrea Palladio

Figure 36: Arches of Villa Pisani in Bagnolo, Produced by Author

On the left is an image of Palladio's Villa Pisani in Bagnolo, one of the eleven villas analyzed by Wittkower. On the right, the rusticated arch is isolated from the rest of the building. By erasing its entablature stairway, and front door, we erase the critical reading of this arch as a villa with classical and humanist principles. We don't even read the arch as a loggia anymore, it is simply just four arches with a stylized ornament. What then are we to read? The rustication may still provoke a reference to a specific place and typological reading, but in isolating and reducing the feature down to what it is[14] we are then liberated to compare it with many other things as well; it finds itself available for more associations than initially considered.

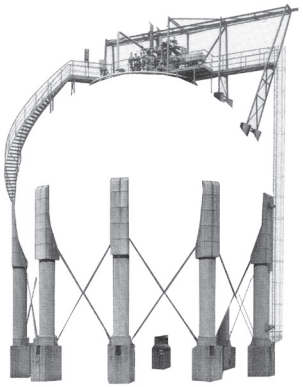
In order to jump-start the search for and collection of features, each of the manipulated photo series of the bechers has offered a specific species to start from. These species are not the way these features are classified and only serve as a starting point. While a use of species, or types, may seem antithetical to this thesis, this is not the case. This thesis seeks to design architecture without typology, or without essential character. Typology is the registration of a whole or stabilizing formal structure of an entire building or space. These species are not of buildings, but of isolated features.

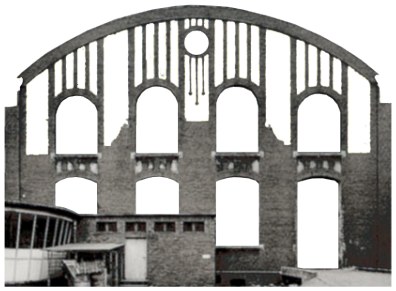
The three emerging species that serve solely as a launch pad for this collection are structure, or legs, from the blast furnaces, decoration, including pattern and ornament, and lastly thresholds, including windows, doors, and the like.

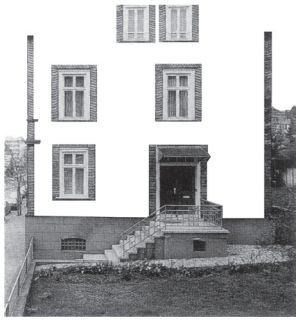
structure, or legs

decoration (pattern & ornament)

thresholds







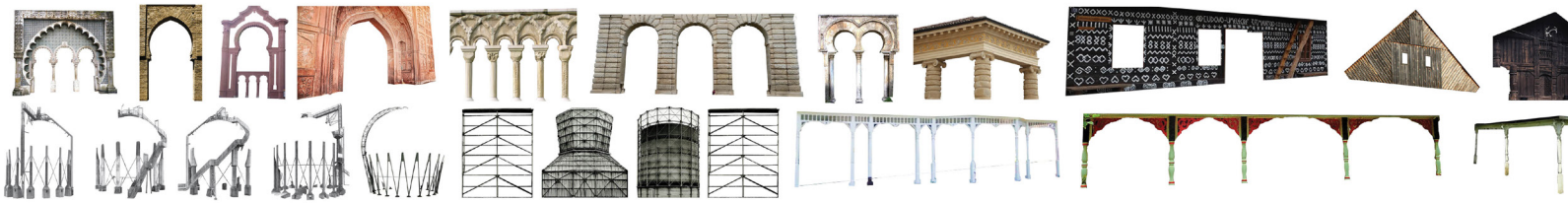
A collection of features... not yet cataloged or organized.... images have no care for scale or size... hierarchies are flattened and functions are removed...

The features are then organized according to four major classifications.

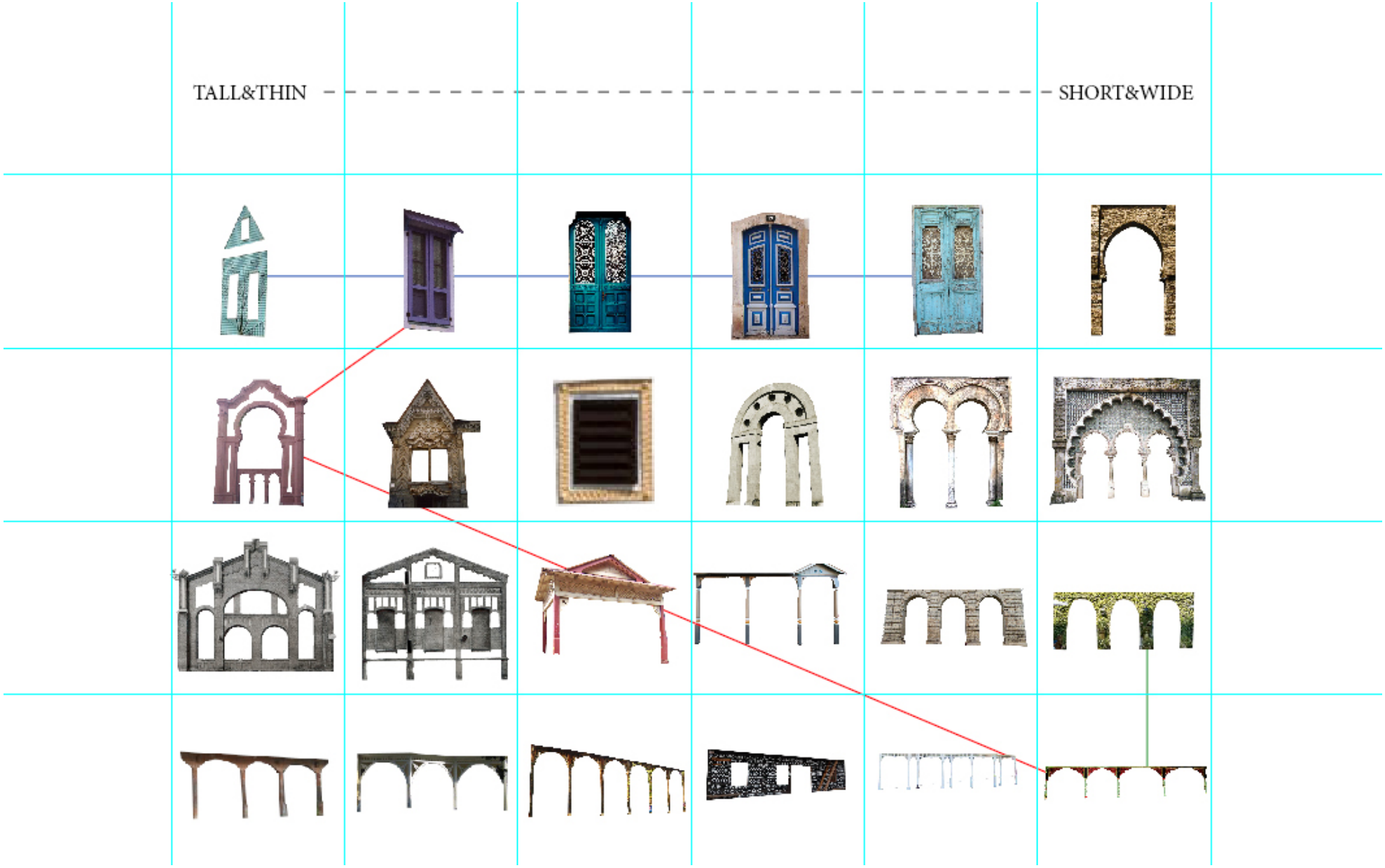
1) Shape/Figure
Upon flattening the hierarchies of scale and function, what remains to be compared is shape and figure. Common arched figures and triangular peaks reveal a new relationship between the structure of a blast furnace and series of arches.

2) Color
Everything has a color value. We can theoretically create a spectrum of color of every existing thing. Here, windows, frames, facades, and columns, amongst others, find themselves perched near one another, solely because of their color value.

3) (Presumed) Age
Do features evolve over time? Can they last 2000 years like some typologies have, or do they cycle in and out like fashion trends?



4) Original Type
It is productive to compare isolated features that come from the same original type, to then compare the differences that are overlooked by a typological analysis.



A catalogue can be made into a matrix through a set of rules. A matrix can go beyond revealing relationships between its objects but can serve to stitch them together as well. For example, where the above image sorts features by proportion, other lines begin to connect them by color value. We can then take all of the blue features from this spectrum of proportions and put them into play.

V. TRAJECTORY

This thesis puts forth a design method that operationalizes character with digital technique. In the analyses of the Bechers' work, distinguishing features have been brought to the forefront instead of the resonating types. In the work of Idris Khan, images from a set are superimposed to produce a new reading. Separate moments are conflated into a single moment, but the image reads as if it is in motion and has been described as ethereal. In his plates, Khan is able to create a reading of both the resonating types and distinguishing features at the same time.

Khan produced four plates based on the Bechers' work, known as the "Every Bechers'..." series. Each plate will serve as a scenario for everyday features to be selected and put into play based on its organization, distinguishing parts, and character. The plates serve as a test bed for the matrix of the catalogue of features and a canvas for multi-media drawings to further defamiliarize and obscure the architectural image and feature.

Each plate will result in a three-dimensional architectural object that is then placed back into original sites where the Bechers photographed. Many of the sites, including industrial parks and domestic villages, have become a type of museum. Driving and guided tours exist to visit the places identified by the Bechers. Each three-dimensional object will serve as another piece within these museums dedicated to the work of the Bechers. They work to simultaneously expand the Bechers' museum as well as respond to their work.

In the same way that the Bechers used media to present a specific reality of the German landscape and thus German identity, the result of this thesis will be a series of architectural artifacts that serve as a new expression of the German landscape through its pseudo-features and reconfigurations.

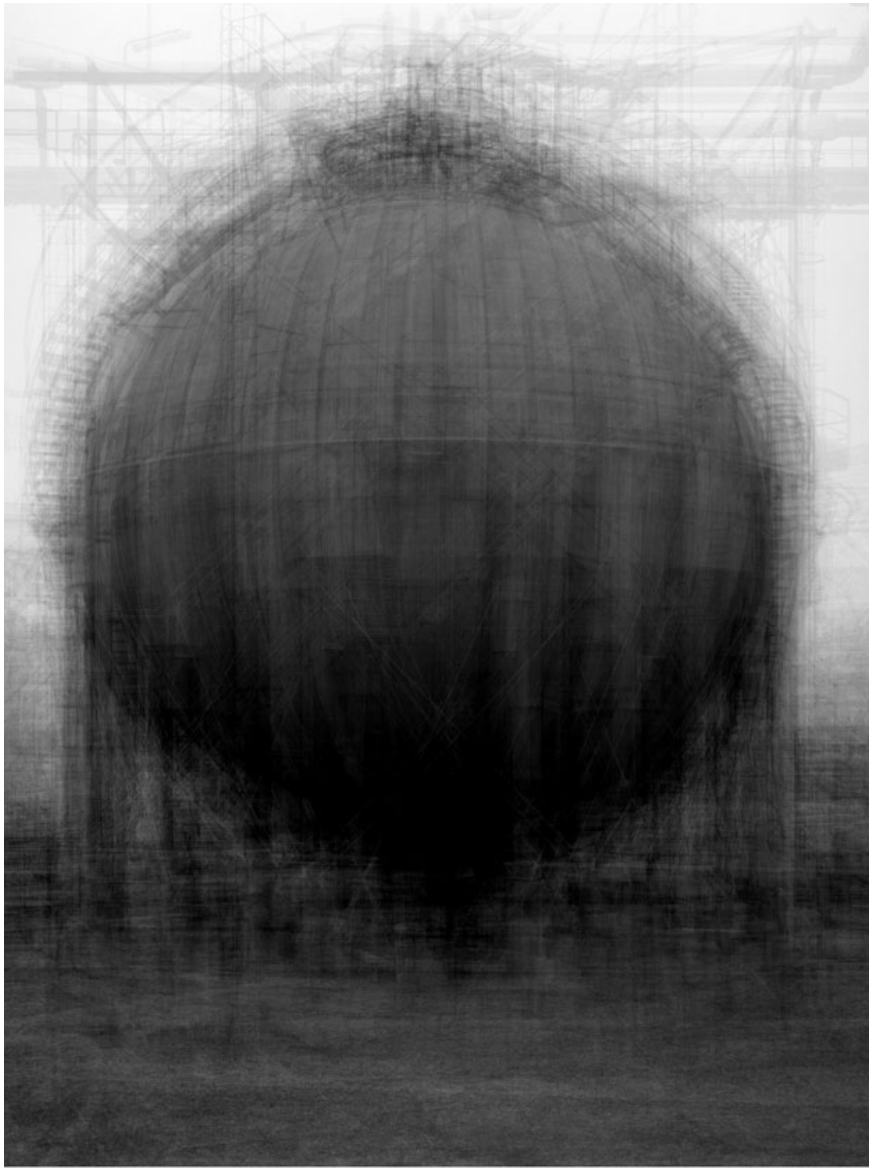


Figure 37: *Every Bernd & Hilla Becher Blast Furnace* (2004) by Idris Khan

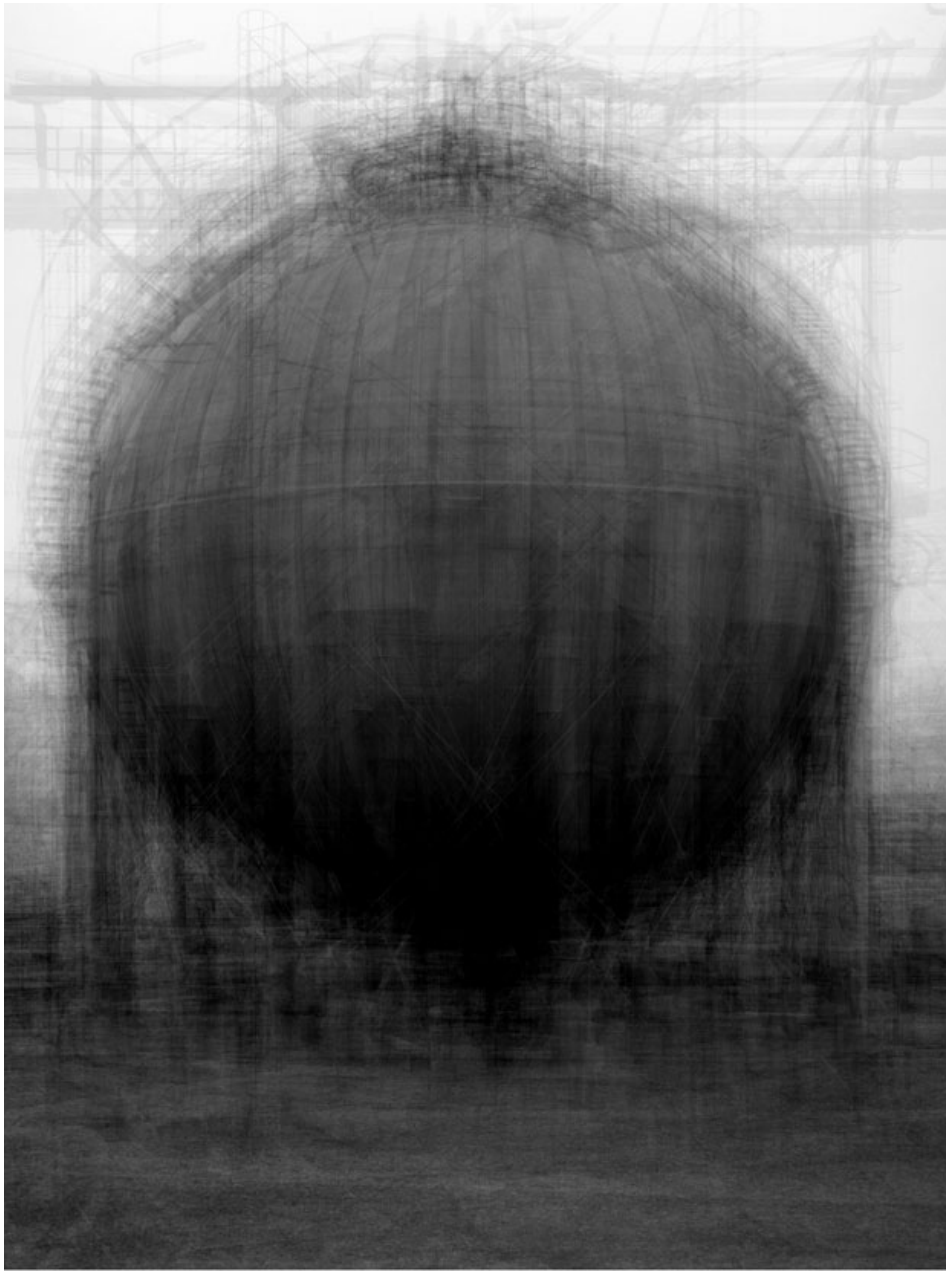


Figure 38: *Every Bernd & Hilla Becher Blast Furnace* (2004) by Idris Khan

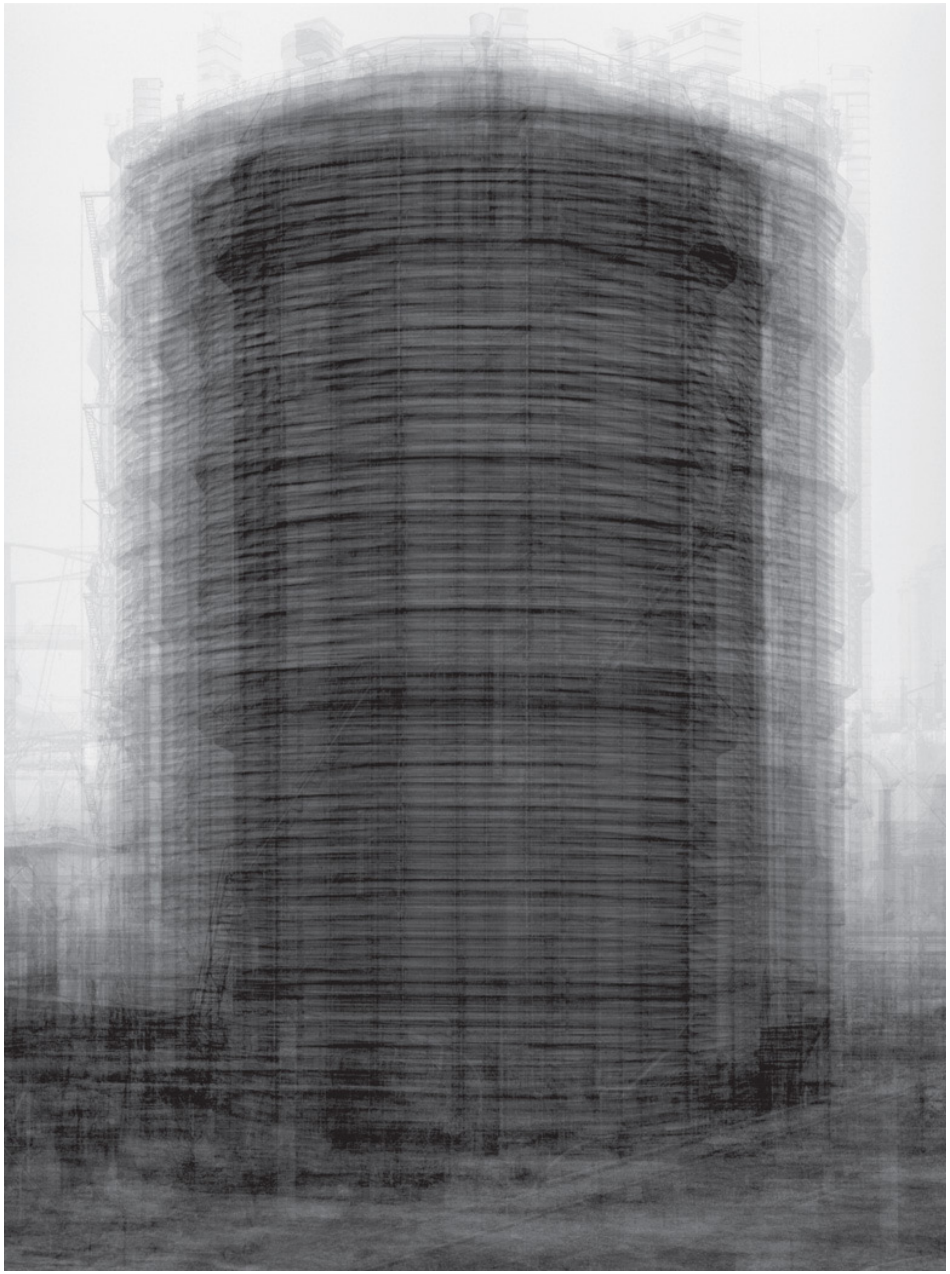


Figure 39: Idris Khan

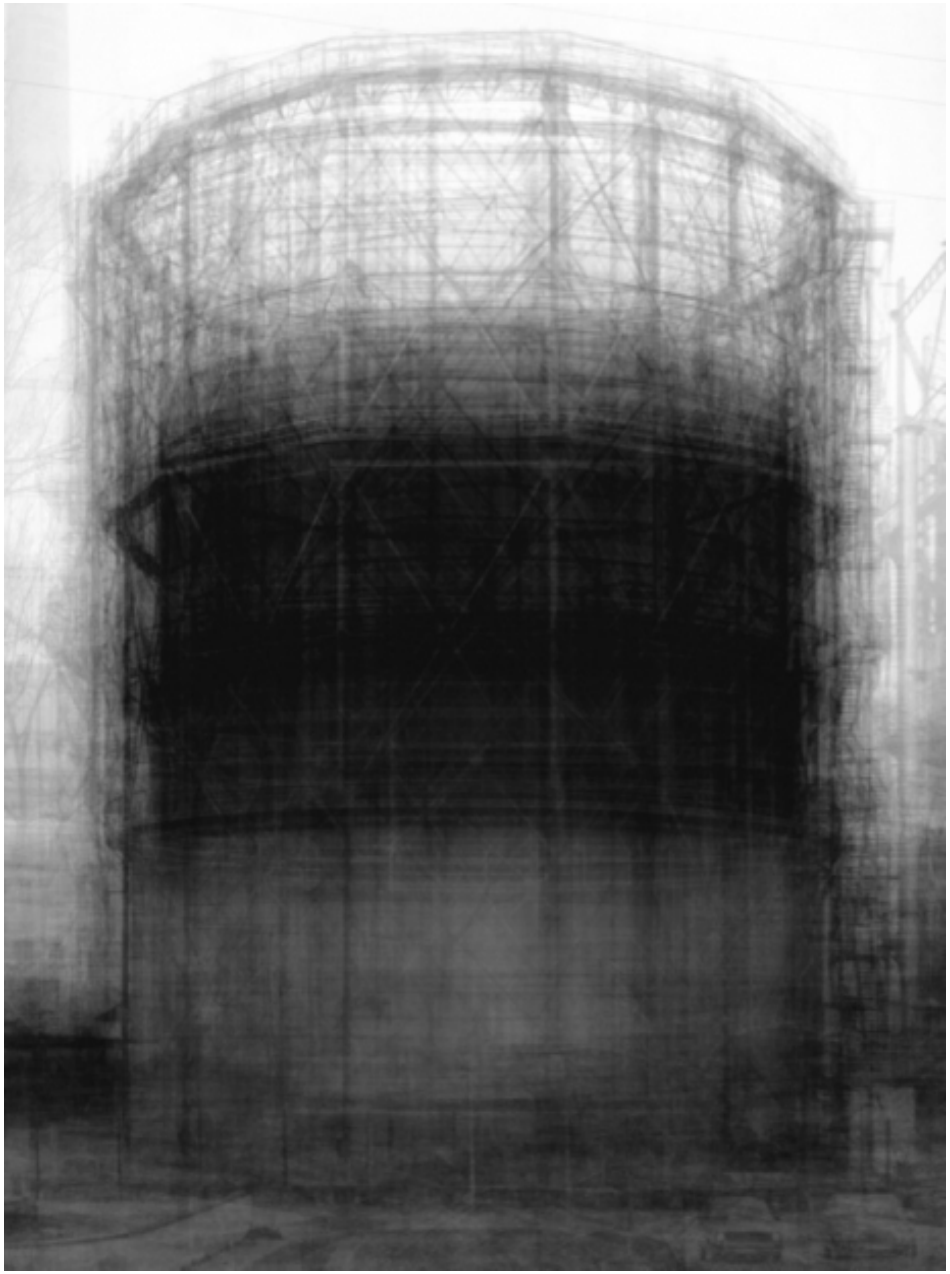
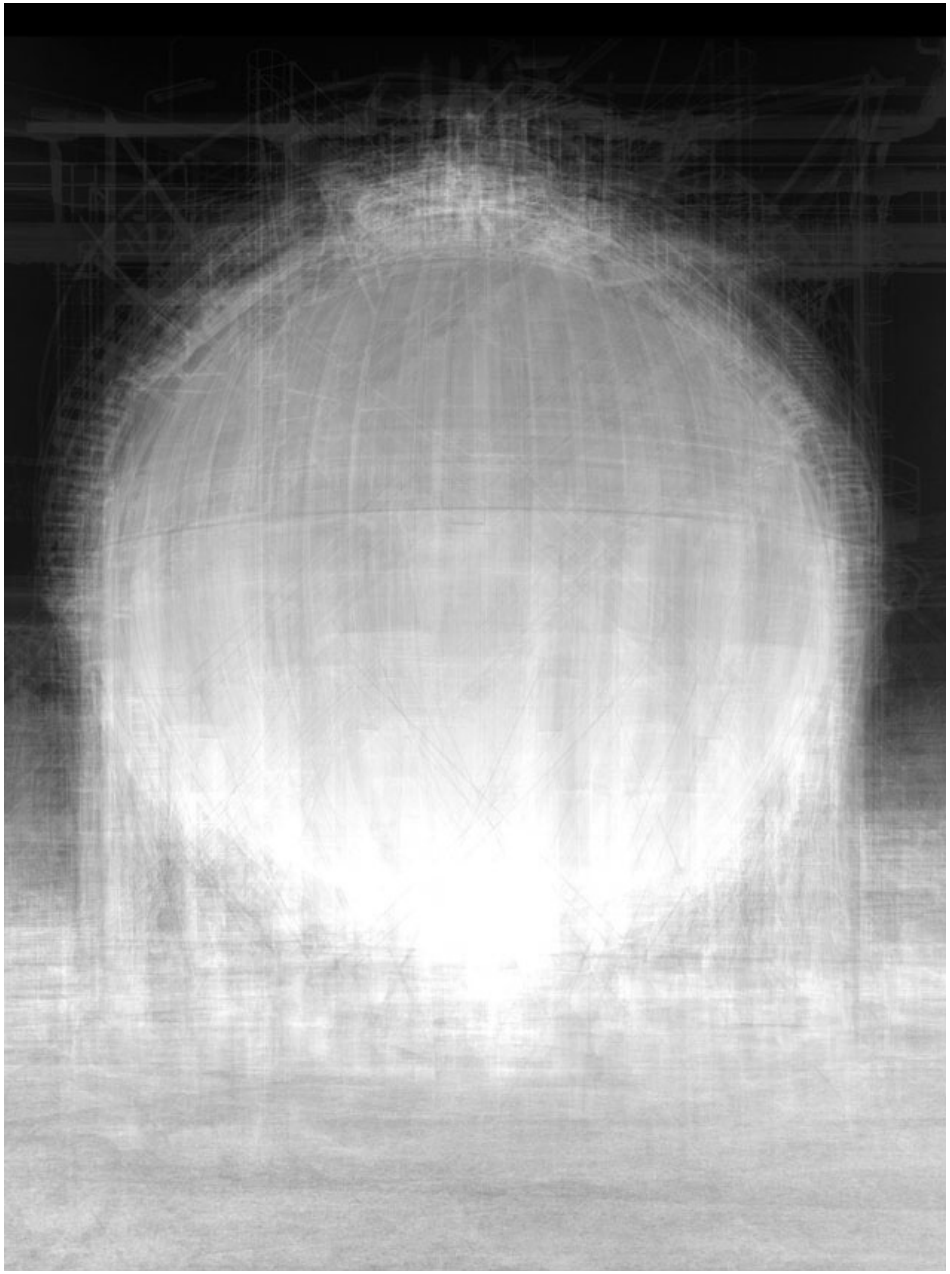


Figure 40: Idris Khan

Figure 41: *Every Bernd & Hilla Becher Gable Side Houses* (2004), Idris Khan



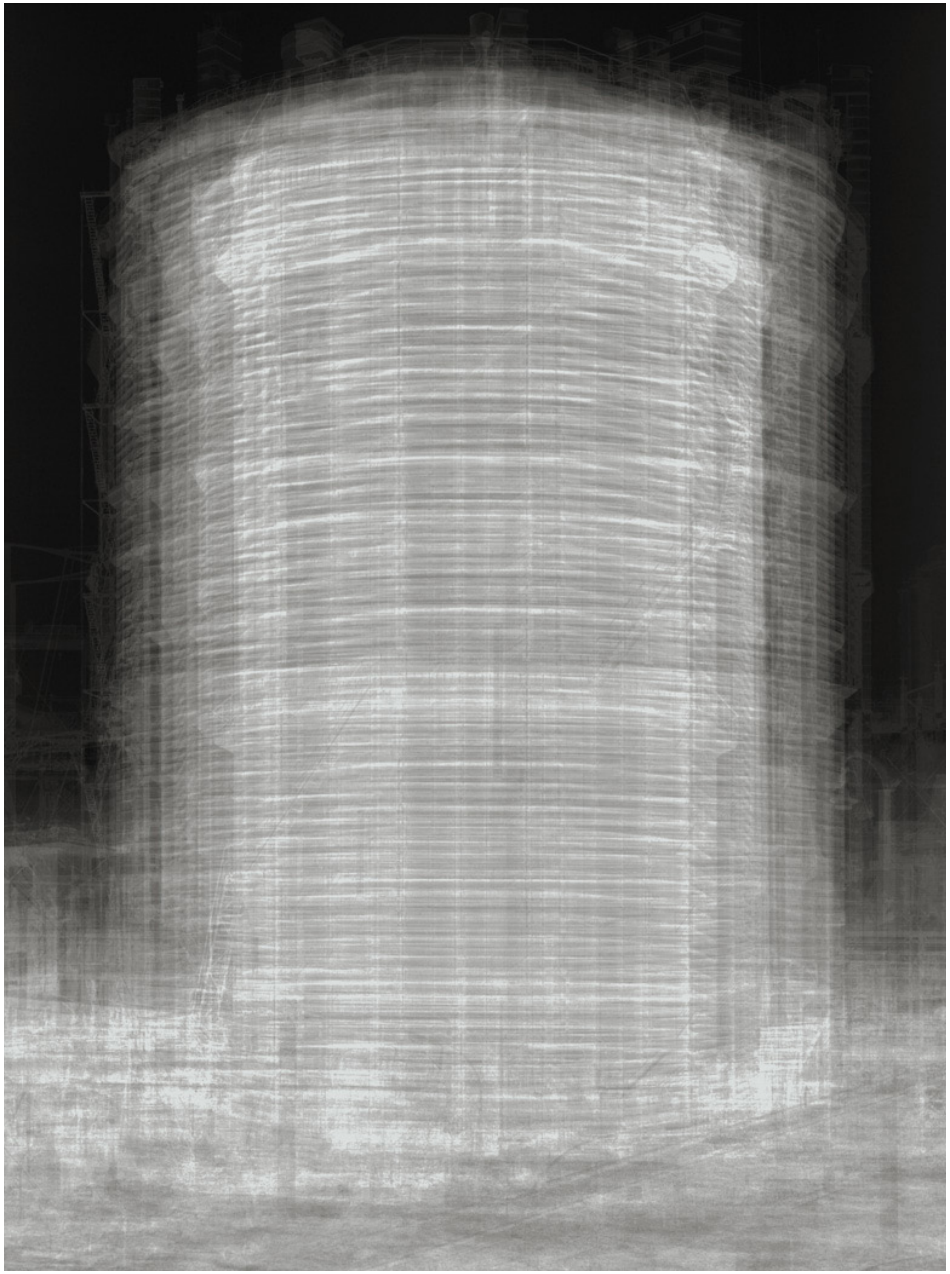
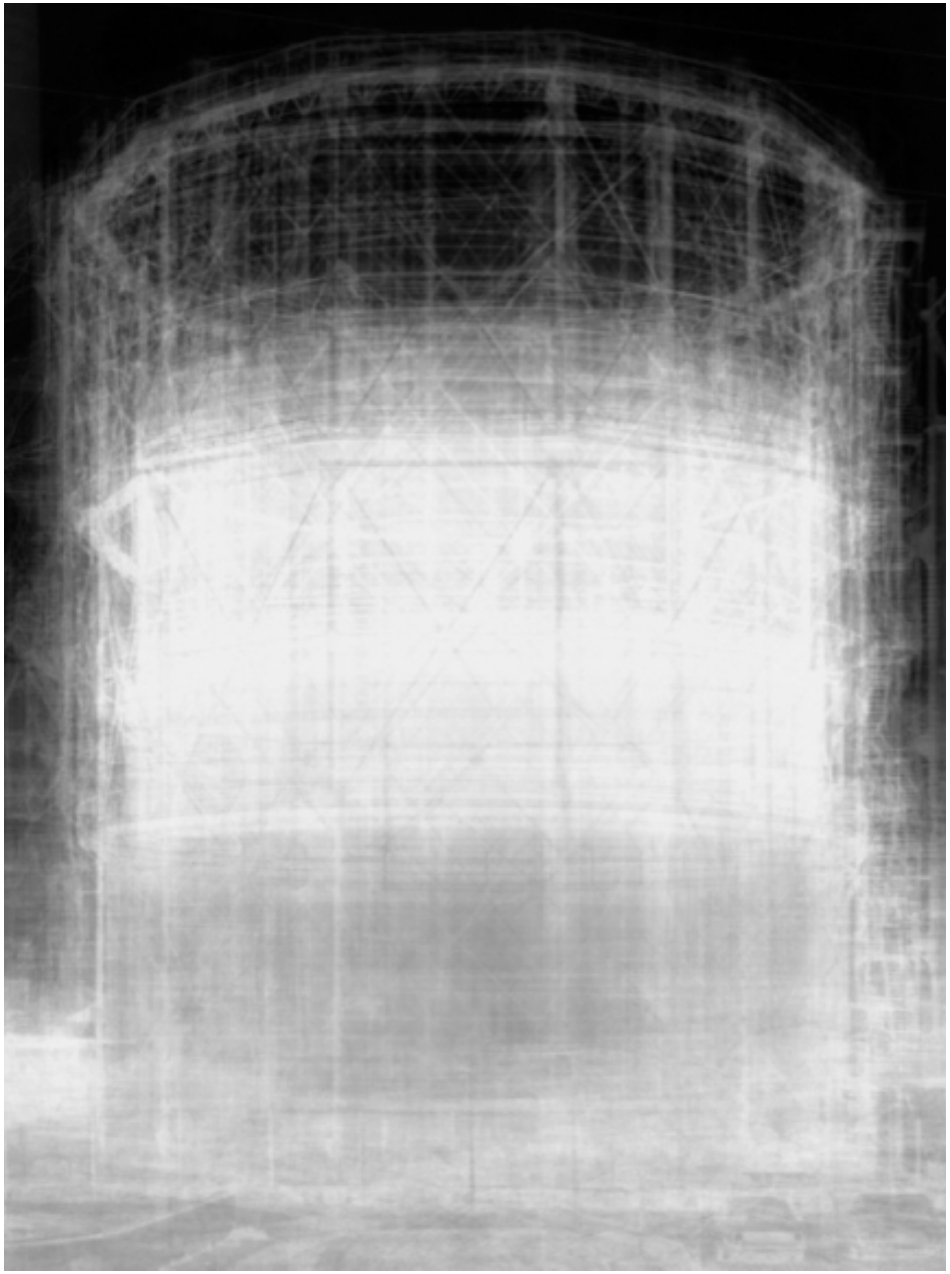
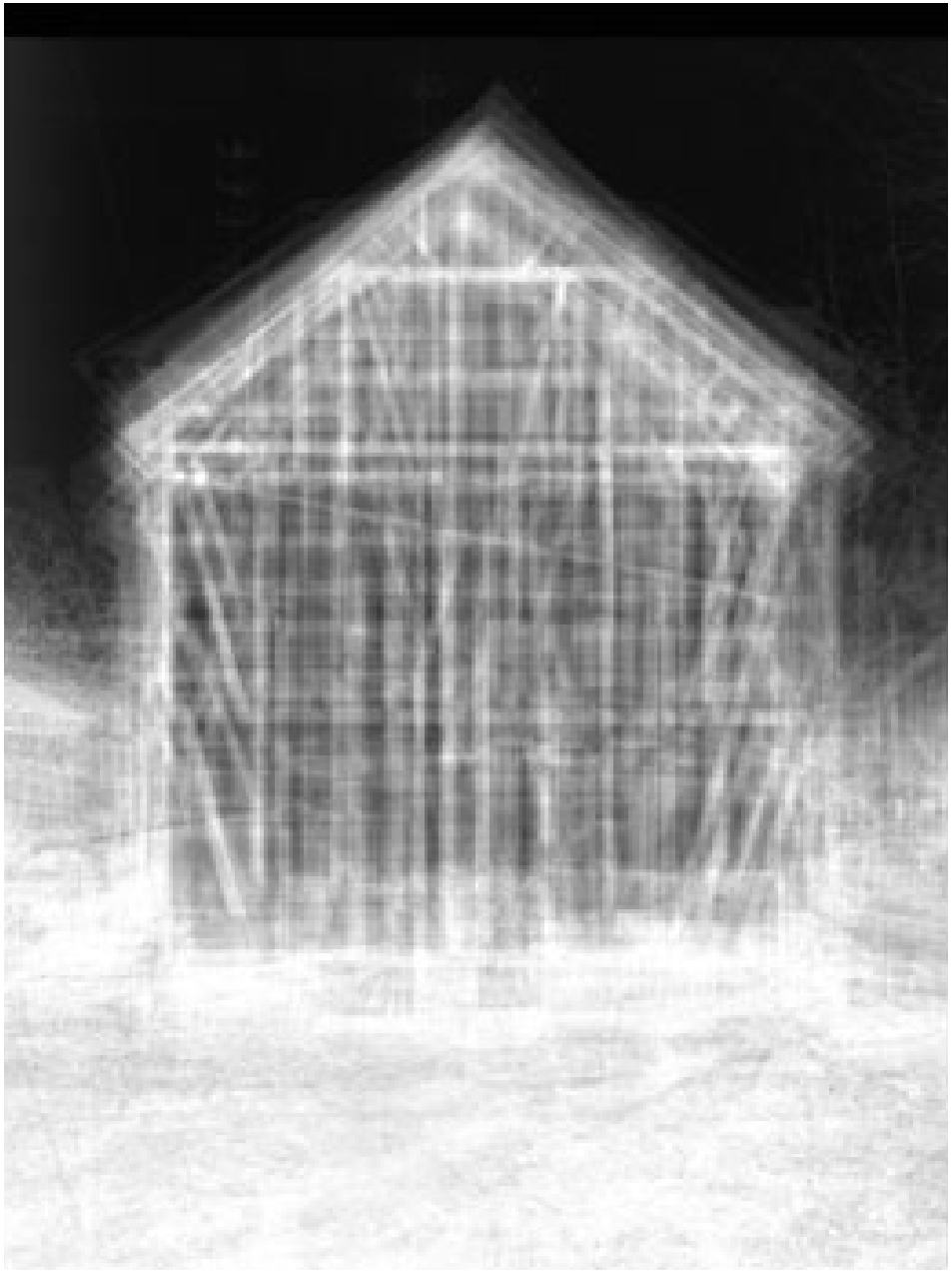
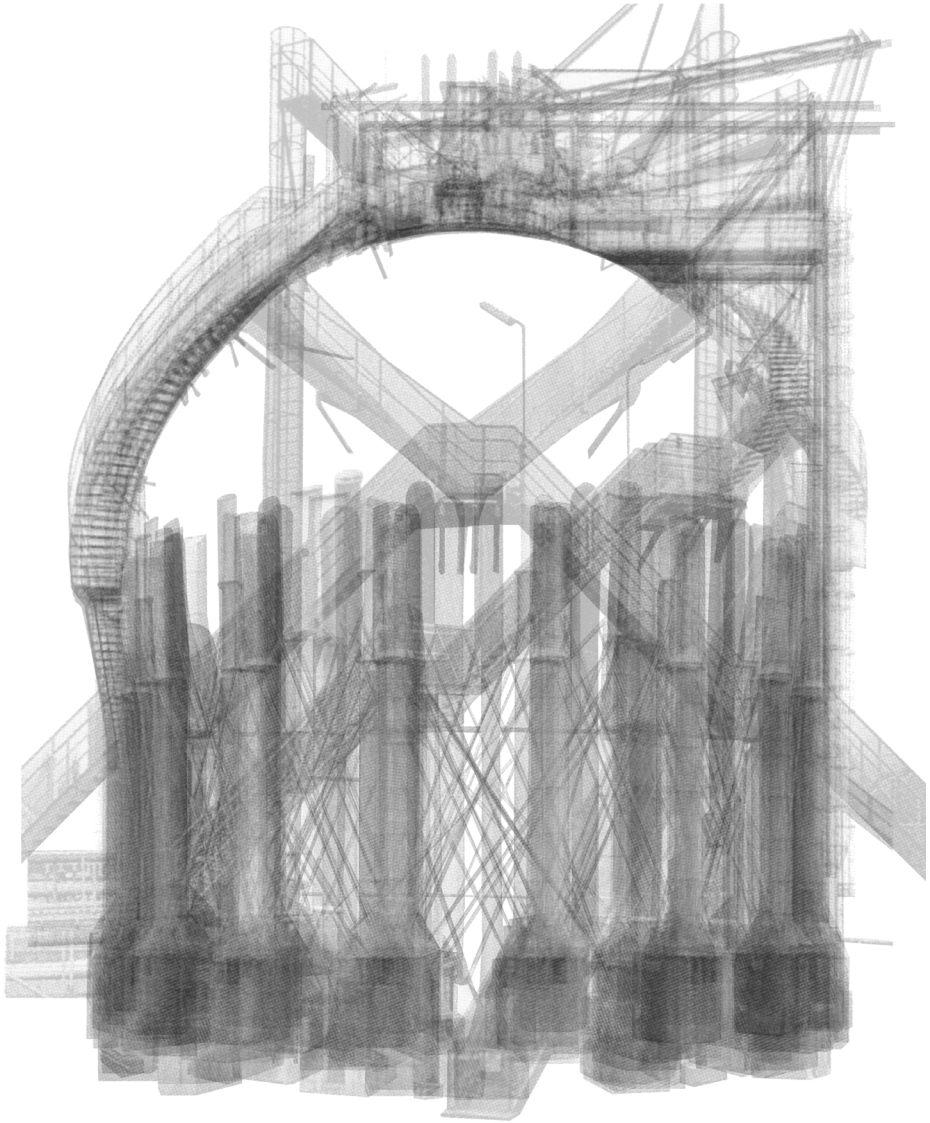


Figure 42: *Every Idris Khan Every Bechers' Series, Inverted*, produced by Author. By inverting the Khan's superimpositions, the distinguishing features are even further articulated.







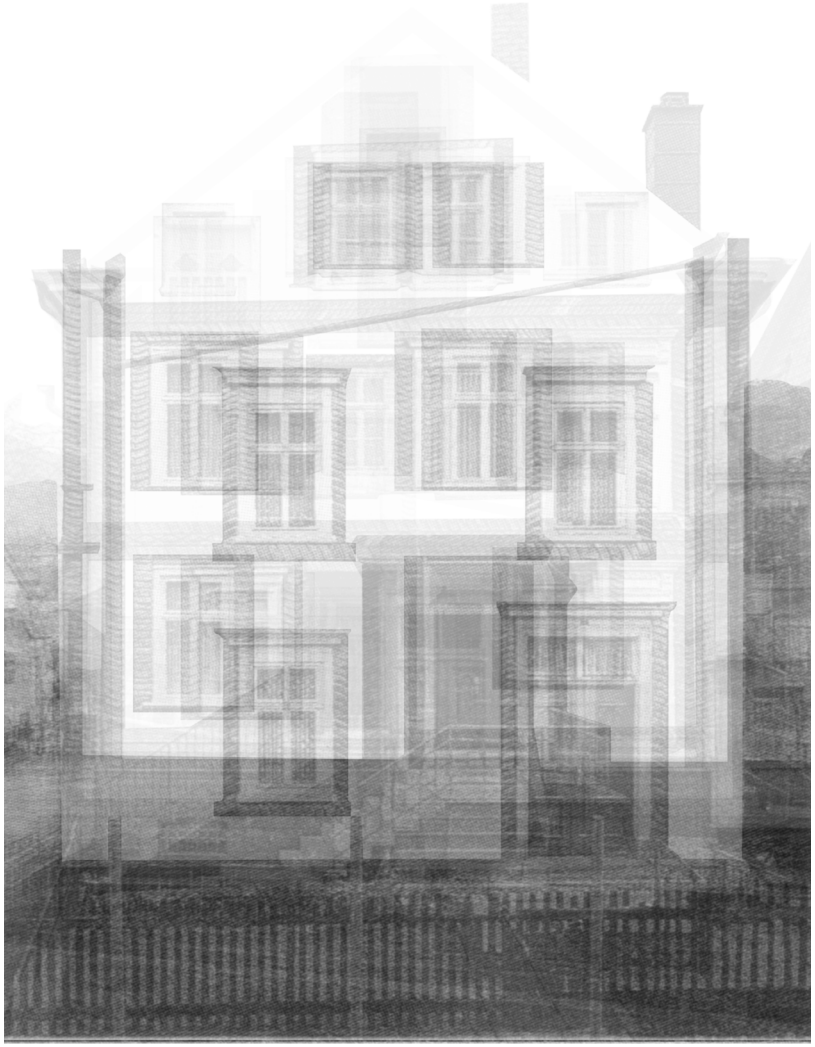
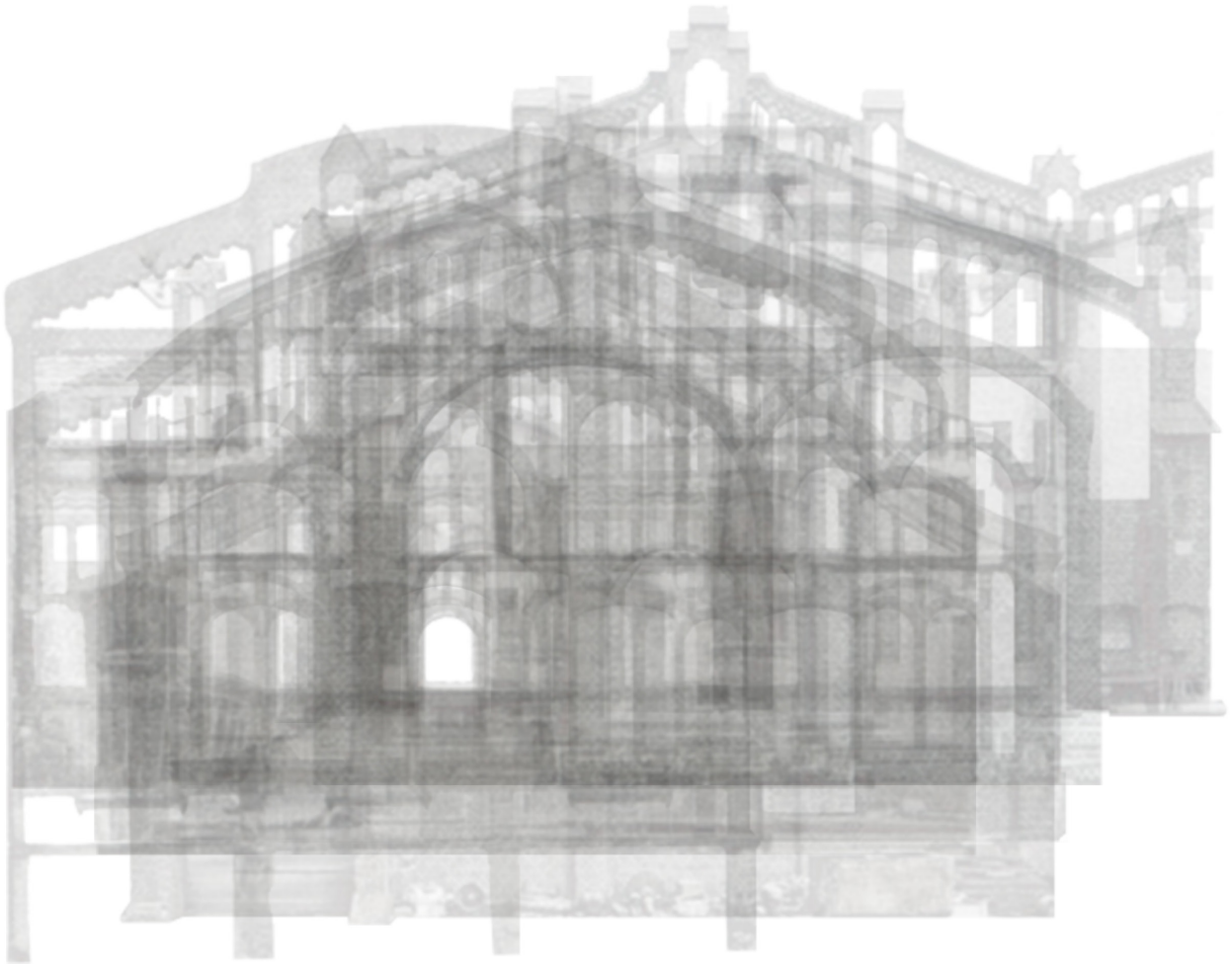


Figure 43: *Superimpositions*, Produced by Author. These drawings serve to quickly borrow Khan's techniques and apply them to the *Erasure* series so as to read the same ethereal effect solely through the objects' features.



WALKER TRAVEL PRIZE

During my travel to Germany, most of my time will be spent in Düsseldorf. My main objective during my trip is to visit the sites of some of the industrial and vernacular landscapes that the Bechers photographed to produce alternate series that focus on distinguishing features from subjective views as opposed to typological similarities photographed objectively. These alternate photographs will also add to my image catalogue, a collection of features that are then deployed in the design project. This travel offers me the opportunity to better understand the industrial and vernacular buildings through their character and how to privilege those in a design project, and to find a proper place to site them.

Photographing of these landscapes and buildings may include but are not limited to:

GoPro (time lapse, point-of-view vantage points)
123D Catch
Other Digital Mapping Apps

Sites to Visit include but are not limited to:

Oberbruch Industry Park (1 hour drive from Düsseldorf)
Westfalenhutte (1.5 hour drive from Düsseldorf), the largest abandoned industrial site in the world
Industrial Landscape Driving Tours
Museums of Domestic Villages (vernacular features)
Kunstakademie Düsseldorf, where Bechers studied
Rhine River, Düsseldorf, site of vernacular influenced buildings within the city

Qualities and Parameters that guide the search and photographing of features include but are no limited to:

Structure understood as not structural, features as understood as not functional
Features that are easily recognized, legible, patterns

VI. FOOTNOTES AND FIGURES

1. Sylvia Lavin, *Quatremère de Quincy and the Invention of a Modern Language of Architecture*, 146

2. Here I am referring to the projective as written about by Bob Somol in “Green Dots 101”, for example the vague but precise silhouettes

3. While the Bechers’ photo series later expanded to photographing similar types around the world, this thesis focuses on the meaning of these image series specifically as they pertain to offering an identity to Germany.

4. Jacques Rancière, *The Future of the Image*

5. Here I refer to Andrew Zago’s essay “Awkward Position”, specifically as he describes the awkward as something that doesn’t utilize traditional mastery, but it doesn’t critique either.

6. Amy Kulper, "Out of Character," Published in *Log 31*

7. Jacques Rancière, *The Future of the Image*

8. Ibid.

9. Thierry de Duve, "Bernd and Hilla Becher or Monumentary Photography", Published in *Bernd and Hilla Becher Basic Forms*

10. Rosalind Krauss, "Sculpture and an Expanded Field"

11. Sylvia Lavin, *Quatremère de Quincy and the Invention of a Modern Language of Architecture*, 146

12. Quatremère de Quincy, "Caractère," in Encyclopédie méthodique: Architecture (Paris: 1788), vol. 1, 498. Cited in Anthony Vidler, The Writing of the Walls: Architectural Theory in the Age of the Enlightenment (Princeton: Princeton Architectural Press, 1987), 158, Cited by Amy Kulper in "Out of Character"

13. Daniel Lin, "Another Milstein Hall"

Figure 1: *Erasure 1: Blast Furnaces*, Produced by Author

Figure 2: Schematized Plans of Eleven of Palladio's Villas by Rudolph Wittkower, taken from his book *Architectural Principles in the Age of Humanism*

Figure 3: Images conveying the features of Eleven Villas of Palladio, formatted and organized by Author

Figure 4: *Blast Furnaces* (1980-88) by Bernd & Hilla Becher

Figure 5: *Twin Water Towers* by Bernd & Hilla Becher

Figure 6: *Stoneworks* (1982-1992) by Bernd & Hilla Becher

Figure 7: *Neuves Maisons, Lorraine* (1986), by Bernd & Hilla Becher

Figure 8: Analysis of Bernd & Hilla Becher's *Blast Furnaces*, Drawn by Author

Figure 9: *Blast Furnaces* (1980-88) by Bernd & Hilla Becher

Figure 10: Analysis of Bernd & Hilla Becher's *Twin Water Towers*, Drawn by Author

Figure 11: *Twin Water Towers* by Bernd & Hilla Becher

Figure 12: Analysis of Bernd & Hilla Becher's *Stoneworks*, Drawn by Author

Figure 13: *Stoneworks* (1982-1992) by Bernd & Hilla Becher

Figure 14: Analysis of Bernd & Hilla Becher's *Neuves Maisons, Lorraine*

Figure 15: *Neuves Maisons, Lorraine* (1986) by Bernd & Hilla Becher

Figure 16: Holder's Parts, Tools, and Resulting Characters, Drawn by the Author

Figure 17: Holder's Techniques and their resulting features, Drawn by the Author

Figure 18: Bernd & Hilla Becher

Figure 19: Bernd & Hilla Becher

Figure 20: *Cooling Towers* (1969-1992), Bernd & Hilla Becher

Figure 21: *Water Towers*, Bernd & Hilla Becher

Figure 22: Bernd & Hilla Becher

Figure 23: Bernd & Hilla Becher

Figure 24: Bernd & Hilla Becher

Figure 25: *Erasure 2: Houses*, Produced by Author

Figure 26: *Erasure 3: Patterns*, Produced by Author

Figure 27: *Erasure 1: Blast Furnaces*

Figure 28: Still Frames from Erasure Animation, Produced by Author

Figure 29: Still Frames from Moving Parts Animation 1.12, Produced by Author

Figure 30: Still Frames from Moving Parts Animation 1.13, Produced by Author

Figure 31: Still Frames from Deformation Animation, Produced by Author

Figure 32: Blast Furnace Parts Applied to Platonic Forms, Produced by Author

Figure 33: Blast Furnace Parts Applied to Platonic Forms 2, Produced by Author

Figure 34: Blast Furnace Parts Applied to Postures, Produced by Author

Figure 35: Villa Pisani in Bagnolo, Andrea Palladio

Figure 36: Arches of Villa Pisani in Bagnolo, Produced by Author

Figure 37: *Every Bernd & Hilla Becher Blast Furnace* (2004) by Idris Khan

Figure 38: *Every Bernd & Hilla Becher Blast Furnace* (2004) by Idris Khan

Figure 39: Idris Khan

Figure 40: Idris Khan

Figure 41: *Every Bernd & Hilla Becher Gable Side Houses*

Figure 42: *Every Idris Khan Every Bechers' Series, Inverted*, produced by Author. By inverting the Khan's superimpositions, the distinguishing features are even further articulated.

Figure 43: *Superimpositions*, Produced by Author. These drawings serve to quickly borrow Khan's techniques and apply them to the *Erasure* series so as to read the same ethereal effect solely through the objects' features.

VII. GLOSSARY

Distinctive Character (Nature): A particularization of essential character entirely the result of external influences. It depends on the accidents and varieties of development that imprint on the same species according to differences in location or on the individuals of the same species according to the different elements that modify their forms. A permanent example is mutation and a temporary example is physiognomy.

Distinctive Character (Architecture): Quatremère defined distinctive character in architecture as its response to site. If two of the same building types were built on flat ground versus a hillside, the distinctive character would be how the two meet the ground differently, or if the original type is materialized differently because of a vernacular language or a response to a different climate. This resulted in the physiognomy and originality as a deviation of the type.

Essential Character (Nature): Natural species. The categories of the three reigns of nature (animal, vegetable, and mineral) and more particular nuances specific of age, sex – all marks externally apparent which prevent the confusion of species.

Essential Character (Architecture): Quatremère theorized that all architecture came from three primitive types: the cave, the hut, and the tent. However he also admitted that modern architecture (at that time) was no longer so primitive for these original types to be read and since architecture is entirely man-made, concluded that modern architecture has no essential character. However, in more primitive works, essential character can be considered type.

Feature: any architectural element that makes up the perception of architecture that isn't inherently tied to a critical or typological understanding. Features are isolated from critical readings and typologies.

Image: I am not defining images here, but rather I want to clarify the way in which I speak about images in this thesis. All images have alterity, meaning that they are present autonomous and alternate realities.

Relative Character (Nature): Manifestation of function in an object's or a being's outward appearance. It consists in the way particular strengths or abilities are associated with those different kinds of features, both natural and developed, to certain species or individuals, and which make clear the use for which these features are more specifically destined.

Relative Ideal Character: An expression of society's intellect through idealized and collectively accepted proportions and harmonies. Quatremère would only give this name to the best architectural works. His main example was the Greek Temple. It wasn't subjugated to only conveying function because it was an expression of divinity.

Relative Imitative Character: Can be judged in any built work. It is the ability for a building to convey its purpose or function through its external language (form, scale, proportions, ornament, etc.).

Typology: Typology is sometimes misunderstood as a shape of a building that is repeated. Typology may manifest itself that way in everyday architecture, for example if we talk about gable or shed roofs in housing projects. However, this thesis sees typology as a resonating and repeated spatial composition and condition (ex. centralized plan, cruciform plan) that is created by geometry. For example, all eleven of Palladio's villas do not have the same shape but share a similar geometry that creates similar spatial compositions. Although not the same shape, this is typology put into practice.

VIII. ANNOTATED BIBLIOGRAPHY

Colquhuon, Alan. "Typology and Design Method" (1969)

Here Colquhuon is writing about design is a very specific time, during high modernism. He was writing about design methods that pushed up against the expertise of modernism and cites projects that design with intuition over rational where rational fell short. He claims that typology is usually a back-up in design method, where if the architect cannot find a new solution to something, the architect will used the existing solution, the previous spatial composition, the known typology. He writes about a process of exclusion, this exclusion being specifically our scientific understanding of a design problem, simply the best way to fix it. By excluding a scientific understanding which brings us to an objective answer so quickly, it enables us to see the potentiality of forms as if for the first time, what he describes as with naivety. This expands the possibility for new design to be put forth.

Di Palma, Vittoria. "Architecture, Environment and Emotion: Quatremère de Quincy and the Concept of Character" (2002)

In this essay, Di Palma focuses specifically on Quatremère's three definitions of character and explains how for Quatremère character was not only visual but also unvisual or moral. For this thesis and in architecture, Quatremère's definitions of character are purely relating to the visual. Di Palma puts forth the notion that all architecture, through its character, speaks more to our emotions and intuitions rather than our intellect, architecture is felt as opposed to read. This thesis doesn't align completely with her quotes as it pertains to a notion of environment, atmosphere, and phenomenology, but leverages the point made about our intuition and feeling. The projective associations described in this thesis come from intuitions and not intellectual readings.

Joselit, David. "What to Do with Pictures" (2011)

Joselit writes about the ubiquity of images today and its resulting visual culture. He writes about the work of Seth Price who leverages the ubiquity of images in his art work. He writes about three projects that use three different methods that leverage the plethora of images in our digital world as a source of producing art, and as a means to defamiliarize them to create new affects.

Kulper, Amy. "Out of Character" Published in *Log 31* (Summer 2014)

Kulper writes extensively analyzing and theorizing about Andrew Holder's 48 Characters. She uses Quatremère's definitions of character (which I would specify as distinctive and relative character) to discuss Holder's process and the way Holder's characters are read, as proto-organs lacking species specificity. She also compares his work to that of Robert A.M. Stern in how they both refer to history in different ways. She writes about how Holder is using analog techniques to produce quasi-digital forms to posit himself with the digital project. In this way both he and Stern work as historians in different ways.

Lai, Jimenez. "Plan V Section" and "On History" from *Citizens of No Place* (2012)

Lai's comic "Plan V Section", claims that the section is more easily remembered and recognized than the plan, and criticizes how mainly plan-based projects are often simply plan extrusions. This comic specifically is in dialogue with contemporaries notion of character as it pertains to inexact postures and figures. This thesis claims a similar criticism not of plans but of typologies, spatial composition, and geometry, which are typically drawn in plan, and rather privileges the architectural feature, almost always understood sectionally, or as you see it in front of you. In "On History", Lai speculates on the future generations, asking if our architecture was about this or that, capital A architecture or everyday buildings. This thesis does not take a clear stance on this debate, but does elevate the everyday by reframing it with digital media and thus elevates it to the level of architecture; the Bechers did the same but to the level of art.

Lavin, Sylvia. *Quatremère de Quincy and the Invention of a Modern Language of Architecture* (1992)

Lavin's book, which comes from her Ph.D. dissertation at Columbia University, offers a great summary and synthesis of not only Quatremère's work in the Encyclopedia and his Essay on Character, but also his life work and career. Lavin offers the context of Quatremère's contemporaries and describes how his writing was different. While his contemporaries were seeking answers to questions regarding to origins in architecture and Quatremère's career started there in his initial research about Ancient Egypt, his writing became defined by not tracing origins but rather analyzing change. This manifested in his definitions of character as a means to compare all works of architecture, and his conceptualization of architecture as a language that allowed all architecture to be considered in a similar way.

Moneo, Rafael. "On Typology" Published in *Oppositions* (Summer 1978)

Typology may be misunderstood by many as the shape of something that is repeated and slightly altered. Typology however is more complex than just a shape. Moneo writes about how typology is inherently about spatial composition through geometry. He offers images of typology as diagrams that precede or start design process. Moneo, along with Aldo Rossi, claims that typology in this sense is the very essence of architecture.

Rancière, Jacques. *The Future of the Image* (2007)

Rancière writes about the alterity of images; images provide autonomous and alternate realities. He writes about how images are not faithful copies but rather serve to stand in place of something else. Every image removes information from whatever it is an image of. Rancière writes that the commonest regime the image presents is a relationship between the sayable and the visible and that he visible can be arranged in meaningful tropes. This thesis takes this for granted in the features catalogue, as the images are not

faithful copies of the features but stand in place for them. In the way they are framed and isolated through media, they remove information about typology to privilege other meanings.

Somol, Robert E. "Green Dots 101"(2007)

Somol writes about design practices whose techniques emerged from the roots of Post-modernism in order to produce a post-critical and post-indexical project, or projects that produce projective affect. The practices that Somol describe are the ones who are the firsts to put forth an architecture that is understood through its character (in a contemporary sense) as opposed to its spatial composition, geometry, and typology. He also offers a few design techniques that offer ways to "cool down" a design, or make it less critical and more projective.

Somol, Robert E. and Whiting, Sarah. "Notes around the Doppler Effect and Other Moods of Modernism" (2002)

Here Somol expands his ideas of a post-critical and post-indexical projective project with a duality he calls hot and cool. He claims that the critical project is "hot" in that it feels like work, it is inherently seemingly complicated. The projective project is "cool" in that it conveys an easiness to it, whether the design method is easy or not; he is not getting at the skills of the designers but rather the perception. He furthers this duality with a comparison to the performances of actors Robert de Niro and Robert Mitchum (hot and cool respectively) playing the same character in separate versions of the same movie. De Niro is an expert in his craft and he is intensely engaging his character while Mitchum is calm and collected and leads the audience to question whether he is truly acting, working, or simply being himself on display.

Zago, Andrew. "Awkward Position" (2010)

Zago appropriates contemporary theory of comedy, specifically cringe comedy relating to "The Office", and brings it into the discourse of architecture. He writes that traditional mastery and expertise, or set of skills, in architecture is limited in what it can make, or how "good" its product can be and eventually backfires on itself. He claims that easy expertise, or what Bob Somol might consider "cool practice", can reach a level of "goodness" in design more quickly and easily than traditionally mastery but also has a limit. He writes that the awkward as a design tactic doesn't use traditional mastery but doesn't necessarily critique it either (like Post-modernism so clearly did), and thus has the ability to produce something unpredictable and can supersede the "goodness" or traditional mastery and easy expertise.

OTHER TEXTS

Caillois, Roger. *Mimicry and Legendary Psychasthenia*

de Duve, Thierry. "Bernd and Hilla Becher or Monumentary Photography", Published as the Introduction in *Bernd and Hilla Becher Basic Forms*

Gomez, Adalberto Perez, "The Collapse of the Image and the Represented Object".

Krauss, Rosalind. "Sculpture and an Expanded Field"

Lavin, Sylvia. "Rereading the Encyclopedia"

Neimark, Anna. "On White on White", Published in *Log 31*

Roberts, Bryony. "Beyond the Querelle", Published in *Log 31*

Somol, Robert E. "12 Reasons to Get Back into Shape"

Venturi, Robert. "Both And" in *Complexity and Contradiction*

Vidler, Anthony. "The Third Typology" Published in *Oppositions* (February 1999)

IV. ARCHIVE, OR WHAT THIS THESIS ONCE WAS

Typological Cannibalism

In her essay titled "Why there's no Post-modernism 2", Bryony Roberts coins the term “typological cannibalism[1]” in describing recent projects that posit an intentional and provocative response to pre-existing built conditions. Specifically, rather than seeking some sort of harmony through imitation or completely ignoring the physical contexts, these projects reconfigure existing spatial conditions with the new design through an awareness of the physical context. She describes a new design consuming an old space in order to produce a new whole, thus cannibalism - and with cannibalism - literally the "death" of a typology.

Some projects that she cites as examples of typological cannibalism include the work of OMA and Herzog & de Meuron, both examples of whom Robert Somol has also discussed as creating forms that perform with "easy character[2]". These firms are not using type and typology as a predecessor for design, rather their projects are being involved in a different discussion of spatial reconfigurations and of character.

To talk about type and typology, one can argue, as many have in the past, is to talk about the history of architecture. Vitruvius lays out parameters for building types based on programmatic function. Laugier and Durand theorized that architectural design principles emerged from an imitation of nature based on economy and convenience. Aldo Rossi and Rafael Moneo claim that type and typology precede form and design.

However if type and typology are inherently tied to the history of architecture, how do contemporary practices posit themselves in history in a day devoid of type and typology? And thus Rossi's claim that type is the essence of architecture is no longer valid. This thesis contends that type and typology as a design tool are dead and the conceptualization of architecture must expand not only to include the work of the likes of OMA and Herzog & de Meuron, but also to understand it.

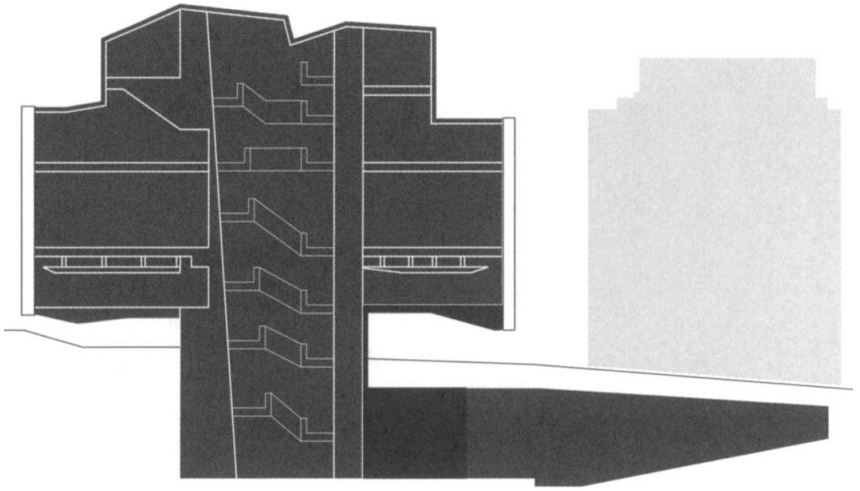


Figure 1: Diagrammatic Section of Herzog & de Meuron's Caixaforum by Bryony Roberts

1 Bryony Roberts, "Why There's no Post-modernism 2" Published in *Log 26*
2 Robert E. Somol, "Green Dots 101"

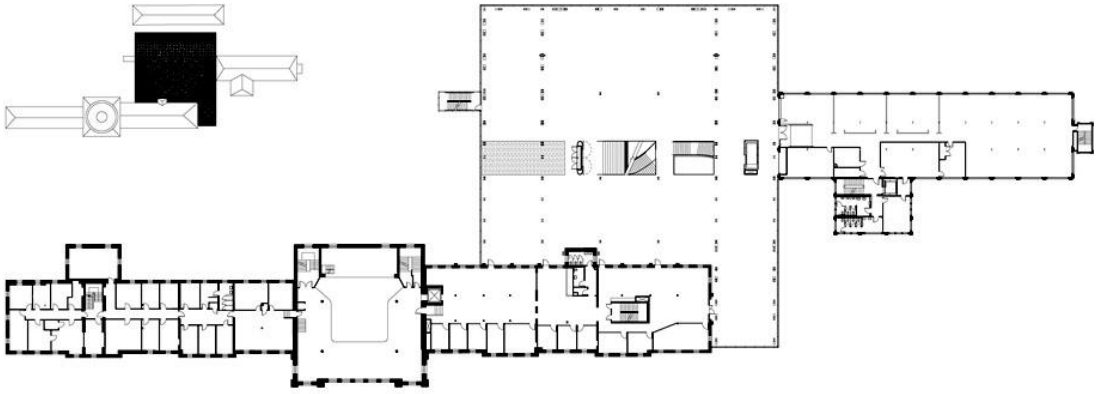


Figure 2: Plan of OMA's Milstein Hall

Figure 3: Photograph taken from above of OMA's Milstein Hall

In OMA's Milstein Hall, the site offers the opportunity to connect to existing buildings, literally. Here Koolhaas places the square studio allowing it to be disrupted by the existing building. What was an old facade becomes part of the interior elevation. Beyond simply the effect and shape of the design move, Koolhaas places major programmatic elements across the center of the square studio linearly. This line not only divides the square but continues the linearity of the existing building. What Koolhaas does well in this moment is impose a seemingly autonomous box onto the site while expanding the language of the existing buildings beyond themselves; the existing buildings' space is expanded into the studio. The building's response is not about typology, rather it is spatial and linguistic resulting in a spatial oscillation of old and new.

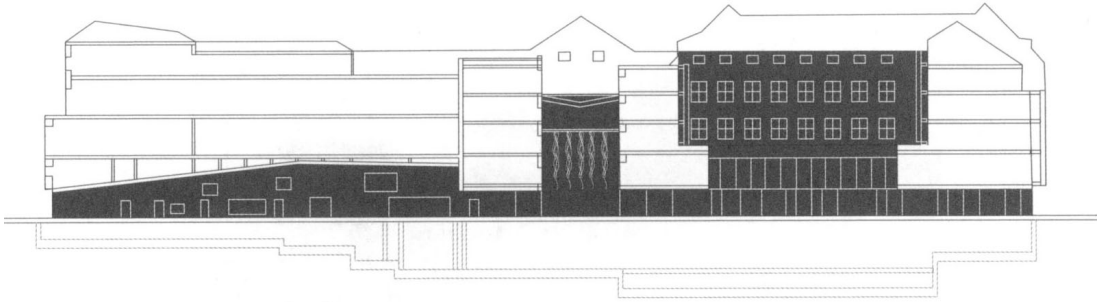


Figure 4: Diagrammatic Section of Herzog de Meuron's Funf Hofe Hotel by Bryony Roberts

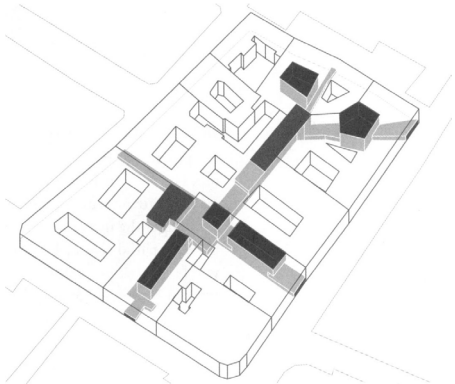


Figure 5: Diagrammatic Isometric of Herzog & de Meuron's Funf Hofe Hotel by Bryony Roberts

In Herzog & de Meuron's Funf Hofe Hotel, they respond to many in between, interstitial, unpleasant, leftover spaces between buildings. They are able to capitalize on the height of the existing buildings to create several pleasant courtyard and atrium spaces. What is most interesting however, is the emergence of the corridor as a solution that stitches many different spaces together. The corridor interlocks the existing buildings whose exterior walls become the new buildings interior thresholds. In the section above the corridor reads as if it would be a large open plan. This misreading of the section is interesting as it alludes to an alternate spatial configuration, the corridor as a pleasant space.

The Digital Project

With the emergence of new software and computer technologies, architects began to create new forms. In order to analyze these new forms in a specific way, Greg Lynn created the brick problem, a project about the part to part relationships of the "blobs" that were coming out of the computer. These forms were completely removed of any understanding of existing typologies, although Lynn would push his work with classification as an analysis tool. It can be stated that the digital project started with the brick problem. In illustrating a lineage of the brick problem, there has been a shift from part to part relationships to part to whole relationships. From this has also emerged an alternate rhetoric of architectural forms. The discussion focuses on the forms' character as conceived as posture, figure, and features.

In Lynn's fountain, the whole is composed by continually joining the toy sharks together along some type of continued radius; however the whole seems uncertain during the joining process and the whole as a form is not registered immediately (although the parts might be).

In Andrew Holder's 48 Characters, he is using and abusing the definition of a "brick", something casted and molded in a shell, to define his forms. Their features are the result of a physical manipulation, this physical manipulation playing out into his definition of the brick. The features are the result of the physical manipulation, the supposed layers of fat, the legs pulled and pinched. These features also make up the registration and understanding of the whole. Despite having different postures and figures, the features are all understood in two manifestations, layers of fat and pointed legs.

Clark Thenhaus's Generic Original blatantly shifts the discussion of the digital project from part to part relationships to part to whole relationships. Where Lynn may be solely focused on the part to part relationships of his forms, Thenhaus's forms are composed of primitives solids. "What fields of small and fine parts cannot accommodate volumetrically, primitive solids do with ease... thus, the reductiveness that Lynn cites of primitives in fact becomes beneficial[3]" in the part to whole problem. His technique is booleaning, stretching, and lofting them together, mathematical commands through the digital software. Similar to Holder, the technique itself results in the features.

Thenhaus is playing a game similar to what Quatremère's definitions of architecture as the endless combinations of elements allude to. Thenhaus does this through the digital technique and deformation. The primitive solids are altered but are still legible in the final form in a coarse resolution as the primitive as a part and in fine resolution as the feature - the clefts and cleavages left behind from the joining of two solids.

These projects, the lineage of the digital project, shift the rhetoric of architectural forms from type and typology to character and features. They are appropriating the conceptualization of architecture as a language and as character of Quatremère de Quincy in projects where understandings of type, typology, and spatial composition in orthographic projection are not useful for analysis or design.

3 Clark Thenhaus, "Part/Problems, Problem/Parts"

Figure 6: Indian Institute of Management by Louis Kahn

Figure 7: Indian Institute of Management by Louis Kahn

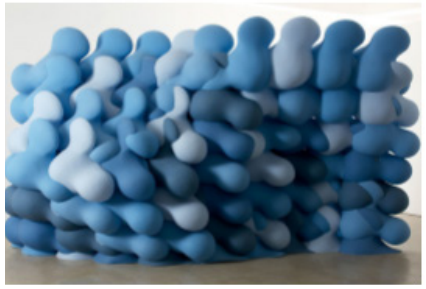


Figure 8: Blob Wall by Greg Lynn

Figure 9: Fountain by Greg Lynn

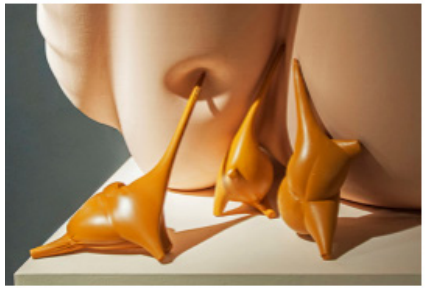


Figure 10: 48 Characters by Andrew Holder

Figure 11: 48 Characters by Andrew Holder

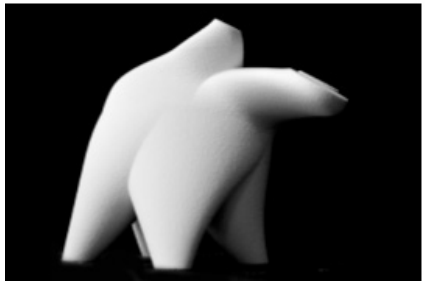


Figure 13: Generic Originals by Clark Thenhaus

Figure 14: Generic Originals by Clark Thenhaus

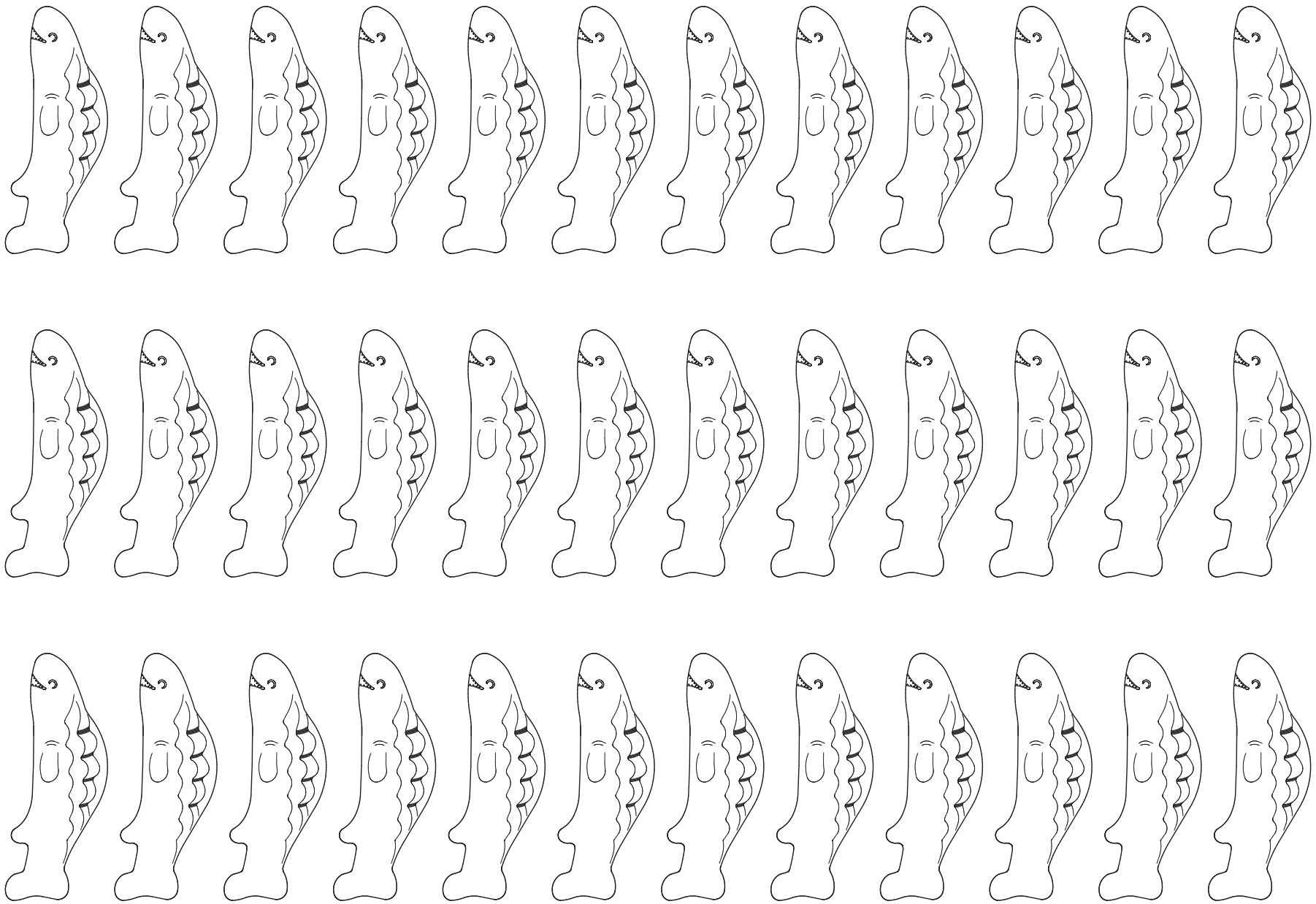


Figure 15: Drawing of the "Parts" in Lynn's Fountain, Drawn by the Author

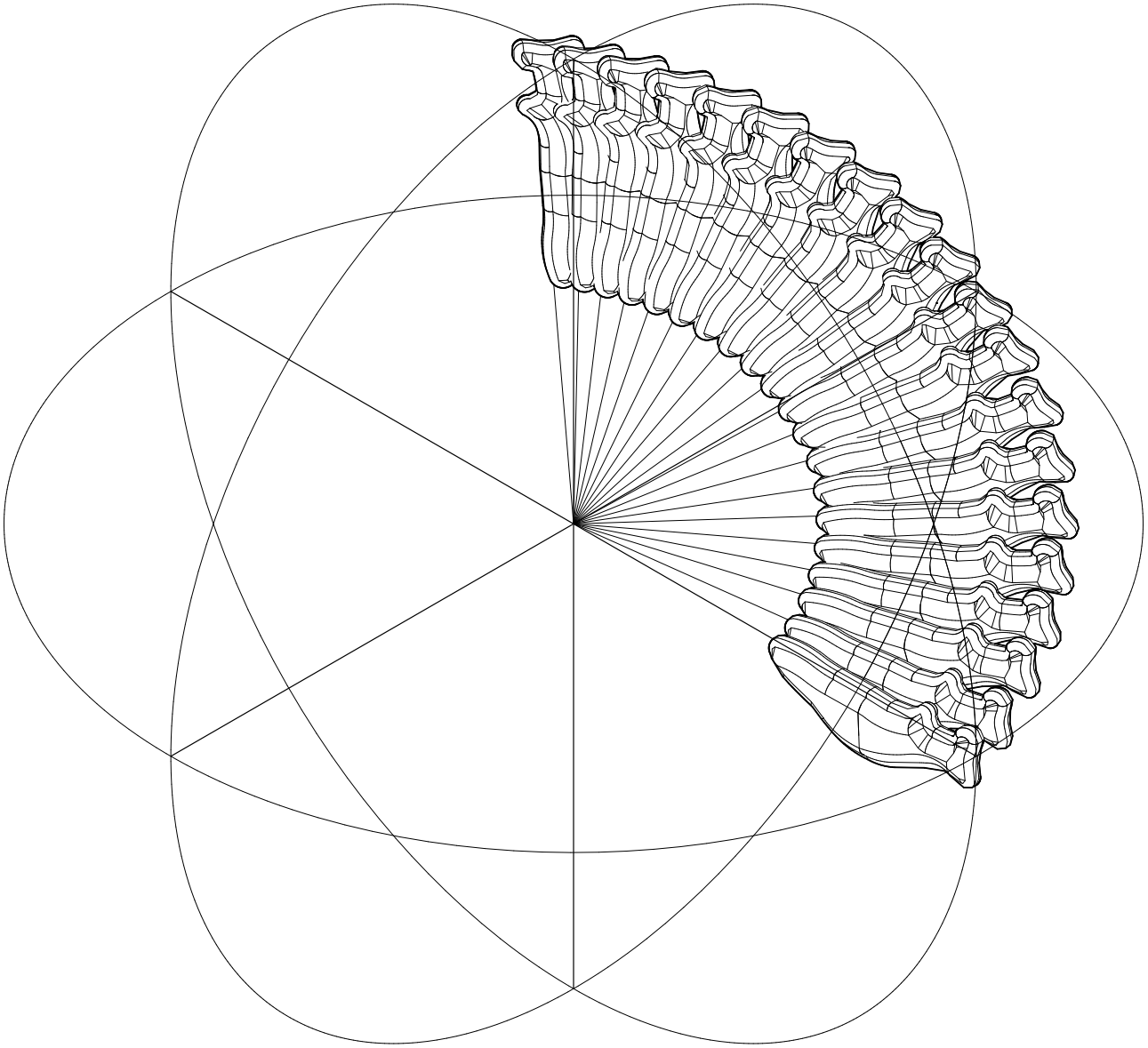


Figure 16 Analytical Drawing of the Technique in Lynn's Fountain, Drawn by the Author. Typical analytical drawings of architectural precedents are spatial and compositional, however traditional modes of analysis are not enough to encompass the technique of Lynn's Fountain.

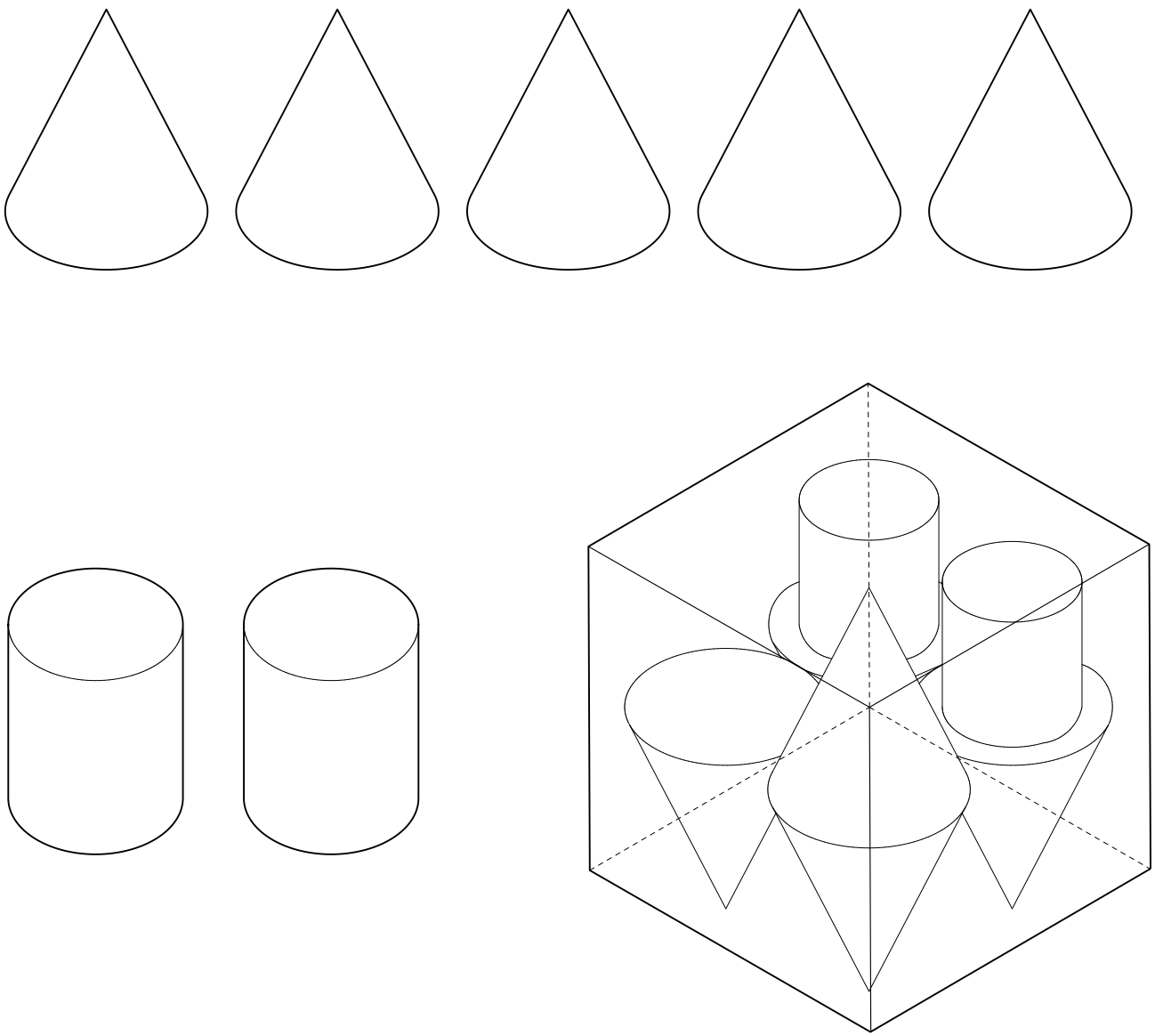


Figure 20: Thenhaus's Primitive Solids as Parts and their Assembly, Drawn by Author

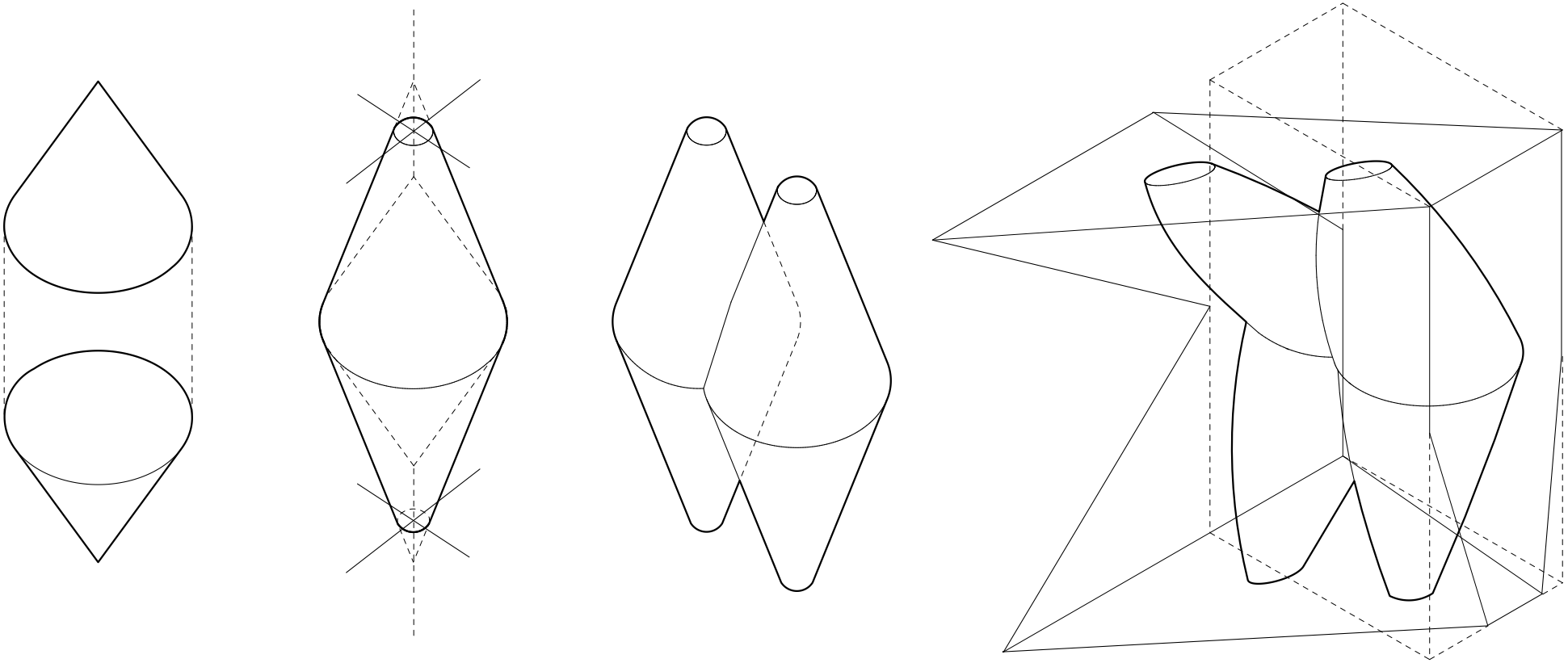


Figure 21: Thenhaus's Technique of Joining and Deforming Primitive Solids, Drawn by Author