

**Time in the Work of Frank Lloyd Wright
Geology, Geography and Geometry of Architecture.**

Sturkenboom, F.J.J.M.

DOI

[10.7480/abe.2023.13](https://doi.org/10.7480/abe.2023.13)

Publication date

2023

Document Version

Final published version

Citation (APA)

Sturkenboom, F. J. J. M. (2023). *Time in the Work of Frank Lloyd Wright: Geology, Geography and Geometry of Architecture*. [Dissertation (TU Delft), Delft University of Technology]. A+BE | Architecture and the Built Environment. <https://doi.org/10.7480/abe.2023.13>

Important note

To cite this publication, please use the final published version (if applicable).
Please check the document version above.

Copyright

Other than for strictly personal use, it is not permitted to download, forward or distribute the text or part of it, without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license such as Creative Commons.

Takedown policy

Please contact us and provide details if you believe this document breaches copyrights.
We will remove access to the work immediately and investigate your claim.



Time in the Work of Frank Lloyd Wright

Geology, Geography and Geometry
of Architecture

Frans Sturkenboom

Time in the Work of Frank Lloyd Wright

Geology, Geography and Geometry
of Architecture

Frans Sturkenboom



23#13

Design | Sirene Ontwerpers, Véro Crickx

Cover photo | Frank Lloyd Wright, Arizona Crater Resort, courtesy of FLLWA (MOMA/AA&FALCU)

Keywords | Frank Lloyd Wright, time, geology, geography, geometry, architecture

ISBN 978-94-6366-726-5

ISSN 2212-3202

© 2023 Frans Sturkenboom

This dissertation is open access at <https://doi.org/10.7480/abe.2023.13>

Attribution 4.0 International (CC BY 4.0)

This is a human-readable summary of (and not a substitute for) the license that you'll find at: <https://creativecommons.org/licenses/by/4.0/>

You are free to:

Share — copy and redistribute the material in any medium or format

Adapt — remix, transform, and build upon the material

for any purpose, even commercially.

This license is acceptable for Free Cultural Works.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

Unless otherwise specified, all the photographs in this thesis were taken by the author. For the use of illustrations effort has been made to ask permission for the legal owners as far as possible. We apologize for those cases in which we did not succeed. These legal owners are kindly requested to contact the author.

Time in the Work of Frank Lloyd Wright

Geology, Geography and
Geometry of Architecture

Dissertation

for the purpose of obtaining the degree of doctor
at Delft University of Technology
by the authority of the Rector Magnificus, prof.dr.ir. T.H.J.J. van der Hagen
chair of the Board for Doctorates
to be defended publicly on
Wednesday 6 September 2023 at 15.00 o'clock

by

Franciscus Johannes Josephus Maria STURKENBOOM,
bouwkundig ingenieur, Technische Hogeschool Delft, the Netherlands,
Born in Zevenaar, The Netherlands.

This dissertation has been approved by the promotor.

Composition of the doctoral committee:

Rector Magnificus

Prof.ir. D.E. van Gameren

Prof.dr.ir. K.M. Havik

chairperson

Delft University of Technology, promotor

Delft University of Technology, promotor

Independent members:

Prof.ir. P.E.L.J.C. Vermeulen

Em.Prof.ir. W. Van den Bergh

Prof. J.M. Desmond

Prof.dr.ir. D. de Meyer

Dr. S. van Tuinen

Prof.dr.ing. C.M. Hein

Delft University of Technology

University of Aachen, Germany

Louisiana University, USA

University of Ghent, Belgium

Erasmus University Rotterdam

Delft University of Technology,

reserve member

I am a man acme of things accomplished, and an encloser of things to be.

My feet strike an apex of the apices of the stairs,
On every step bunches of ages, and larger bunches between the steps,
All below duly traveled-and still I mount and mount.

Rise after rise bow the phantoms behind me,
Afar down I see the huge first Nothing, the vapor from the nostrils of death,
I know I was even there....I waited unseen and always,
And slept while god carried me through the lethargic mist,
And took my time...and took no hurt from the foetid carbon.

Long I was hugged close...long and long.
Immense have been the preparations for me,
Faithful and friendly the arms that have helped me.

Cycles ferried my cradle, rowing and rowing like cheerful boatmen;
For room to me stars kept aside in their own rings,
They sent influences to look after what was to hold me.

Before I was born out of my mother generations guided me,
My embryo has never been torpid....nothing could overlay it;
For it the nebula cohered to an orb....the long slow strata piled to rest it on....
vast vegetables gave it sustenance,
Monstrous sauroids transported it in their mouths and deposited it with care.

All forces have been steadily employed to complete and delight me,
Now I stand on this spot with my soul.

Walt Whitman, *Leaves of Grass, Song of myself*.
Harmondsworth: Penguin, 1986 [1855] p. 77.

“The rock-ledges of a stone-quarry are a story and a longing to me.
There is suggestion in the strata and character in the formations.
I like to sit and feel it, as it is. Often I have thought, were great
monumental buildings ever given me to build, I would go to the
Grand Canyon of Arizona to ponder them. (...)

For in the stony bonework of the Earth, the principles
that shape stone as it lies, or as it rises and remains to be sculptured
by winds and tide- there sleep forms and styles
enough for all the ages, for all of Man.”

Frank Lloyd Wright, *In the cause of Architecture III*.
The meaning of materials: stone.

Acknowledgements

I Like to express my gratitude to:

promotor Prof.ir. Dirk van Gameren, for sharing his Wright-enthusiasm and bringing me back to earth whenever I soared to my literary and philosophical heavens;
promotor Prof.dr.ir. Klaske Havik, for sharing her knowledge of and enthusiasm for architectural phenomenology and for encouraging the research whenever necessary;
all the members of the Situated Architecture Research-Group of the TU-Delft, for presenting their research and commenting upon mine during my PhD trajectory;
Patrick Healy, for his philosophical enthusiasm in the same group and for kindly peer-reviewing my ongoing investigations; Em.Prof.ir. Wim Van den Bergh, for the invitations to share my knowledge on Wright and architectural history with the students of the Academy of Maastricht early in my career and for opposing during my defence; Prof. J. Michael Desmond of the Louisiana University, for kindly peer-reviewing a first Wright-article of my hand and for opposing; Prof.dr.ir. Dirk de Meyer, who once, without knowing, kindled my Baroque passions by writing on Johan Santini Aichel—the fruits may come to him in this study—and for opposing; Prof.ir. Paul Vermeulen, for commenting on a presentation of my research and for opposing;
dr. Sjoerd van Tuinen, for the enthusiast exchanges on the subject of Mannerism, and for opposing; Prof.ir. Lars Spuybroek, for all the architectural and philosophical exchanges during the last years; dr.ir. Gijs Wallis de Vries, his writings on Piranesi accompanied my apprenticeship in architectural theory; the Arnhem 'bench': Ad Habets and Ton Verstegen, for sharing Arnhem gossip and for listening to my Delft counter-gossip; Twan Verheijen; for the communal projects on architecture and the weather, which had their reflection on my study, and for helping in the digital make-up of the first version of the research; the members of the Kenniskring of the Research Group Theory in the Arts of Artez, University of the Arts—chaired by Peter Sonderen—for so often listening to my presentations on Mannerism and on Frank Lloyd Wright and discussing and encouraging them; Véro Crickx, for her patience in the graphic design of this book; Katherine M. Prater of the Avery Library of Columbia University for all the help with the illustrations; Jurjen Zeinstra, for all the help in finishing this PhD trajectory and for assisting during the defence ceremony.

Finally, last but not least, Marike Fleuren, for her patience with all my frustrations, black days, and Wright-filled weeks; for energizing and bringing me back on track wherever I lost it; for affectionately accepting and even enjoying that all our holidays were disguised architecture & urbanism excursions; my sons Wim and Teun, for keeping me rooted in the future.

Contents

Abbreviations and technical terms	17
Summary	19
Samenvatting	21

Introduction 23

Architecture and nature 23

Wright-space & Wright-time 25

Wright-space 25

Wright-time 26

Earth as a building 27

Geology 27

Geography 28

Geometry 29

Methodology and theoretical framework 30

Phenomenology (hermeneutics/gesture/language) 30

Architectural phenomenology 33

Romanticism & organicism 39

A dialogue with historiography 42

The sources. Buildings, drawings, texts 44

Brief guide through the chapters 46

1 The dead and the living city 49

1.1 **Abstract** 49

1.2 **The metropolis: the disappearing city** 51

1.2.1 Immunizing interior space 51

1.2.2 The blank façade 56

1.3	The SC Johnson Administration Building: streamlining the city	61
1.3.1	Introduction	61
1.3.2	The Baroque city	61
1.3.3	Building speed	67
1.3.4	A first grotto	69
1.3.5	The terrestrial and the celestial city	72
1.4	Broadacre: The reappearing city	76
1.4.1	Introduction	76
1.4.2	Broadacre: studying the model	77
1.4.3	Settling: from the city of speed to the city of the earth.	88
1.4.4	Neighbours	90
1.4.5	Broadacre: spatial organization.	93
1.4.6	Twin city	96
1.5	Wright's urbanism	100
1.5.1	Levine's stance on Wright's urbanism	100
1.5.2	Nature shining through	103
1.5.3	An organic city?	107
1.5.4	Roman roots?	109
1.5.5	A new neighbourhood: the round lot	112
1.6	Summary: disappearing and reappearing cities	119

2 The villa 123

2.1	Abstract	123
2.2	Time	125
2.2.1	Vitruvius and his clocks	125
2.2.2	Templum and tempus	127
2.2.3	Private time: the closing of the interior	132
2.2.4	The clock of remembrance	134
2.2.5	Architecture and its templa	135
2.3	Wright and his templa	136
2.3.1	Introduction	136
2.3.2	The hearth and the city wall: constructing a safe space	139
2.3.3	The ritual of entry	144
2.3.4	The multiple window and the multiple terrace door	146
2.3.5	Furniture	149
2.3.6	The clerestory and the high window	151

2.3.7	The electric skylight	155
2.3.8	The terrace, the balcony and the eave	158
2.3.9	Inaugural gestures in the light of situatedness	162
2.3.10	Profanation	164
2.4	Multiplication and dynamics of the frame	165
2.4.1	From the one to the multiple	165
2.4.2	Tectonic aspects of the dynamic frame	171
2.4.3	I and my chimney	175
2.5	The story of the villa	179
2.5.1	The villa as a special frame: otium and negotium	179
2.5.2	The villa as a theater: staging the settler	182
2.6	Recapitulation and conclusion	183
3	Descent into the earth	185

3.1	Abstract	185
3.2	Taliesin or beyond the landscape	186
3.2.1	The Grotto	186
3.2.2	Settling again	188
3.2.3	Wright and Palladio: the villa as a stage and a face	189
3.2.4	To view or not to view.	193
3.2.5	The house as an open camp	199
3.2.6	Natus est. A house born from the hill	202
3.2.7	The climbing horizon in the interior	204
3.2.8	Climbing into the top: towering	208
3.2.9	The immature vertical: the house as a bas-relief of the earth	214
3.3	The house at Bear Run	218
3.3.1	Introduction	218
3.3.2	Landscape as oecumene	220
3.3.3	Descent into the canyon: an architectural cascade	221
3.3.4	Architecture between nature and culture?	223
3.3.5	Matter and spirit	227
3.3.6	Time crystals or how we should see the rock	230
3.3.7	Shallow space	235
3.3.8	On the balcony	237
3.4	Conclusion	239

4 Architecture as adventure 241

- 4.1 **Abstract** 241

- 4.2 **Architecture as geography** 242
 - 4.2.1 The local data 242
 - 4.2.2 Scientific and transcendental geology 244
 - 4.2.3 Designing as a remixing of the strata 248

- 4.3 **The geographic expedition and its objectives** 249
 - 4.3.1 The scientific expedition 249
 - 4.3.2 Architecture graphing earth 254
 - 4.3.3 Organic architecture 265

- 4.4 **Dressing up with American nature** 270
 - 4.4.1 On adoption and grafting 270
 - 4.4.2 Wright's four elements 274
 - 4.4.3 On Drilling towers and fountain heads 276

- 4.5 **The far and the near** 280
 - 4.5.1 Indigenous and exogenous 280
 - 4.5.2 Genius loci or Genii loci 281
 - 4.5.3 Settler motifs 286
 - 4.5.4 Drilling into the cosmic heart 287
 - 4.5.5 What's in a name? 292

- 4.6 **Silhouettes: riding the earth** 295
- 4.7 **Recapitulation and conclusion** 300

5 Manner and style 301

- 5.1 **Abstract** 301
- 5.2 **A truly American style** 303

- 5.3 **History and tradition** 305
 - 5.3.1 The architectural subsoil and its subterranean lines 305
 - 5.3.2 To compose or not to compose: a singular Wright 306
 - 5.3.3 Wright deconstructing the Classicist and the Victorian style 307

5.4	Mannerism	310
5.4.1	A short review of the traditions we already met	310
5.4.2	Manner as individualization, differentiation, and personalization	310
5.4.3	Rejuvenation: bending form back to formation	312
5.4.4	Human architecture in a natural series	315
5.5	Romanticism	319
5.5.1	The ruin: the journey to the post-human	319
5.5.2	Science fiction architecture	321
5.6	Stylistic differentiation	326
5.6.1	Organic or eclectic, nativity or travesty?	326
5.6.2	Matters of expression	328
5.6.3	Wright's stylistic continuum	330
5.6.4	A singular Wright	334
5.7	Geometry	335
5.7.1	Wright's geometries: Baroque and Mannerist operations on basic geometry	335
5.7.2	Polygonal grids in the plans	340
5.7.3	Figures of growth, latent curves	341
5.7.4	Typologies: great organizing figures, the limits of classical figures	344
5.7.5	Form and formation	346
5.8	Tectonics	357
5.8.1	Tectonics as gesture: Wright's element	357
5.8.2	The Gladney house	359
5.9	Conclusion	361
6	Conclusions	363

6.1	A Romantic, a contemporary and a future Wright	363
6.2	Answering the questions of the study	364
6.2.1	Why time instead of space?	364
6.2.2	A natural architecture: Earth building	366
6.2.3	Continuity and separation: the role of art	367
6.2.4	Natural techniques and human techniques	368
6.2.5	Native to the place, the man and the time	369

6.3	A contemporary and a future Wright	374
6.3.1	Romance	374
6.3.2	Terrestrial and celestial cities	376
6.3.3	Time: a new templum of the sky and a new templum of the earth	381
6.3.4	A transcendental geology of architecture	384
6.3.5	Geography or how to define a place	386
6.3.6	Beauty	390

Literature 393

Glossary 399

List of Figures 408

Curriculum vitae 417

Abbreviations and technical terms

Abbreviations found in the footnotes and captions are explained below.

AA&FALCU	Avery Architectural & Fine Arts Library, Columbia University
AB	An Autobiography
CWD 1-3	Complete works: designs Frank Lloyd Wright, Complete works: Vol. 1:1885-1916; Vol. 2:1917-1942; Vol. 3 1943-1959 Bruce Brooks Pfeiffer, P. Gossel, Hong Kong, Köln, London, Los Angeles, Madrid, Paris, Tokyo: Taschen, 2016.
CW1-5	Collected Writings Frank Lloyd Wright, <i>Collected Writings 1 t/m 5</i> , ed. Bruce Brooks Pfeiffer, New York: Rizzoli publishers, 1994.
FLW	Frank Lloyd Wright
FLLWFA	The Frank Lloyd Wright Foundation Archives
LC	The Living City Frank Lloyd Wright, <i>The Living City</i> , New York: Meridian, 1970 [1958].
MNG. 1-12	Monographs 1-12 Frank Lloyd Wright, <i>Monographs 1 t/m 12</i> . Text, Bruce Brooks Pfeiffer; Photographed and edited by Yukio Futagawa. Tokyo, Adata Publishers, 1986.
MOMA	The Museum of Modern Art
SH 1-8	Selected Houses 1-8 Frank Lloyd Wright, <i>Selected Houses 1 t/m 8</i> . Text, Bruce Brooks Pfeiffer; Photographed and edited by Yukio Futagawa. Tokyo: Adata Publishers, 1991.
UA	Unpacking the Archive Bergdoll, Barry, & Gray, Jennifer, <i>Frank Lloyd Wright, Unpacking the Archive</i> , New York, MOMA, 2017
WP	The Wasmuth Portfolio Frank Lloyd Wright, <i>Gli anni della formazione, studi e realizzazioni</i> . Introduzione di Vincent Scully. Milano: Jaca Books, 1986 [Ernst Wasmuth A.G. Berlin 1910/1911]

Technical, architectural and philosophical terms are explained either in the text, by using a clause, or in the footnotes, and only the first time they appear. They may also be found in the glossary at the end of the dissertation.

Summary

For a long time Wright's architecture has been theorized in terms of space. Although space was certainly a key-word in Wright's discourse, we can neither see it as an objective, three-dimensional space, nor as a more subjective, intimate space. In Wright's architecture, the third dimension implies time, an axis mundi, a story about the earth as being built. Architecture faces the task to explicate this geological dimension. Geology here not only pertains to the crust of the earth and its materials. It also refers to flora and fauna, all the life having co-built the earth. Designing means the digging up of this natural history of a place that should come to resonate in structure, texture, type, pattern, colour and form. Architecture finds its reason in this geological time, it memorizes that time. Every Wright House is a monument of the American landscape. A new space appears: no longer Cartesian three-dimensional space, not human-centred place-space, but the shallow space of the building as a bas-relief of the earth, "growing out of the ground into the light."

Wright saw it as a personal assignment to free American architecture from European Eclecticism in order to finally come to "a truly American architecture." He sought inspiration in the landscape, the earth as being built and as still building itself. Wright's oeuvre might be read as a journey of discovery of the American landscape. The light, horizontal parts of his buildings refer to an 'on the way,' they remind us of vehicles and tents. The stone parts refer to a local earth. The 'fleet' of his buildings move over the earth to sample it. In its images we find the archetype of a scientific expedition comparable with the great geographic expeditions of the 19th century. The expedition discovers the styles of American nature as the possible ingredients of a "natural architecture."

The geographic expedition mirrors the adventures of the wanderer and the settler, according to Wright the two characters united in the American soul. It mirrors the adventure of a people of colonists trying to get situated on a terra incognita, trying to root in the American earth while dressing up in American nature.

If nature must become the soul of architecture, geometry is the powerful instrument to analyze nature. It is an instrument teaching us the intellect of creative nature. Wright used a polyphony of geometric styles, from basic geometric forms to proto-fractals, inventing a style reconciling form with formation. If "an organic building should grow out of the ground into the light, holding that ground as a basic part of itself," the intelligence of the ground—of nature building the earth—reflects itself in the geometrical patterns of architecture.

Samenvatting

Wrights architectuur is altijd geanalyseerd in termen van ruimte. De apologeten van de moderne beweging zagen er een objectieve, Cartesiaanse ruimte in, de fenomenologen van na de oorlog een meer plaatsgebonden, subjective ruimte. Beide hadden geen oog voor het feit dat de derde dimensie—de verticaal—in Wright's architectuur gezien moet worden als een temporele dimensie, een *axis mundi*. Deze verwijst naar de aarde als een bouwwerk, gebouwd door de creatieve krachten van de natuur. In het ontwerp moet de architect deze tijd van formatie, deze geologische tijd ontvouwen en zichtbaar maken. Geologie heeft hier niet alleen betrekking op de aardkorst en haar materialen. Ze verwijst ook naar flora en fauna, naar al het leven dat heeft bijgedragen aan de bouw van de aarde. Ontwerpen betekent dan het 'opgraven' van die natuurlijke geschiedenis die terugkeert in structuren, texturen, patronen, vormen, kleuren en typen. Architectuur vindt weerklank in de geologie. Ieder Wright-huis is een monument van het Amerikaanse landschap. Een nieuw soort ruimte dient zich aan: niet langer de Cartesiaanse driedimensionale ruimte, noch de antropocentrische ruimte, nee, de ondiepe ruimte van het gebouw als een bas-reliëf van de aarde.

Wright zag het als zijn persoonlijke taak om de Amerikaanse architectuur te bevrijden van het Europese Eclecticisme en een "waarlijk Amerikaanse architectuur" te ontwerpen. Hij zocht inspiratie in het landschap, de aarde als gebouw. Wrights oeuvre kan gezien worden als een ontdekkingstocht van het Amerikaanse landschap. De lichte, horizontale delen verwijzen naar een 'op weg', ze herinneren ons aan voertuigen en tenten. De zware, stenen delen verwijzen naar de lokale aarde. De vloot van zijn gebouwen beweegt over de aarde om deze te bemonsteren. Wrights onderzoek kan vergeleken worden met de grote geografische expedities uit de 19e eeuw. Het ontdekt de stijlen van de Amerikaanse aarde als de mogelijke ingrediënten voor een "architectuur van en voor de natuur", zoals Wright het zelf noemde.

Als de natuur de ziel van de architectuur moet worden, dan heeft de architect een krachtig middel nodig om de natuur te leren kennen. Dit middel wordt gevonden in de geometrie, een instrument dat ons het intellect van de bouwende natuur leert. Wright gebruikte een veelvoud van geometrische stijlen, van eenvoudige primaire vormen tot proto-fractals. Zijn doel was om vorm met vorming te verzoenen: de gebouwde en noch steeds bouwende aarde was zijn uitgangspunt. Het programma voor een "organische architectuur"—door Wright gezien als een expliciet alternatief voor de

Moderne Beweging—laat zien hoe de continuïteit tussen architectuur en natuur zijn beslag krijgt: “Een organisch gebouw groeit vanuit zijn grond naar het licht en houdt deze grond vast als een wezenlijk deel van zichzelf.”

Introduction

Architecture and nature

In times desperately in need of a deeper understanding of the relation between architecture and nature, architects may feel the obligation to learn how nature has built the earth and all that grows upon it. When orientating themselves, they will soon come across the name of Frank Lloyd Wright, who—in the modern era—was the first to look at earth as a building (a verb and a substantive) and to explicitly thematize the time of natural history as a dimension of architecture and architectural reasoning. Wright sought a continuity between architecture and nature. In the era of the Anthropocene, in which we can no longer negate the fatal repercussions of human’s decision to separate from nature and to subject it, such a thought seems highly pregnant.

It will be the coming era that will decide about Wright’s thoughts. More than ever, architecture will be confronted with the question if we, humans, are able to build *with* nature instead of *on top of* it or *opposing* it. We will be forced to again pose Wright’s own questions: what does it mean to strive for “a natural architecture?” What will be the role of technique in such a natural architecture? And: what does it mean to be situated and to make an architecture “proper to the place, the man and the time”? These questions become urgent in a time in which the specificity of place becomes volatile in changing climate regimes and in which globalization tends to efface all locale culture; in which humans seem more than ever ‘on the move;’ in which time—the time of the Anthropocene—heavily confronts us with an earth irreversibly changed by the human, though at the same time ‘out of control.’ When we are dealing with unforeseen conditions, treading a terra incognita, the notion of the ‘settler’ able to adapt to a difficult situation and adopting a strange earth, seems topical more than ever. It will be one of the key notions in this study. Wright’s idea of the dwelling as an open camp, a sojourn ‘perforated’ by the circumstances, may even become prophetic.

In all these questions, Wright's thinking will show us the consequences of a decision to build *with* the earth instead of opposing it and to pose the separation of architecture and nature as a real question directly bearing on the status of art and architecture themselves. It will show us the possibilities of a "natural architecture" fully honouring progressing modern technique, while never forgetting its own artistic lead on the way to the future.

Measured in terms of the current debate, Wright may appear as an ambiguous figure in many ways. He aspired to build "in the nature of materials," but at the same time he was prepared to test that "nature" in order to find its unknown qualities. He wanted buildings to "marry the landscape" but at the same time this marriage did not exclude a massive transformation of the surface of the earth. But in all of his efforts we can see that earth means something more than only the indifferent ground for a human architecture. Wright often wrote that name, Earth, with a capital letter. And this already indicates he saw it as something else than an object. As what? This is the guiding question of this study, and the title *Time (in the work of Frank Lloyd Wright)* gives us the direction to search for answers. If we think of earth as a building—as having been built and still building—and if we think of architecture as building in continuity with that earth in formation, isn't architecture far more a temporal than a spatial profession?

Somewhere in his *Über den Begriff der Geschichte* (On the concept of history) Walter Benjamin tells us that a historic era will only come to speak to us when it holds a promise for the future, when it contains a prophesy. Stronger, it is even this prophesy that makes the past readable and elucidates the present.¹ As a consequence Wright's prophesy on a "natural architecture" will make us look differently at the existing historiography and Wright-exegesis, which all too eagerly made Wright an exclusively modern, 20th century architect, an architect fully occupied by the idea of *architecture as space*.² It may even be necessary to give Wright back to the 19th century, to the Romantic era, which found its strongest philosophical expression in Schelling's philosophy of the organic and which may still be heard in Mahler's *Lied von der Erde* (Song of the Earth). Wasn't it Wright himself who pleaded for an organic architecture, which would indeed become the other face of 20th century architecture? A Romantic face?

1 Benjamin's formulation stresses the idea that it is a coming era that will redeem the past: „*Wie Blumen Ihr Haupt nach der Sonne wenden, so strebt kraft eines Heliotropismus geheimer Art das Gewesene der Sonne sich zuzuwenden, die am Himmel der Geschichte im Aufgehen ist.*“ Walter Benjamin, *Über den Begriff der Geschichte*. In *Gesammelte Geschriften Bnd 1-2*, Frankfurt, Suhrkamp, 1980, p. 694.

2 As the title of one of the most famous documents of the historiography of the Modern Movement rings. Bruno Zevi. *Architecture as Space. How to look at architecture*. New York, Horizon Press, 1957.

Wright-space & Wright-time

Wright-space

The first question that faces us is: why time instead of space? Architectural theory and criticism in the twentieth century mainly interpreted Wright's architecture as a spatial phenomenon. This was only logical: the early Wright saw his work as a "destruction of the box," the opening up of the closed interior of the traditional house. The destruction was supposed to lead to a building in which the interior rooms would open up to each other. This spatial continuity would be prolonged in the relation between interior and exterior space, thus cancelling the difference between inside and outside. Wright's plea for a spatial continuity seems to be coherent with the concept of transparency so dear to modern architects in general.

Nevertheless it remains to be seen if Wright's architecture is the product of a thinking in terms of a transparent Cartesian space. When looking at the intimate character of Wright's houses, *room* seems to be a more adequate word. Room is often considered to be a more subjective, experienced space. In Wright's houses it is centred on the hearth and it expands into the outside, stretching out toward the largest circle, that of the horizon. We may recognize here the phenomenological couple of place and space. I must immediately add that place is not merely a human, social construct here, as it was for the post world-war II generation. For Wright it implies a natural history and thus the temporal depth of the earth as a building unfolding in the landscape. Yes, architecture explicates place as a social gathering, but this *socius* comprehends all that has contributed to build such a place, everything from the lithic to the vegetative, from the animal to the meteorological; including the human.

Because 20th century-conceptions of space and room do not suffice to understand fully what happens in Wright's architecture, it becomes necessary to find a new concept of space, a concept doing justice to this temporal dimension. Monitoring closely how Wright wanted to build in continuity with the earth—geological layers "suggesting building" as he phrased it—I will propose a concept of space as unfolding from the temporal depth of the earth, space as a *bas-relief of the earth*. Visiting Taliesin-North and Fallingwater, I will substantiate such a new conception of space.

Wright-time

When we take a closer look at Wright's buildings, we will even see that labelling it as three-dimensional, Cartesian space would be a severe mistake. The supposed continuity between inside and outside does not lead to a homogeneous, neutral space, as in the case of *De Stijl*. The indifference so typical of modern space, resulting in the idea of the building as a prototype to be repeated on whatever spot on the surface of the earth, is severely opposed in the idea of extension as a differing, an accounting of the geographical differences as the varying qualities of places. This also means that the third dimension, perpendicular to the surface of the earth, assumes the quality of an *axis mundi*. The vertical axis is not neutral. It implies a *temporal* dimension, the story of the genesis of a local earth and hence the unfolding of a world. *Axis mundi* implies the discovery of earth as stratified, a landscape as something built, a building in all the temporal dimensions of past (being built), present (building itself) and future (to be built). I will investigate how in such a conception, architectural design manifests itself as a geology of place, the account of the depth of earth as a story of creation. For Wright designing means probing the strata, *sampling* earth. Stratification not only pertains to possible building materials to be won on the spot, but also to flora, fauna, the weather and all the life having passed through and over the site, including the peoples that might have inhabited it: all these past voices must be acknowledged in the design process. We will see that place is produced (literally: led before us) by architecture which remembers, transforms, and eternalizes all the voices having spoken and speaking out as *genii loci*,³ making place a living gathering in which the inhabitants get co-involved. In this study I will suggest to think of atmosphere in terms of this deep time. All those time-lines intertwined and bound together create atmosphere as the product of the intuition of place as a *singular* assemblage. An intuition of the *genii loci*.

Still, the question: why time? is only partially answered. If the third dimension manifests itself as a temporal dimension, why was this temporal dimension so important for Wright? I will answer this question by travelling back to 19th America, an era in which American art tried to define an own identity no longer dependent on the history of European art. Wright's plea against the European neo-styles still colonizing American art, is famous.⁴ But it hides a deeper question of a new people of colonists, trying to get situated on a new continent, rooting in a new earth, finding

³ I will come back on the notion of the *genius Loci* and my pluralization when treating on architectural phenomenology on page 34.

⁴ FLW, Still in 1959 Wright unambiguously spoke of the need of an own American culture. FLW, *A Culture of our own*, CW5, p. 347.

new horizons, inaugurating a new life. I will argue that it is this cultural situation that leads to a heightened consciousness and sensitivity for the American landscape. For Wright it means that a building must become an organic part of the landscape. Architecture must dress up with the American earth whose new inhabitants must adopt an American nature. Or as he puts it himself: “an organic building should grow out of the ground into the light, holding that ground as an essential part of itself.”⁵ Building an own home is a moment of getting baptized as an American.

Wright’s architecture is a situated architecture, situated both in terms of historical time and of place. In this research I will analyse this situatedness using Heidegger’s essay *Bauen, Wohnen, Denken* (building, dwelling, thinking), in which building is inextricably bound up with dwelling in the sense of *habitare*: a getting habits, a coming to peace with the environment. I will try to capture this time of getting situated with the Heideggerian concept of the *while*, the time of getting attuned to the surroundings. I will ask how Wright’s architectural ‘apparatus’ framing the situation (both site and occasion) accommodates this time of the *while*.

Earth as a building

Geology

If architecture manifests itself as a geology of place, this already implicates that the products of nature may repeat themselves in the products of the human. It implies that architecture is able to frame nature, that ‘nature building’ may become the example of ‘human building.’ It implies a *geology of architecture*, tracing the roots of architecture in nature building a world. As we will see, Wright constantly stresses nature as an example for architecture, in a structural/constructional, a material, and an ornamental sense. Such an exemplarity—for Wright: human *learning* from nature and human *feeling* into nature—implies a so called ‘transcendental geology,’ tracing the common spiritual and material roots of nature and the human, of the earth and of architecture. I will show how such a transcendental geology also unfolds to an ethical dimension, the dimension of humans co-building with earth, of humans co-dwelling with nature.

⁵ FLW, AB, 363

When treating on this subject, it will be necessary to give the different meanings of the term geology—both the story of the formation of the planet earth and the natural history tracing the common roots of nature and of the human⁶—a historical background by demonstrating how for the Romantic era the former comprehends the latter. I will do so in a conversation with Friedrich Schelling.⁷ For Schelling the transcendental or spiritual geology loops back into the physical geology of the building earth. It loads it with an ‘electricity’ that will make earth the true object feeding art and philosophy. Such an electricity may also be found in one of Wright’s most mysterious sentences, which will return regularly in our study: “For in the stony bonework of the Earth, the principles that shape stone as it lies, or as it rises and remains to be sculptured by winds and tide—there sleep forms and styles enough for all the ages, for all of man.”⁸

Finally this philosophical detour will help us to understand two of the most essential notions in Wright’s philosophy, the notion of ‘ground’ and that of ‘organicity.’

Geography

The geology of a site always manifests itself in the geography of the landscape. For Wright, in his effort to free American architecture from the European neo-styles en vogue in his time, the landscape was the true source of style. He considered it the only building worthy to inspire the American architect. Wright’s *oeuvre* reads as a geographical expedition discovering geographical variation as a ground for architectural expression. In this research I will compare Wright’s endeavour with the great geographical expeditions of the 19th century—those of Von Humboldt, Bonpland, Lyell, Haeckel, and Darwin—who all researched the varying phenomena of nature as the products of a deep time, the time of a natural history. In this comparison I will reconstruct Wright’s architecture as a scientific expedition ‘digging up’ and laying out the styles of the earth, from the sandstone to the prairie-flower, from the desert boulder to the saguaro-cactus. In doing so I will echo Wright’s statement that “every creature worthy the name has got style in some degree” and may thus inspire the architect.

⁶ I will come back on this transcendental geology in § 4.1.2. The transcendental geology pertains to the history in which nature constructs the human mind in a and the human history in which nature stepwise constructs the human mind in a stepwise process of potentiation.

⁷ I will introduce Schelling properly on page 39 ff.

⁸ FLW, *In the cause of Architecture III: the meaning of materials-stone*, CW1, p.275.

Geometry

The scientific expedition, implied in Wright's architecture, is in need of specific instruments to 'describe' the different styles of creative earth and to transform them to the data of a terrestrial architecture. Architecture must dispose of the power to react on relief, to abstract patterns from natural phenomena, to structure space and to refine structure to ornament. Wright's main instrument is geometry, originally meaning the measuring of earth. Geometry is not merely a synthetic but before all an analytical means for Wright, enabling him to understand the geological and geographical characteristics of a site.

Like in geo-logy and geo-graphy, the geo- of geo-metry is something else than merely an indolent mass waiting to be measured or delimited by human's intellectual tools. Geo—earth—implies time, the process of a natural history, in which nature's intellect unfolds in ages or stages, in all the products of *natura naturata*. Architectural geometry must be able to describe and visualize the logic of form used by creative nature, by *natura naturans*. "Geometry is the grammar of form." But it must also be able to capture the process of growth itself as an unfolding. If a building, like a flower, "grows out of the ground into the light,"⁹ geometry must be able to capture the dynamics of such an appearing. In Wright's architecture this happens in tectonics, which structures the design and transforms structure to ornament. I will show that it is for tectonic reasons that geometry has to be transformed from a static architectural instrument to a series of flexible tools able to grasp structure in its unfolding movement to ornament.

Wright disposes of a whole arsenal of geometries, which all describe a system of architectural gestures. When evaluating the different geometries in Wright's work, my main concern will be to prove that in Wright's architecture we find an effort to reconcile geometry as the grammar of *form* with a geometry celebrating the organic idea of *formation*. Just like in the work of the Romantic philosopher Schelling we find an effort to account for nature both as *being* and as *becoming*.

⁹ "It is in the nature of any organic building to grow from within on its site." FLW, AB, 363

Methodology and theoretical framework

Architectural theory always heavily draws on philosophy. In this introduction I will therefore take my time to expose my own methodology, which in essence is a phenomenological one. I will then expand on my somewhat tensed relation with *architectural* phenomenology by touching on some theoretical differences with its main protagonists. In order to contextualize my own concepts, I will go back to my main philosophical source Martin Heidegger to loop his thoughts back to Romanticism and relate them to the philosophy of Friedrich Wilhelm Joseph (von) Schelling. This will give me the opportunity to show how Romantic thought penetrated the twentieth century, as such taking a theoretical advance on my effort to re-ground Wright in Romanticism. Finally I will expose my relationship with Wright-historiography (Scully, Levine, Hoffmann) to show how it inspired me but also to account for the differences in method issuing in different results. This dialogue will also allow me to say something about my own empirical sources and to characterize my study.

Phenomenology (hermeneutics/gesture/language)

If Wright's work has again come to speak to us, one should allow it enough space to appear. If, in the coming chapters, I will often be busy to describe my object, it is exactly to let the architectural thing be born into the word patiently. Philosophers may recognize here the hermeneutical *epochē*, the postponement of a judgement proper to the phenomenological method. When writing, we must suspend for a while our inclination to give the object of study meaning, we must postpone giving it a place in history, and we must prevent spinning a web of social, economic, or artistic reasons around it. Instead we should give it space in order to allow it to grow towards us, spin its web around us. Describing is a means to abide with the thing in order that it may open up its world. Still, when it moves us, a work will probably do so by surprise.

Writing means to go *with* the thing, allow it its own freedom of movement. It is here that the notion of *gesture* becomes crucial. In this study, the notion of gesture is meant to capture the mobility, the free stance and the own spatiality of an architectural thing. Its vividness. Describing architecture means responding to its *suggestions*. If, in Wright's work, we look at horizontal gestures like the overhanging eave or the protruding balconies, they obviously *suggest* movement, a going

outwardly. A gesture does not mean something, it is a means without an end.¹⁰ It only suggests. Nonetheless, when a gesture touches us, it is by the sheer power of ideas.¹¹ Wright often uses the verb *to suggest*, for example when he speaks of geometric symbols and asserts that “the spiral suggests organic progress.”¹² He seems to use the term here to sketch a correspondence without a denotative pertinence, almost a physical-affective tracing of energy. What is carried towards us in the symbol, is at the same time born in us. For that reason, the medium of the symbol is enthusiasm, a being carried, lifted or elevated.¹³ In Wright’s symbol it is nature that speaks to and speaks in us. Wright’s symbol is a gesture of nature.

Gesture comes from the Latin *gero/gerere*: to bear or to carry toward, to carry forwardly, but also: to yield, to bear fruit. The etymological complex of gesture is rich, but unfortunately hardly explored in architectural theory.¹⁴ *Suggero/suggerere*: to offer, to advice, to prompt, to insinuate. A gesture tries to convince us without meaning. *Se gerere*: to behave. Gesture implies ethos. In general in *gero/gerere* we feel a tension between the spontaneity of an act and the economy of behaviour and management (the French *gestion*).¹⁵ A gesture, when used often, tends to congeal into meaning. But codified or caught in a system with other gestures, the original suggestion of the gesture has already extinguished.

An architectural example may be elucidating: it was Karl Boetticher who found the same tension between the spontaneity of tectonic gestures revealing the living Doric soul in the variations and fluctuations of the Doric Style, and its extinguishing in the proportional system as described in Vitruvius.¹⁶ Inversely, we could say it was Wright’s explicit intention to find the spontaneous architectural gestures of an American soul—the soul of the settler-wanderer, as he put it—beyond the extinguished gestures of the European neo-styles still colonizing American art. Wright sought a gesturality born from, i.e. *suggested* by American nature.

¹⁰ Giorgio Agamben, *Means without Ends*, translated by Vincenzo Binetti and Cesare Casarino, Minneapolis/London, University of Minnesota Press, 2000.

¹¹ William James, *The Varieties of religious experience*. New York, London, Bombay, Calcutta, and Madras: Longmans, Green, And Co, 1917, p. 112: “*Suggestion is only another name for the power of ideas.*”

¹² FLW, *The Japanese Print, an Interpretation, CW1*, 117

¹³ According to Joshua Ramey when speaking of the “‘enthusiasm’ symbols inspire.” *Joshua Ramey, The hermetic Deleuze, Philosophy and spiritual ordeal*. Durham and London: Duke University Press, 2012.

¹⁴ A first exploration of the subject may be found in my essay *De Gestiek van de architectuur* (Gesture in architecture), Arnhem, Artez Press, 2017.

¹⁵ See ten Bosch, René, *Stilte, Geste, Stem*. Amsterdam: Boom, 2011, p. 127.

¹⁶ Boetticher, Karl, *Tektonik der Hellenen*, Berlin, Ernst& Korn, 1874, p.29.

If phenomenology is an effort to let things speak themselves by following the suggestions of their gestures, an important question is to what instance in the human do they appeal? Obviously, we perceive gestures with the senses but that does not say gestures appeal to the senses. They appeal to the inner sense of the imagination. For Kant the imagination was the faculty prefiguring the material of the senses according to the categories of the understanding. We can only perceive a world filtered by categories like quantity, quality, plurality, unity, causality etc. The imagination functions as a scout for reason. But according to a Romantic poet like Novalis, if we imagine, it is the imagining power of creative nature that speaks in us. "It is by the same movement that nature produces the grasses and flowers that I imagine them....the seashell conch has its own roots in the imagination, insofar as the movement through which it is produced in the imagination appeals to an identical spiral."¹⁷ If Wright speaks of symbols which suggest, he obviously relates them to the organizational forces of life or of nature. "The spire suggests aspiration.(...) The square suggests integration." The lines are active. The imagination traces such lines of force haptically far more than optically,¹⁸ by following their gesture or movement on the interface between the ideal and the real. Note that "movement" is exactly the word Novalis uses. The imagination pertains to an awakening consciousness. The symbol has an immediate working, it cuts through all the layers of the universe. If the human imagination is a faculty of invention it is because it traces the potentials of a creative nature organizing that universe, it becomes co-involved in nature's production of images, in nature's imagination.¹⁹

In this study one will meet a series of phenomenological diagrams. They are certainly not meant as symbols but must be seen as efforts to visualize the gestures and the organisational schemes of Wright's architecture. In them one may see the revitalisation of the axis mundi in action, working to come to a dynamized and pluralized interpretation of Wright's architecture: accounting for form and formation.

When speaking of gesture and suggestion some words must be said here on 'sphere' or 'atmosphere,' a category which has played such a huge role in the architectural debate during the last 30 years. In Wright's work, atmosphere is closely related to the idea of a geology of architecture, in which all the layers of the natural past of a place may come to resonate in structure, textures, patterns, colour and type. As we will see, in Fallingwater it were the textured rocks, eroded by the stream, which

¹⁷ Quoted by Deleuze in his lectures on 'grounding.' In: Ramey, Joshua, *The Hermetic Deleuze*, Durham: Duke University Press, p. 248.

¹⁸ Joshua Ramey, *The Hermetic Deleuze*, p. 109.

¹⁹ For all these aspects I refer to Joshua Ramey's book on Deleuze, specifically to the chapter: *The force of symbols*. In: Ramey, *The Hermetic Deleuze*, pp. 103-111.

came to *suggest* (Wright's word again) the textures of the masonry. We can still feel the history of a battle of forces, the forces of erosion and persistence, in the surface of the masonry. Atmosphere is indeed a question of suggestion, of being carried by the imagination, but that doesn't make it less real. Because we cannot hear these hidden voices with the senses—atmosphere operates subliminally—our 'organs' must be intuition (*Vermutung*) and sympathy. These are the organs of atmospheric perception, apt to capture *Stimmung* (mood). They ask for a receptive language, in which things may be suggested to us. Quite recently, in his article on Wright's Galesburg project, Michael Desmond has searched for such a dynamic language able to capture the energy in the relation of Wright's architecture with the landscape.²⁰ A *gestural* use of language!

When going fluently from description to interpretation, we need to double the geology of architecture with a geology of language.²¹ Words suggest as much as things suggest. They carry us. We need to descend into the subterranean layers of language in order to hear the echoes of forgotten meanings resonating with new ideas. For that reason etymology will play an important role in our endeavour. Language is a lively event in which meanings become covered in time and deep roots may begin to grow again to feed the word. Etymology is not only the archaeology but also the *adventure* of language. Language is a method of its own, a *mêta odos*: in pursuit of the way, on a journey. Or as Heidegger puts it: if we think, we are "on the way to language."²²

Architectural phenomenology

Contrary to what one might expect, in this study architectural phenomenology will stay somewhat on the background. In general, I prefer to shape my own thoughts in a conversation with Martin Heidegger, whose thinking has always remained one of the main sources feeding architectural phenomenology.

Because issues like place and atmosphere, which are recurrent themes in this study, have typically always been foregrounded by phenomenological thought, I nonetheless feel obligated to expound briefly on my relationship with some of its

²⁰ Michael Desmond, *Abstracting the landscape: Galesburg, above and below the surface*, in: Frank Lloyd Wright: *Unpacking the Archives*, New York, MOMA, 2017

²¹ As Daniel Whistler accurately says it for Schelling's method. *Language after Philosophy of Nature: Schelling's Geology of Divine Names*, In: Smith and Whistler: *After the Postsecular and the Postmodern*, Newcastle: Cambridge Scholars' Press, 2010

²² Martin Heidegger, *Unterwegs zur Sprache*, Pfullingen: Verlag Günther Neske, 1990 [1959].

main protagonists. When I do so, it will be both to show my debt and my dissent. The themes of time, place, atmosphere and technique will be the tread in this digression. Phenomenology all too often sees modern technique as a threat for the specificity of place and its atmospheric qualities. Such an attitude would be a serious obstacle in trying to understand Wright's architecture, an architecture carried by a strong believe in modern technique.

When talking of architectural phenomenology,²³ we must begin with its 'founding father,' Christian Norberg-Schulz. Norberg-Schulz was one of the first to introduce Heidegger's double of place and surroundings (*Ort-Umgebung/Gegend*) elaborating it in a strong sense of landscape and its historical and geographical specificities.²⁴ I will use his revitalization of the notion of the *genius loci* and pluralize it to *genii loci* to also account for a non-human or not-only human sense of place.²⁵ In general, phenomenologists are open to anthropological observations, but they tend to forget that human life has an evolutionary and even cosmic past, which resonates in architecture as well. Place is a gathering of human and non human aspects and they both determine the *genius loci*.

Juhani Pallasmaa touches upon such a past in his efforts to capture the atmospheric aspects of Taliesin-West, speaking of the "images and vibrations of some primordial and mythical origins," but eventually he codifies such images as "bio-cultural, instinctual reactions," and relates them to "awareness and sense of self."²⁶

²³ Architectural phenomenology: I will leave out here the great studies on phenomenological space of Gaston Bachelard, *La Poétique de l'espace* and Otto Friedrich Bollnow, *Mensch und Raum*. In my treatment of Wright's houses as vertical houses (despite their horizontality) some may recognize a faint echo of Bachelard's house "from the cellar to the attic," a house rooting in the earth and growing into the universe. Gaston Bachelard, *La maison. De la cave au grenier. Le sens de la hutte*. In *La Poétique de l'espace*. Paris: Presses Universitaires de France, 1981 [1957], pp. 23-50.

²⁴ Christian Norberg Schulz, *Genius Loci, Towards a Phenomenology of Architecture*, London: Academy Editions, 1980 [1979]; *Meaning and Place. Selected Essays*, New York, Electa/Rizzoli, 1988 [1986] Heidegger's essential texts on the subject of place, space, and surrounding are: *Bauen, Wohnen, Denken*, in: *Vorträge und Aufsätze*, Pfullingen: Neske, 1978 [1954], pp 139-156; *Agkibasin, Ein Gespräch Selbstdritt auf einem Feldweg zwischen einem Forscher, einem Gelehrten und einem Weisen*. In: *Feldweg-Gespräche*, GSA Bnd. 77, Frankfurt am Main: Klosterman, pp 3-157; *Die Kunst und der Raum*, in: *Aus der Erfahrung des Denkens*, Frankfurt am Main GSA, bnd. 13, pp 203-210.

²⁵ It was Aldo Rossi who first redeveloped the idea of the *locus* as a specificity of place. He refers to the Roman conception of a *genius loci*, in his treaty *The Architecture of the city*, but he does not further elaborate the concept of the *genius loci* itself. When speaking of the Romans, he writes: "the situation – the site- was governed by the *genius loci*, the local divinity, an intermediary whom presided over all that was to unfold in it." *The architecture of the city*, Introduction by Peter Eisenman, translation by Diane Ghirardo and Joan Ockman (Cambridge MA and London (England), 1982 The MIT press.), p. 163.

²⁶ Juhani Pallasmaa, *Orchestrating Architecture, Atmosphere in Frank Lloyd Wright's buildings*. Oase 91, p. 55

He thus returns to an anthropocentric view. Palasmaa acknowledges atmosphere to be an internalized, existential experience.²⁷ His “peripheral vision” implies a turning into oneself. But is human existence not built on nature’s existence? And does that embodied existence and its empirical or synesthetic claims not imply the full temporal depth of our universe, its univocity and the intuition of such a whole? Does it not imply the geological depth of the earth? Such a depth implies a certain *loss* of the self. If, in Taliesin West, the “desert masonry” with its small boulders and its circles of little stones invites the hand to touch it, it is the stone that touches us. It touches us internally, affectively, and for that reason our fingertips are moved to touch the surface. We stem from the same *immemorial*, from the same *inhuman* depth of time. And that is why we can feel its appeal. It is this abyssal univocity of being that forms the very condition of atmospheric perception. “*Leise rührt dich an ein alter Stein*” (gently an old stone touches you),²⁸ says the Romantic poet Trakl, a contemporary of Wright. And indeed, it will be Romanticism that will help us to understand Wright’s love of the lithic. At the same time it will help us to open up architectural phenomenology to a less anthropocentric view. As Schelling’s philosophy suggests: “to plumb the depths of nature means to sound the depths of one’s own nature.”²⁹ “The eyes of the skin,” to use Palasmaa’s powerful metaphor, imply the “lithic depth” of the human body.

Kenneth Frampton, in his essay on critical regionalism, wants to resist “placelessness,” which he sees as the effect of an unrestrained globalism.³⁰ He propagates an architecture in which the natural (climatic/geologic) and cultural characters of a region are inscribed in a building. He pleads for craft as bound to regional traditions, against “universal technique.” Despite Frampton’s affinity with Wright’s work, such an approach will only help us to a certain degree in understanding Wright. As we will see in chapter 4, globalism and its uprooting effects were never Wright’s real problem. Neither was there any opposition for him between “universal technique” and a sense of place. For Wright place is a layered concept, sometimes referring to local conditions, sometimes to Nature as the true source of all architecture, sometimes to America as “the new world” and first of all, to Earth as a building. Place, for Wright, cannot be seen without time (and thus also to progressing technique) and always refers to situation and situatedness, and not merely to site. We will try to capture this complexity with another concept of place,

²⁷ Juhani Palasmaa, *Atmosphere, Compassion and Embodied experience*. Oase 91, p. 45.

²⁸ Trakl, Heiterer Frühling, Leipzig 1913. From the poem Heiterer Frühling. https://www.deutschestextarchiv.de/book/view/trakl_gedichte_1913?p=39

²⁹ Gord Barentsen, *Schelling’s Dark Nature and the Prospects for Ecological Civilization*, in: *Cosmos and History: The Journal of Natural and Social Philosophy*, vol. 15, no. 1, 2019, p 95.

³⁰ Kenneth Frampton, Towards a critical regionalism. Six points for an architecture. In: *The Anti-Aesthetic, Essays on postmodern culture*. Edited by Hal Foster. Port Townsend, Washington: Bay-Press, 1983 PP 16-30.

place as “the rift of time,” a concept Michel Serres develops in *Biogea*³¹ to indicate the meaningless, rumbling depth of nature “before humans covered the earth with meaning.” Place as (the French) *lieu*, “a genital word indeed,” the temporal depth of the earth as “the uterus or the womb,” the place where the human waited so long in a still embryonic form, before it appeared on the stage. Earth, where *mundus latet* (*world lays hidden*). This conception of place corresponds to Wright’s geology of architecture as the probing of a temporal depth of place.

Talking of architectural phenomenology, a last name must be mentioned here: that of Alberto Pérez-Gómez. My reading of *Attunement*,³² his fundamental study on mood in (the history of) architecture, came too late to fully honour its importance. Although sharing his ideas on the eminence of atmospheric motivations in the history of architecture, powerfully traced in his book, I do not share Perez-Gomez’ pessimism when it comes to modern science and (digital) technique as he words it in *Phenomenology and virtual space*.³³ Doubtless virtual space opens up to an almost delirious exploration of ideas and even to an “empty exercise in formal acrobatics,” but we should see the experiments of digital architecture as a necessary ‘training session,’ exploring the mathematical domain of nature’s structuring and adorning intellect. Eventually its “self-referential structural determinism”³⁴ will turn out to embody the atmospheres of the near future. In fact Wright’s formal exercises in abstracting patterns from nature—in his coloured leaded glass and especially in the coloured studies made by Eugene Masselink³⁵—must be seen as a same sort of acrobatics, testing geometry in its capacity to structure life rhythmically.

31 Serres finds his observations on the etymology of the French *lieu*. Michel Serres, *Biogea*, Minneapolis, Universal publishing, 2012 [2010]. Translation Randolph Burks. (Kobo E-book). The chapter *Earth and Mountains*, paragraph *Gaping mother earth*.

32 Alberto Pérez-Gómez, *Attunement. Architectural Meaning after the Crisis of Science*. Cambridge (MA), London, MIT, 2016. Kobo E-book.

33 This is a recurrent theme in Pérez-Gómez. Though he always weighs possibilities and excesses in new technical approaches in a nuanced way, it is clear that his concerns are always with the excesses en hardly with the potencies of modern technique and science. Cf: *Phenomenology and virtual space. Alternative tactics for architectural practice*. Oase 58, 2002, pp. 35-55. The same distrust to the possibilities of ‘digital architecture’ also abounds in *Attunement*. E.g. Chapter 4 “Today, parametric strategies in design and other extrapolations of “scientific” theories and tools into form generation are built upon similar presuppositions. The obsession with algorithmically generated form thrives on a distrust of the capacity of words to recount the experiential qualities of a site and to propose meaningful, attuned environments for human cultures, a distrust justified by the inherent opacity that always operates in the gap between the words we speak and the things we make.”

34 Pérez Gómez, *Phenomenology and virtual space*, in Oase 58, p. 36.

35 Frank Lloyd Wright, *Unpacking the archive*, p. 37. Masselink made series of drawings of certain natural phenomena, abstracting patterns from nature, among them drawings of patterns of the staghorn cactus and the barrel cactus and of lichen on rock have been found in the archives.

It was Romanticism which formulated the premises for a positive approach to science when Schelling remarked that it is nature itself that works with science “unconsciously.” The same could be said of technique. Wright invented his archi-technique by following techniques found in nature. The exoskeleton of the saguaro became the example of the reinforced concrete columns of the SC Johnson Administration Building. He saw human technique as a means to cooperate with nature, but also as a means to test the unknown possibilities hidden in materials.

Wright’s faith in modern technique was based on the Romantic idea that the same creative intellect that was working in nature was working in the human too. To feel into nature also meant to recognize the progressing way up. Just like Walt Whitman, Wright saw the human rooting in and rising from the temporal depth of nature with an open horizon. “All goes onward and outward.” It is the believe in a moving intellectual and affective frontier that appears in Whitman’s *Leaves of Grass*,³⁶ one of Wright’s favourite poems.

I am an acme of things accomplished, and an encloser of things to be.
My feet strike an apex of the apices of the stairs,
on every step bunches of ages, and larger bunches between the steps,
all below duly travelled – and still I mount and mount.³⁷

The future of phenomenology in general and consequentially of architectural phenomenology will depend on its ability to open up to a less anthropocentric vision. The complications of such a less anthropocentric approach by far exceed the theoretical frame of this study. In a way I will tackle this need of a change ‘at flying speed’ wherever it occurs, by returning to the sources to seek the open ends in phenomenology. It are especially some notions of Heidegger that seem promising for such a change. And to limit myself to the notions more directly relating to architecture, we can think here of the related notions of *Befindlichkeit* (attunement), *Situation* (situation), *Stimmung* (mood) and *Vermutung* (intuition), all notions relating to a rooting (*innestehen*) in deep time and to the ecstasy of being in the world; the notions of *die verweilende Weite* (the abiding expanse) and its correlate of the *Näherin* (literally what brings near, but also ‘the seamstress’) pointing to an experience in which all the layers of a deep past approach to unite on a same plane as human consciousness, which thus feels carried by that past; the associated complex of *wohnen* (to dwell) and *gewöhnen*, (getting used to, to habituate, getting habits) as a getting situated and coming to peace with the environment; and

³⁶ Walt Whitman, *Leaves of Grass*, Harmondsworth: Penguin, 1986 [1855]

³⁷ *Ibid.*, p. 77.

finally the verb *Bauen* (to build), especially with its etymological root in proto-Indo-European *bheue*, a root also feeding *being*, the Greek ‘*phuein*’ (to grow) and the word *future*, enabling philosophy to reconcile ontologies of being with ontologies of becoming, the thinking in terms of form with a thinking in terms of formation.³⁸

Heidegger himself always remained faithful to his idea of a prerogative of man (*da-sein* as there-being) in the relation between beings (*Seienden*) and Being (*Sein*), a faith resulting in his conception of man as the shepherd of being (*Sein*). At the same time this conception implied a less humanist vision because it was built on a fundamental decentring of man, which found its most famous formulation in the notion of the *Geviert* (the fourfold). In this fourfold, the mortals and the divinities, the earth and the sky, are mutually involved (“dance in chorus” says Heidegger) in the unfolding of world.³⁹

The conceptual presence in this study of philosophers like Serres (the celestial city, the rift of time), Flusser (the perforated home/*unheimlichkeit*), Deleuze and Guattari (haecceité, earth and territory), Bergson (sympathy), Agamben (profanation, the coming community), and even Spinoza (*natura naturans/natura naturata*)⁴⁰ may be seen as a help-site—in the most positive sense of the word—in tracing, assessing and elaborating the open questions in Heidegger’s philosophy. Though I do admit I run the risk of a certain syncretism or even eclecticism in such a multiple approach, this danger must be accepted when phenomenology wants to be ready to face the problems of its own time. In the Anthropocene it can no longer unproblematically contract on the eminence of the human. *Da-sein*, inhabiting this earth, has become a problem.

³⁸ <https://www.etymonline.com/word/future> <https://www.etymonline.com/word/build>

³⁹ Martin Heidegger: *Das Ding*. In *Vorträge und Aufsätze*, p. 173.

⁴⁰ I will come back on these names and concepts with a proper reference on the places in the text where they occur.

Romanticism & organicism

Having broached on the subject of Romanticism, a last philosophical name must be mentioned here, that of Friedrich von Schelling.⁴¹ He has been called ‘the prince of Romanticism.’ I already made the link of Wright to the Romantic era and I am certainly not the first one to do so. Usually such a link is substantiated by pointing to American Transcendentalism and its main protagonists Emerson, Thoreau and Whitman.⁴² I do not deny such a link: historically it is crucial.⁴³ But I think one should avoid the risk making Wright’s architecture the ventriloquist dummy of Transcendentalist thought.⁴⁴ Wright had his own thoughts, which may have been triggered and catalysed by Transcendentalism, but that doesn’t make them less authentic. Introducing Schelling will allow me to take some more distance (it is highly improbable that Wright ever read Schelling) and to speak of a *resonance of ideas* instead of an influence with its supposed causality.⁴⁵

Schelling’s notions of ‘ground’ and ‘existence’ and of the conflict of the organic forces of contraction and expansion correspond strongly with the dynamics in Wright’s architecture. Schelling was a dynamic philosopher who saw it as his task to reconcile being and becoming, just as Wright strove to reconcile form and formation. More in general, Schelling may help us to relate Wright to the 19th century, a century in which he was born and educated and that never left him.

⁴¹ Friedrich Wilhelm Joseph (von) Schelling (1775-1854). German philosopher, with Fichte and Hegel usually mentioned as one of the protagonists of German Idealism.

⁴² Ralph Waldo Emerson (1803-1882), Henry David Thoreau (1807-1862), Walt Whitman (1819-1892), are usually considered to be the main protagonist of what has been called the Transcendentalist movement. Wikipedia says of Transcendentalism that it “ is a philosophical movement that developed in the late 1820s and 1830s in New England. A core belief is in the inherent goodness of people and nature, and while society and its institutions have corrupted the purity of the individual, people are at their best when truly “self-reliant” and independent. Transcendentalists saw divine experience inherent in the everyday, rather than believing in a distant heaven. Transcendentalists saw physical and spiritual phenomena as part of dynamic processes rather than discrete entities.” <https://en.wikipedia.org/wiki/Transcendentalism>.

⁴³ An excellent and extended tracing of the bonds between American Transcendentalism and Wright’s architecture can be found in: Michael Desmond, *A clearing in the woods, Self & City in Frank Lloyd Wright’s Organic Communities*, Cambridge (MA), MIT, 1996, pp. 525-560

⁴⁴ In a very elucidating article, Naomi Tanabe Uechi has shown how Transcendentalist thought accompanied Wright throughout his life. *Frank Lloyd Wright, Transcendentalism and Organic Architecture*, <https://franklloydwright.org/for-you-o-democracy/>

At the end of such an article, however, one always gets the feeling that Wright himself has disappeared. And one asks oneself: what about his own thought? How did he change the transcendentalists, how did he betray them by appropriating them?

⁴⁵ Such a resonance of ideas may be felt when Emerson himself speaks of Schelling: “this admirable Schelling and his strange genial poetic comprehensive philosophy.” Quoted by Andrea Wulf, *Magnificent Rebels, The first Romantics and the Invention of the Self*, New York, Alfred A. Knopf Publisher, 2022, Kobo E-book, no pagination, Introduction.

But there is still another reason why Schelling is such an important philosopher in this study. It is exactly by hearing the resonance between Heidegger's and Schelling's philosophies that we may have a chance to open up phenomenology to a less anthropocentric future. Moreover, we may come to distinguish a strong romantic trait in the twentieth century.⁴⁶

It is often said that Schelling's philosophy is a philosophy of the organic, the same notion that Wright reserved for his own 'organic' architecture. The notion of the organic does not recur in Heidegger. Instead it is easy to see that the torch of Schelling's organicism was handed over to philosophers like Bergson and Whitehead, who carried it into the twentieth century with their concepts of "creative evolution" and of "organic realism." However, we should not be mistaken by this Heideggerian silence. Schelling conceptualizes the organic by pointing to the forces of contraction and expansion, the elementary forces of the formation of nature. In early works he speaks of these forces as light (*das Lichtwesen*) and as gravity (*die Schwere*).⁴⁷ In a later work Schelling says of these forces: "One strives forward, driving toward development, and one holds back, inhibiting and striving against development."⁴⁸ In all creatures there is a will to hold on to their selves and even of going back into their own grounds, but at the same time there is a longing to relate to each other and build and unfold into a world, a spiritual striving for development.

Schwere and *Lichtwesen*, contraction and expansion, come close to Heidegger's notions of earth and world.⁴⁹ Earth is not a passive material ground here, it is not the object earth, neither is it pure matter, it is the ground in which hide the potentialities for a world developing, it is a living material ground. To fully highlight the dynamics of those terms, Heidegger speaks of world with the gestural verb *welten* (to world) to indicate the power of a tearing forwardly and he says of earth: "*Erde durgraget Welt*" (Earth tears through the world).⁵⁰ In the word *ragen* we hear both the wild, untraceable origin of the living material ground (nature as *Herkunft*) and the gravity ready to hold and even tear back what tears forwardly as the spiritual opening up of world (*Zukunft*). Nowhere clearer than in Wright's work, we may see how these forces or events (Heidegger himself would never speak of forces) become embodied

⁴⁶ Rüdiger Safranski has already explored such a Romantic presence in Heidegger's philosophy in book II of his study on Romanticism. Rüdiger Safranski, *Romantiek, Een Duitse affaire*. Translation Mark Wildschut. Amsterdam / Antwerp: Atlas Contact, 2009.

⁴⁷ Schelling, F.W.J.; *Von der Weltseele*, Altenmünster, Jazzybee Verlag Jürgen Beck, 2018 [1798] (Kobo E-book)

⁴⁸ Schelling, F.W.J.; *The ages of the world (second draft, 1813)*, English translation by Judith Norman, Ann Arbor, The University of Michigan Press 2006 (1997) p. 123

⁴⁹ Chf. For all these aspects: Martin Heidegger, *Der Ursprung des Kunstwerkes*. In *Holzwege*, pp. 1-72

⁵⁰ Martin Heidegger, *Ibid.*, p 34.

in architectural tectonics. If we go back to Taliesin West, in the small boulders, taken from the desert floor, and rising up in the desert-concrete, we hear the dark voice, the *ragen*, of an immemorial earth speaking, while in the tent-like lighting volumes and in the dashed character of the cornices, we see a world tearing outwardly and forwardly to connect to and jump towards the horizon.

Somewhere else, Heidegger says that all things of the earth and the earth as a whole are mutually attuned and flow into each other while at the same time they receive their contour. “*Alle Dinge der Erde, sie selbst im Ganzen, verströmen sich in einen wechselweisen Einklang.(...) Hier strömt der in sich beruhete Strom des Ausgrenzens, das jedes Anwesende in sein Anwesen begrenzt.*”⁵¹ In this sentence we find the reason why in this study the notions of earth and *natura naturans* often seem exchangeable. They both point to the infinite productive ground manifesting itself in the finite products of *natura naturata* (*jedes anwesende in sein Anwesen begrenzt*). We see a ‘fluid,’ maybe even ‘Mannerist’ Heidegger here, coming close to Schelling’s conception of natural history as a metamorphosis. One may find plenty munition here to both conceptualize Wright’s continuity between nature and architecture and his ideas about separation, and to understand an organic architecture growing or flowing from the ground.

And yes, Heidegger’s unmistakable nationalism seems indebted to his conceptualization of earth. But as long as we do not fathom the relation between earth and land, between “*terre et territoire*” (Deleuze and Guattari) and thus also between locus/region and the temporal depth of the earth, we will never understand that such a bond is neither coincidental, nor inevitable and needs a careful interpretation whenever it occurs. Let us not forget that nationalism is a feature threatening much 19th century art, and that we find it in Wright too. We may hear so in his plea for a “truly American Architecture,” born from American grounds and skies, and in his ideas about the country ‘Usonia,’ uniting the States in a turning away from Europe.⁵² “Architecture is the mother art: its national value lies in its natural value.” An American nature for sure.

The link between Heidegger and Schelling may help us to see the notion of the organic in a new way by relating it to Wright’s story on the wandering tribe and the cave dweller as united in the American soul. Contraction becomes the longing of the settlers to find a root in the American earth, to graft themselves onto American nature, while expansion may be best formulated with Whitman’s lyrical words “all goes onward and outward,” a clear longing to stay on the road to a brighter future: “still I mount and mount.”

⁵¹ Martin Heidegger, *Ibid.*, p 32.

⁵² Wright’s nationalism is everywhere. His search for an architecture “*proper to the place, the man and the time,*” always implies ‘the place’ named *The United states of America*. FLW, *Usonia, Usonia South and new England*, in FLW, *CW4*, pp.88-92

A dialogue with historiography

In this study I intend to touch upon Wright's singular contribution to architecture. What makes his work unique? This search for a singular Wright asks for a conversation with historiography. Conversation means showing the difference in method leading to differences in results. Historiography is led by another sense of time, a 'horizontal' one, which—to simplify the scheme—thinks in terms of a succession of eras and their *Zeitgeist*. Its main tool is comparison. Reconstructing a singular Wright means cutting or separating him from his peers and—in a way paradoxically—giving him roots in eras long gone, exploring a vertical time, a time of affiliations and traditions, but not without observing how such affiliations also imply betrayal and change.

Three historians must be mentioned here. Vincent Scully was the first to speak of the central place of the hearth and the chimney and a strong "compulsion toward movement in Wright's houses."⁵³ He found that compulsion in American literature too, in the desire to go away or to return to the open road. Although in his study Scully's observation seems to be a coincidental remark, we will see that it resonates in my entire dissertation, often without an explicit confrontation. We find the base here to think of Wright's houses in terms of a contraction on the terrestrial element of the hearth and of an expansion towards the horizon manifesting itself in the periphery of the house.

The second name is that of Neil Levine. Levine was the first to broach the subject of time in relation to Wright's work. In *The temporal dimension of Fallingwater* Levine relates time to the Bergsonian concept of *durée* (duration). He interprets *durée* as the experience of natural elements in a process of transformation. In his interpretation the image of a cyclical time prevails.⁵⁴

It is exactly in the interpretation of time that I will take a different path, which will be elaborated in the conclusions of the third chapter. I will take a geological stance in which human history becomes part of a history of nature in which we may descend by Bergson's sympathy and intuition, far more than by the senses so heavily stressed by Levine. In essence *durée* is memory, time building up, and as such the condition for any form of experience.

⁵³ Vincent Scully, *Modern Architecture: a Redefinition of style*. In: *Modern Architecture and other Essays*. Selected and with introduction of Neil Levine. Princeton (NJ): Princeton University Press, 2003 pp 74-87

⁵⁴ "The natural cycle of growth, decay and regeneration, which is ultimately what Fallingwater is about, (...)" Neil Levine, *The architecture of Frank Lloyd Wright*, Princeton University Press, 1996. p. 250.

In general Levine will be a reference in my entire book. As a scholar I must position myself vis à vis his work, a work I enjoyed much and which gave me many a lesson. His work has set a new standard in Wright-interpretation. For that very reason it is necessary to clearly establish and expose the differences in our approach. It is not solely in our interpretation of *'durée'* that we differ, this difference leads to clearly different positions when it comes to history. However deep Levine may dig into the unique character of Wright's architecture, he eventually always returns to the 20th century to insert Wright's thinking in a more general history or *Zeitgeist*. This is off course fully legitimate from the point of view of the historian. All architects have to face the conditions and peculiarities of their time and will find inspiration in its problems and questions. As such they may be compared to their contemporaries. Architecture *evolves*, unfolds in a chronological time that will become part of history. But when architects contemplate and ponder their designs, they also become 'contemporaneous' with the entire past of their profession to enter into conversation with that past. They become *involved* in a secret 'a-historical' community, in what the writer Eliot called a "simultaneous order."⁵⁵ Its focus is the point of the pencil. When sketching a vault, Wright not only relates to Nervi, he immediately relates to the Persians, the Romans, the Goths, and in his polyhedra most eloquently to Giulio Romano's crystalline vault in the Palazzo dell Te, shortly he relates to the *problem* of vaulting. With his pencil on the paper, he contracts an entire past and traces a unique line, which will end up in a unique, singular style, a unique way of summarizing history. I will try to determine this unique style or stance in the 5th chapter, thinking of the differences between the concepts of 'manner' and 'style.'

I do not say these 'vertical' moments lack in Levine's books, but by making them functional in a historiographical and thus 'horizontal' approach, they get a somewhat coincidental character. It will be in the first chapter that our differences become visible most clearly. Levine tries to interpret Wright's urban designs from the thirties as cohering with other efforts to revive the city centre of the big city, which, in the early 20th century, was drained by the flight of its inhabitants towards the suburbs. Wright's work has to be part of the *Zeitgeist*. And this 'positive urbanist' Wright destines him to decline Wright's most singular and proper contribution to the rethinking of the city, Broadacre, as a "deviation" and an "anomaly" in his work.⁵⁶ Instead, in my 'vertical' approach, we will see Broadacre in the tradition of the settler, finding a root in the Roman agrarian town, the *Ager Romanum* resonating with Wright's own ideas about the modern city as an agronomy.

⁵⁵ Eliot stressed this idea of the dimension of a 'pure past' by saying that all writers and all literature exists in a same time. Slavoj Žižek: *Event, filosofie van de gebeurtenis* (Event, Philosophy in transit), Amsterdam: Boom, 2015, p. 130.

⁵⁶ Levine, Neil, *The Urbanism of Frank Lloyd Wright*, Princeton: Princeton University Press, 2016, p 385, p.179 resp.. On Broadacre: pp. 157-179.

This brings me to my third ‘companion,’ Donald Hoffmann, who will return in many a chapter. It was Hoffmann who, from the 1980s onward, tried to come to such a singular Wright by reading his texts, looking at his drawings, visiting his buildings and scrupulously studying the processes with the clients. In some chapters I lean heavily on him. For Hoffmann, in his amazement and anger regarding the superficial character of many biographical and psychoanalytical interpretations of the work, there was only one task: looking how Wright’s principles, formulated in his texts, came to shine in his buildings.

There is a danger, however, in ‘filling’ the designs with the words of an architect. Hoffmann was certainly aware of this risk, trained in a way by the notorious ‘obscurantist’ Wright. But in *Understanding Wright* he nevertheless completely clarifies Wright’s works by pointing to his principles.⁵⁷ This may have its logic, we may come to a coherent interpretation, it is also a dead end because it is indeed always Wright’s interpretation. There is nothing to come further.... Happily, in his best moments, Hoffmann also forgot his own principles to come to daring and powerful new interpretations of the work.

The sources. Buildings, drawings, texts

Let me clarify my own stance on the relationship between Wright’s texts, his drawings, and his buildings. Wright was clear on the subject: “when I cannot design and build, I write.” Logically these different forms appear as converging towards each other. They come from the same source, Wright’s realm of ideas. But this cannot be a reason to judge on them in terms of causal relations. We must acquire a free stance, sometimes letting texts speak to hear how they ‘break open’ given interpretations of the built work, sometimes letting buildings or drawings speak to see how they displace or even disqualify the leads and guides the architect has written down. In my case, I can only find pertinence in judging their relative weight for the question of time.

Let there be no doubt, Wright was a great, but somewhat ‘fragmented’ theoretician. His ‘tensed’ relation toward the world handicapped him in consistently constructing a real theory. His lectures are unruly and unnecessary aggressive. Robert Twombly even speaks of “outrageous remarks, obscure jargon, and abysmal prose.”⁵⁸

⁵⁷ Donald Hoffmann, *Understanding Wright*, New York/London: Dover Publications, 1995

⁵⁸ Twombly notices the importance of ‘sifting the kernels of his ideas from the chaff of his rhetoric.’ Twombly, Robert C., *Frank Lloyd Wright, An interpretive biography*, New York, Harper & Row, publishers, 1973, p. 223.

But when really captured by his subject, Wright immediately becomes lyrical and shows the deep intuitions that characterized him, as in the essay on the Japanese print and his series of articles on the meaning of materials.⁵⁹ Reading Wright's *Collected Writings* is hard work, but nevertheless rewarding for these enlightening moments.

By contrast, the study of his drawings is a rare feast. This goes for the coloured perspectives, in their beauty and sensibility unequalled in the history of architecture, but as well for the preliminary studies. In my analysis the drawings acquire a same status as the built work. They give us insights we would never have been given in merely visiting the built work or reading the texts.

My study must be seen as a philosophical interpretation of the work of Frank Lloyd Wright. I do not reveal new facts, I didn't consult the archives. Sometimes I hesitated but Covid 19, complicating travel and access to public institutions in a crucial phase of my study, strengthened that decision. Moreover, I am convinced that there exists an abundance of published materials grounding my new interpretation.⁶⁰

I worked with texts: texts of Wright, of other architects and of historians and critics. I worked with dubious photographs found on the internet, but also with the beautiful pictures of Pedro E. Guerrero (Wright's favourite photographer) with their tension of 'the first shot,' the birth-shot of buildings having come into the full light of their existence. I worked with the sublime photographs of the Japanese photographer Yukio Futagawa who, apart from having photographed Wright's entire oeuvre, also excelled in picturing the soul of his own people building houses and landscapes. I studied Wright's drawings, one of the greatest pleasures of my life. I worked with my own archive of slides, having visited many of Wright's works in the mid-nineties of the previous century. In that 'grand tour' I even had the luck of chancing upon some of the original commissioners. During this trip, travelling the landscapes in which Wright's architecture was born, the first germs of this study began to bud.

I do not reveal new facts. But, following Nietzsche, who saw all facts as already being interpretations, I hope that my interpretation may change the facts a little bit.

⁵⁹ Frank Lloyd Wright, *The Japanese print: an interpretation*, 1912, CW pp116-125. In the cause of architecture III-VIII, *The meaning of materials*. A series of articles for the architectural record. 1928, CW pp 269-309.

⁶⁰ Wright's work has been 'collected' several times in sometimes extensive series of which the Monographs 1-12, edited by Adata-publishers –with text of Bruce Brooks Pfeiffer and photographs and editing by Yukio Futagawa- remains the most extensive and important one. See also the bibliography.

Brief guide through the chapters

I will begin my study with an introductory chapter on the city, presenting some key notions enabling us to see Wright's architecture both from an urban and a rural point of view. For Wright everything begins in the city, the big city—the metropolis. Wright detested that metropolis and saw it as a “disappearing city,” eventually returning to nature. At the same time he believed that the modern means of transport and communication would facilitate the rise of small county towns following a rural model, which he sketched in his plans for Broadacre city, uniting a sense of cosmopolitanism with an agrarian sense of the ground. The question that will lead us in this first chapter is how Wright's ideal of a ‘natural architecture’ stays alive in the city, how it works in the design for Broadacre city and finally how it finds an ‘urban’ climax in later plans for small communities like Galesburg and Pleasantville.

In order to give my approach of architectural temporality some historic background, I will begin my second chapter by going back to Roman times to see how questions of time were already central to Vitruvius' thinking when he described the procedures founding a new town. I will argue that it were not merely technical questions concerning orientation and the installation of a chronological order of time, which were at stake when the *gnomon* was stuck into the ground in the heart of the new city, but that cultural questions concerning the need to get situated on a new earth were factually primal. When the shadow begins turning around the gnomon, and the regions of the sky become the tempi of the day, there is also a new clock ticking for a new community, a clock drawing on memory and mood. With the presupposition that similar cultural conditions steer Wright's work—a presupposition progressively filled in in the course of my research—I will then argue that the elements of Wright's architecture must be seen as the products of a cultural need to get situated on a new continent, the need of a people of colonists in search of an own identity. His buildings testify of an intense desire to ‘taste’ the American landscape as a past to be inaugurated and as a future to open up to.

In chapter 3 I will demonstrate how, for Wright, this time of getting situated involves the adoption of a new earth, the acknowledgement of that earth as being built and thus the explicit appropriation of a memory embodied in the American landscape. In ‘visiting’ Taliesin North and Fallingwater, I will elaborate the idea of a geological time, the time in which the landscape is built, inhering in architecture. Wright's interiors manifest themselves as grottos, quasi subterranean spaces in which the human eye takes delight in seeing earth building a pre-human universe. With the help of Deleuze's notion of the time-crystal, I will show how that geological time opens up

to multiple temporal dimensions. Wright's architecture frames the utopian time of an oecumene of natural non-human and human 'inhabitants'; it frames the time of the pre-human when it presents human attributes as if they were fossils dug out of a stone formation; it sketches a post-human era in the building as a romantic ruin.

Central to my observations in chapter 4 will be Wright's geographical expedition. Architecture 'frames' earth in its different geographical manifestations. It describes and changes the landscape as the phenomenological surface in which the forces of deep time manifest themselves. Some major questions will lead us: what is the relation between geology and geography, between the depth and the surface when Wright tells us that "organic buildings should grow out of the ground into the light"? What does Wright mean when he speaks of "organic architecture"? A particularly pressing question will be why Wright, like many contemporaneous compatriots, still saw the American landscape as a unity?

My last chapter discusses style. I will try to make plausible that the questions posed in the different chapters refer to certain lines or traditions in architecture and that in the case of Wright many lines may be distinguished. For our questions concerning time, a Mannerist and a Romantic heritage have to be foregrounded. The former refers to a mineral age, the age of a 'not yet' where architecture and nature were not yet separated; the latter to a 'no more' in which architecture is already taken back by nature in the idea of the ruin, but complemented by a resurrection in science-fiction architecture. The major question that will lead us in this chapter is how, despite a strong eclecticism, we nonetheless may speak of a true Wright-style. Evaluating the role of stylistic variation and seriality in his oeuvre, I will end my chapter by showing how variation functions in Wright's geometric styles and how these styles unfold in the basic gestures of his tectonics.

1 The dead and the living city

“Go back far enough in time. Mankind was divided into cave-dwelling agrarians and wandering tribes of hunter warriors; (...) The cave dweller became cliff dweller. He began to build cities. Establishment was his idea. (...) But his swifter, more mobile brother devised a more adaptable and elusive dwelling place—the folding tent. He, nomad, went in changing seasons from place to place, over the whole earth, following the laws of change: natural to him. He was the adventurer.”

*Frank Lloyd Wright, The shadow of the wall: Primitive instincts still alive.*⁶¹

“Yet I am the necessary angel of earth,
Since in my sight, you see the earth again.”

Wallace Stevens, Angel surrounded by paysans.

1.1 Abstract

Wright's attitude towards the city has always been ambiguous. On the one hand he despised the existing city as the dystopia of an only quantitative development symbolized in the skyscraper as the mere product of ground interest speculation. He named the metropolis with the biblical motto “The Moloch that knows no God but more”⁶² and thought of it as a “disappearing city.”⁶³ On the other hand, the mere fact that Wright kept building in that same city, testifies of a conviction that even in the metropolis it was possible to realize his ideals of a “natural architecture.”

⁶¹ FLW, *The Living city* (LC), Ontario: Meridian 1970 [1958], p. 23.

⁶² FLW, *The Disappearing City*, New York: William Farquar Payson, 1932 [CW3, p. 82].

⁶³ FLW, *Ibid.*, pp. 70-112.

Wright's buildings in the city show the evidence of this ambiguity. They are often defensive, turn inwardly and they hardly communicate with city space. The interiors, however, often manifest themselves as fragments of nature, which function as safe havens in that same "disappearing city." I will begin by analysing two of these buildings, Unity Temple and the SC Johnson Administration Building.⁶⁴ Both buildings will help me to establish the conditions that lead to the emphatically immunized urban interior with its terrestrial, grotto-like character. Moreover, the second will give me the opportunity to sketch how, in the 1930s, Wright became aware of a new urban form. With Michel Serres, we will call this new form a "celestial city," the city enabled by the new transportation and communication means. [§§ 1.2.1-1.3.4]

I will then show how this new city finds an expression in Wright's utopian city Broadacre,⁶⁵ which was explicitly conceived at the crossroads of the terrestrial-agrarian city and the celestial—'speed of light'—city. [§§ 1.4.1-1.4.4]

In the last part of this first chapter, I will try to answer some questions that popped up in our analysis of Wright's city buildings and the proposal for Broadacre. I will do so in order to reconstruct Wright's 'urbanism.' The first one pertains to the status of the proposals for large urban projects such as Madison Monona Terrace and Pittsburgh Point Center.⁶⁶ Neil Levine quite recently adopted these projects as examples illustrating a supposed positive stance on the city on Wright's part.⁶⁷ [§ 1.5.1] Persisting in an opposite tenor, I will show how such proposals are still part of the "disappearing city." They refer to an urban condition in which citizenship as the social habitus of urban organization disappears from physical city space. [§ 1.5.3] I will argue that the celestial city—the city communing-communicating through the ether—enables the splintered, 'disorganized' community of 'disappeared citizens' to reappear on a local or regional, more terrestrial level. Looking at Wright's proposals to integrate greenery in his buildings, I will then ask the question if it is not exactly this 'moving out' of the dystopian city that makes the disappearing metropolis appear as a romantic ruin, in which nature comes shimmering through. [§ 1.5.2] Finally I will try to find a positive root of Wright's celestial-terrestrial twin city by suggesting Roman origins. [§ 1.5.4]

⁶⁴ Unity Temple, Oak Park, Chicago (IL), 1908; SC Johnson Administration Building, Racine (WI), 1936.

⁶⁵ Broadacre city; Plans, texts, model, 1932-1935.

⁶⁶ Madison Monona terrace, Madison (WI), 1938; Pittsburgh Point Center, Pittsburgh (PA), 1947.

⁶⁷ Neil Levine, *The Urbanism of Frank Lloyd Wright*, Princeton & Oxford: Princeton University Press, 2016.

Wright's critique on the metropolis remained vehement during his entire career. At the same time, positive ideas about neighbourhood as defined in Broadacre were further refined in the plans for small communities such as those for Galesburg and Pleasantville.⁶⁸ In these plans Broadacre's utopian model shifts to a full blown idea of a reactivated, territorial neighbourhood as the social base for a communal enjoyment of nature. [§ 1.5.5]

1.2 The metropolis: the disappearing city

1.2.1 Immunizing interior space

In the introduction to this chapter I spoke of Wright's buildings in the city as "defensive buildings," "turning inwardly" and "hardly communicating with city space." As a first example of such a building I will look at Unity Temple in Oak Park in Chicago (1906). Before doing so, however, I would like to make some preliminary remarks to fill in these three qualifications and to point to their paradoxical character in Wright's philosophy.

Wright became famous as the architect who pleaded for "the destruction of the box," the box being the closed interior of the 19th century house.⁶⁹ He foresaw a spatial continuity within the house, prolonging itself in an open relation between inside and outside. We must realize, however, that in the city he was all too eager to build boxes, even stronger, to construct fortresses, to cut off as much as possible every relation with the surroundings. No continuity, no transparency, hardly any openness.

⁶⁸ Galesburg Country homes, Galesburg (MI), 1947; Usonia Homes, Pleasantville (NY), 1947.

⁶⁹ FLW, *AB*, p. 166



FIG. 1.1 The Larkin building, Buffalo (NY), 1906. The building recedes between its huge and massive towers. [Photo: Clarence Fuermann and Henry Fuermann and Sons, Chicago]

The Larkin building recedes between its huge and massive towers. [FIG.1.1] Right from the start of Wright's career, one can see the formation of gestures of defence and retreat, Mannerist gestures of keeping distance and of escape. The main tectonic gesture is the *ressault*,⁷⁰ the step forward of the façade. This gesture entails the paradoxical manifestation of a keeping distance and keeping up the shield in order to better step back, retreat into the interior as a place of salvation. The façade embodies a play of forces, the resistance to the pressures of the world outside, finding a positive counterpoint in the interior that often manifests itself as an expansive 'flight of space' towards a virtual horizon.

The closed interior is complemented with a technical apparatus providing heating, cooling and clean air. With his inclination to honour new technologies, Wright did not only strive for a spatial cut between the city and the interior. He tended towards the idea of a real "immunology," to use the words of Peter Sloterdijk in his spheres-trilogy.⁷¹

⁷⁰ From the Italian *risalire*: jumping forward

⁷¹ Peter Sloterdijk, *Sferen I & II, Bellen/Globes*; Vertaling Hans Driessen; Amsterdam: Boom 2009 [2003] p. 35; Peter Sloterdijk, *Het Kristalpaleis, Een Filosofie van de Globalisering*, Amsterdam: Boom/SUN, pp.162-168.

The safe, immunized space, is not solely a negative space, a mere reaction to the turmoil of the city, it must become a wholesome place too. It aims for ideal physical conditions to be levitated.

Though Wright's city-buildings do not communicate horizontally with the outside world, interior space does communicate vertically according to some *axis mundi* that embodies a real communion of the light with the earth in a utopian inner space: a fragment of nature as the sacred place of some immured community, hiding from the city.

Looking at Unity Temple, we see a full blown example giving us all the gestures of this defensive attitude towards the city. The middle parts of the facade step forward, the lateral sections take a step back and completely close the corner like bastions. A sharp incision in between, gives both their measure. The space within is mainly lighted from above, the light broken into soft earthly colours, which together with the abundantly used wood and softly green, yellow and ochre brown of the painted walls make the room a terrestrial but spiritual abode. And in its turn, the softly glowing interior develops a radiating force which manifests itself as a free expansion of space at the level of the clerestories, which function as a sort of outlet. Levine has accurately shown this expansive force, which is embodied in the cantilevering concrete slabs on the outside.⁷² We could add that this force already seizes upon the beams in the ceiling. After the somewhat staccato-character of their orthogonal crossings in the middle of the room, they accelerate towards the clerestories to confirm the outward movement of the interior.

The hardly coloured light in the clerestory-windows reminds us of the open sky with its orientations and its arc of the sun. [FIG.1.2-1.3] The gestures are extremely precise here. The multiple moss-green figures in the leaded glass, vibrating in backlight, seem to hang down as if they were the fringe or the tassels of that 'carpet' of coloured leaded glass in the skylights. In their turn, the skylights show little pieces of uncoloured glass to remind us of the open sky. If we look at the pattern of the leaded glass, we see four large amber-coloured rectangles surrounded by bands of transparent glass. [FIG.1.4] The coloured glass seems to fold open over a symmetry-axis. Because the direction of the rectangles varies with every new coffer, they point to the four regions of the sky. The pattern gathers the span of the heavens. The crossing concrete beams confirm that gathering gesture.⁷³

⁷² Neil Levine, *The Architecture of Frank Lloyd Wright*, Princeton/London: Princeton University Press, 1996, p. 46.

⁷³ Cf. § 2.2.2 and § 2.3.7 .



FIG. 1.2 Unity Temple, Oak Park, Chicago (IL), 1908. Interior with skylights and clerestory windows [Photo: Frans Sturkenboom]



FIG. 1.3 Unity Temple. Clerestory windows with moss green 'tassels' [Photo: Frans Sturkenboom]



FIG. 1.4 Unity Temple, skylights. Pattern of the leaded glass in one coffer and in a series of coffers. [Photo: Frans Sturkenboom]

Eventually such a division of light also defines the 'four horizons' of the clerestory windows. The light coming down there is immediately captured in a surrounding movement articulated in the rhythm of the tassel-like verticals in the glass. Even the pure, uncoloured light is thus divided according to the logic of the cardinal points, a logic of light distributed according to the time of the day.

Wright's colours are extremely terrestrial: the large amber squares modulating to a darker brown, the yellowish pink and the orange pits and even the mossy greens of the 'tassels,' it is as if we are allowed to see colours only as mixed with earth. The coloured panels give the appearance of ultra-thin slices of natural stone. This 'stone' and the clear glass are held together in a wooden frame coming down in a single batten that folds around the corner of the concrete beams. It continues its surrounding movement in the wooden cornice of the coffers thus connecting the four regions of the sky with an earthly domain. These coloured 'lenses' in the coffer transform the pool of light to a real medium, the atmosphere of a spiritualized earth in which the worshippers bath.

The extending movement of space through the clerestories is counterbalanced by the 'holding' gestures of the walls of the bays, defining the intimacy of the space inside. With their angular movements they make it *a room*. The step inward of the corner volumes and the step outward of the bays mark the play of contraction and expansion on street level. [FIG. 1.5] This holding of space acquires all its acuteness when the outer periphery is cut open by the long vertical windows between the corner volumes and the central bays. This cut completes the movement of light coming down towards the ground. [FIG. 1.6]



FIG. 1.5 Unity Temple. Play of contraction and expansion (ressault) at the place of the slot.
[Photo: Frans Sturkenboom]



FIG. 1.6 Unity Temple. Slot and 'ladder window' cutting open the shield of the wall.
[Photo: Frans Sturkenboom]

1.2.2 The blank façade

The vertical slots with the tall windows show the walls as shields in their full protective power, piercing them by a flash of city-light. They function as marks of vulnerability, giving the interior its character of a safe haven, a character it would have never reached so emphatically when the closure would have been absolute. The elevation 'leans' against the background of the heat and turmoil of the city scourging its skin. The wall as the cut, the *temenos*⁷⁴ of the temple, severing the profane from the sacred domain, indeed makes Unity Temple a temple in the full sense of that word: a separated domain.⁷⁵ It sunder the time of still devotion of the interior from the chronological time of the city with its ruthless tides of commuters and its intensification of traffic, trade and commerce, 'accelerating' and 'electrifying' life in the metropolis.

⁷⁴ *Templum* and *temenos* stem from the Greek *temnein*, to cut, to sever. See also § 2.2.2.

⁷⁵ Mircea Eliade, *The sacred and the profane*, New York: Brace and World, 1963 [1957].

All the 'defensive' gestures point towards the metropolis as an inimical non-place in which the citizen threatens to disappear, as the caption "find the citizen" under one of the photographs of *The Disappearing City*, suggests. [FIG.1.8] Although living "in the shadow of the wall"⁷⁶ seems to be the subject of the photograph, it is far more urban life as overcrowded and plagued by overexcited nerves, a *Nervenleben*⁷⁷ intensified by too many stimuli, that is Wright's real problem: "the forces (in the urban domain, FS) are unchecked and their acceleration is still encouraged while man is sterilized by more and more stimulants."⁷⁸ City space becomes overexposed by a "festering acceleration."⁷⁹ This overexposure can be seen in many of the facades of Wright's urban buildings, which appear as 'obliterated' walls. The Guggenheim and the SC Johnson Administration Building illustrate the case. Fifty years after *The Disappearing City*, Paul Virilio, the French theorist so often thematizing speed and light, would write: "The fact that little by little so many surfaces (territories, bodies, objects) become deserts is the result of an increasing exposure to light, the light of speed."⁸⁰

Already in Unity Temple, an early work, the walls remain sober and without much ornament. [FIG. 1.9] Urban noise has erased all possible communication of the façade with the city and its citizen. The walls are scraped off by "the screech and mechanical uproar of the big city."⁸¹ They reflect the grey sea of sounds of the urban murmuring.

Wright's urban interiors interrupt the 'horizontal time' of the city, they introduce a cut in time, a "while"⁸² giving birth to surroundings in which the citizens may reappear and 'incarnate.' One 'reincarnates' in a natural light, the light of the cycle of the day. In the interior of Unity Temple, the glance is drawn upwards to remind us of a natural distribution of the light over the four horizons, the regions of the sky.

⁷⁶ FLW, *LC*, p.23.

⁷⁷ Wright's analysis of life in the metropolis, in *The Living city* resembles that of George Simmel, the German urban sociologist, thematizing the wake of the individual trying to hold in the play of forces of the metropolis. He explicitly speaks of a heightened nervous level of life ('*ein gesteigertes Nervenleben*.') George Simmel, *Die Großstädte und das Geistesleben*, 1903 (*Jahrbuch der Gehe-Stiftung Dresden*, hrsg. von Th. Petermann, Band 9, Dresden, 1903, p. 185-206).

⁷⁸ FLW, *LC*, p. 22, p. 34.

⁷⁹ FLW, *The Disappearing City*, FLW, *CW3*, p.82.

⁸⁰ Paul Virilio, *Het horizon negatief*, Amsterdam, Duizend en één uitgevrij, 1989 [1984] p. 180.

⁸¹ FLW, *LC*, p. 19.

⁸² The 'while' refers here to Heidegger's *die Weile*, the time of abiding, the time in which one may become attuned to the surrounding. Cf. § 2.3.4 *Ein Gespräch selbstdritt auf einem Feldweg*. In: Martin Heidegger, *Feldweggespräche*, Frankfurt Am Main: Vittorio Klosterman, GA77, p.115.



FIG. 1.7 Photograph of the disappearing city in *The Disappearing City* [Source: FLW, *The Disappearing City*, New York, William Farquhar Payson, 1932. Courtesy of FLLWFA (MOMA | AA&FALCU)]



FIG. 1.8 Photograph in the disappearing city with its caption "find the citizen." [Source: FLW, *The Disappearing City*, New York, William Farquhar Payson, 1932. Courtesy of FLLWFA (MOMA | AA&FALCU)]

FIND THE CITIZEN

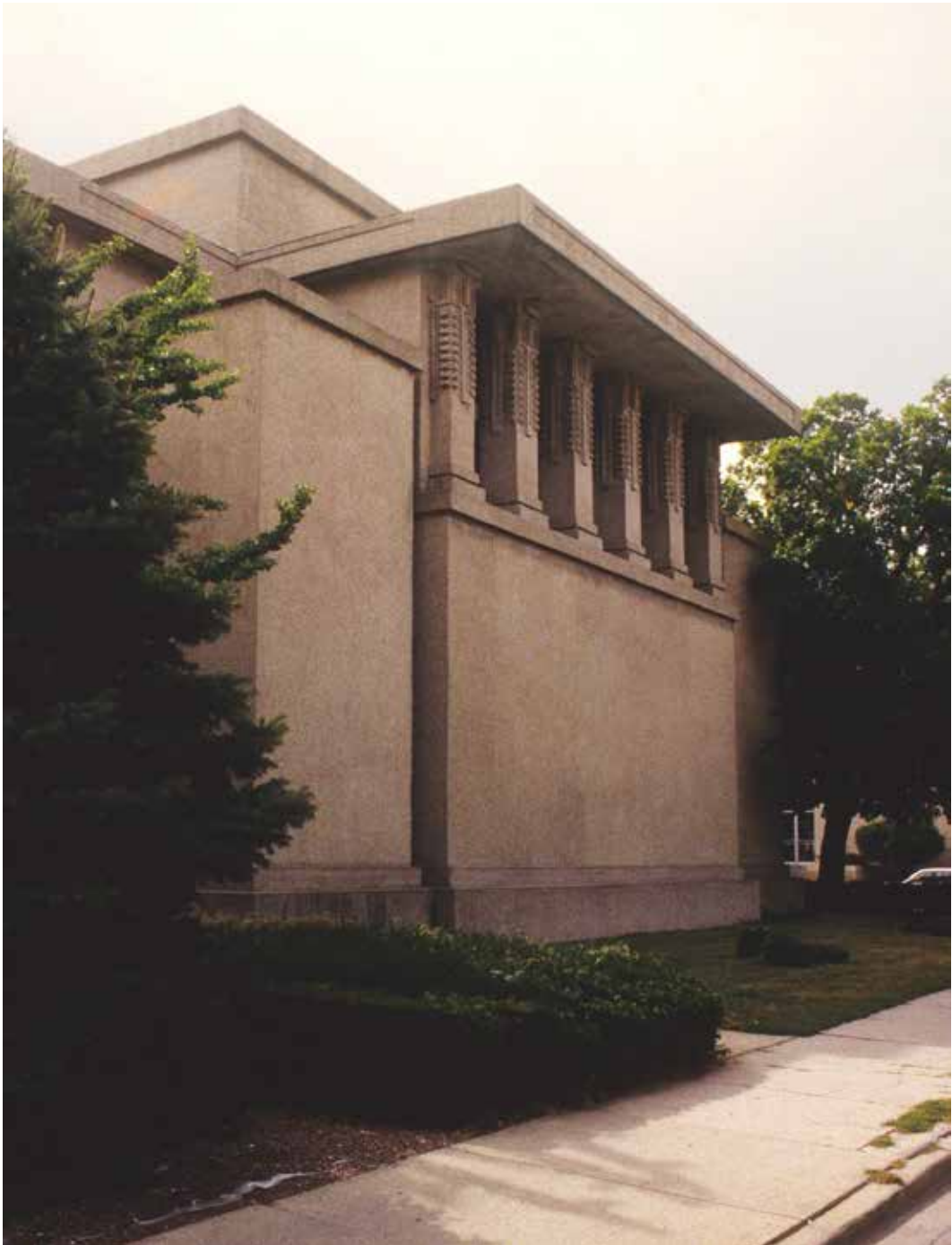


FIG. 1.9 Unity Temple. Exterior: the blank façade. [Photo: Frans Sturkenboom]

The *temenos* as the spatial cut between the interior and the city is also a temporal cut, opening up to an atmospheric time, the time of a community retrieving an earth forgotten in accelerated city life.

We can now understand the often noticed ‘complications’ of entering a Wright-building.⁸³ Passing the barrier means changing speed, a gearing down from the speed of the city to the time of the ‘while.’ If we want to enter the safe haven of the interior, we have to use a sort of airlocks in which we change medium. We have to become ‘decompressed.’ These airlocks manifest themselves as the detour we have to follow when entering a Wright building: ‘seven times to the left, to the right...’⁸⁴

Despite the closure of the interior, the medium transpires in the façade. In Wright’s urban work we feel an imminent presence of nature in the ultra-materiality of the ‘erased’ surfaces: the refined concrete of Unity temple with its little particles of stone, the clay of the red bricks of the Morris shop,⁸⁵ and even the rose, orange and cream versions of the Guggenheim-design.⁸⁶ In all of them earth transpires. It is as if in the metropolis nature is only suspended, ready to reappear when the time has come, when the “disappearing city” has erased itself.

⁸³ I will elaborate this aspect of the ‘difficult entry’ more extensively in § 2.3.3. Donald Hoffmann describes such an approach for the Robie House. Donald Hoffmann, *Frank Lloyd Wright’s Robie House, the illustrated story of a masterpiece*, New York: Dover, 1984, p. 61.

⁸⁴ We will come back on the aspect of the secrecy of Wright’s interiors in § 2.2.3 and § 2.3.3.

⁸⁵ The Morris shop, San Francisco (CA), 1948; Guggenheim Museum, New York (NY) 1956.

⁸⁶ When it comes to the Guggenheim: Wright hesitated a long time about the colour of the exterior.

1.3 The SC Johnson Administration Building: streamlining the city

1.3.1 Introduction

It is important to understand that speed, the destroyer of urban space as a place of gathering, is not a negative fact for Wright. When it comes to the metropolis, Wright does not operate from a nostalgic point of view. We shouldn't be misled by the extremely negative discourse that he maintained in speaking about the city: "it would be cheaper to abandon it."⁸⁷ His designs for buildings in the city are far more neutral in the sense of factual when it comes to taking into account and expressing the real circumstances of building in the modern city. They 'take the consequences' of a technical and social transformation. The shield and the 'obliterated wall' mirror the urban condition, at least when we think of the exterior.

When it comes to speed, it took Wright some time to find a set of tectonic gestures corresponding to the ideas of speed, circulation and acceleration. Of course, some of these gestures were already present in the horizontalism of the late Prairie Houses. In his early work, however, he completely relied on the Mannerist vocabulary of the resault, the gestures of retreat and defence, perpendicular to the façade. We will now see that in the second half of his career he developed a far richer tectonics based on the idea of streamlining and thus directly related to speed.

1.3.2 The Baroque city

It may be rewarding to make a formal comparison of a later Wright-building with the Baroque city. When I do so it will be for several reasons. In the first place the Baroque city was already a city of circulation in which the urban façade became a plastic mass able to act and react on the traffic-movements in city space.

⁸⁷ Wright's answer to a journalist interviewing him on the topic of possible urban improvements for the city of Pittsburgh.

In the second place the profile of a Baroque building corresponded to the different 'gears' of the traffic. In the third place, Baroque city space was a public space, a space in which the public was invited and stimulated to move around in order to consume the imagery of its social order. Last but not least, we see a strong scission between the exterior and the interior domain. All these aspects are at stake in Wright's treatment of urban space. The comparison may help us understand the gestures of the 'streamlined' building.

Let's start with a short excursion to the Rome of Sixtus the fifth.⁸⁸ [FIG. 1.10] Baroque Rome was a city of pilgrimage. Visiting their holy places, the pilgrims circulated through the streets, moving from one holy place to the next, consuming the imagery of Christianity that was exhibited on urban facades and in the interiors of churches and chapels. Streets were straight and ending up in squares usually occupied by monuments. They recounted the great past of the Roman and Christian city, the former contributing to the shining magnificence of the latter. Monuments like obelisks, fountains, but before all the domes and bell-towers of the chapels and churches constituted the long distance attractors instigating movement in urban space. [FIG. 1.11] These were combined with short-distance seductors in the form of swinging facades in the streets: their concave and convex gestures slowed down the pace of the pedestrian by catching the eye and inviting the pilgrims to pause for a moment and ravish in the marvels of their religion. These were piled up in the form of ornaments and statues on the façades. The interior richness spilling over on the street, persuaded the pilgrim to go inside to become even more stupefied by the wonders of Catholic faith. [FIG. 1.12]

The movement in the streets finds expression in the continuity of the eaves or of the horizontal entablature of the buildings while the pace of the pilgrims is repeated in the rhythm of the columns and pilasters supporting them. Waves or folds disturb this continuity of the urban wall, and every time the facade swings back, it creates a hollow in an encircling movement. The pilgrim is drawn into an urban room and becomes part of a communal space in front of a screen projecting its message. When lingering for a moment in front of the urban screen, the moving body is almost literally bound in that social space by the curving horizontal lines. The hollow spaces of Baroque Rome constitute the organs of a communal social body, the body of the Christian *civitas*, a *civitas dei*. Baroque city space can easily be defined as shaping a house or a palace, —the metaphor has so often been used that it has become a cliché.

⁸⁸ Sixtus V's plan of Rome aimed at systematizing movement within the city of Rome, headquarters of the Catholic Church. His plan was designed to centre all movement on the Seven Major Pilgrimage Churches by straight streets connecting those religious foci of the city. <https://www.flickr.com/photos/24364447@N05/6073167679>

In that palace the streets can be seen as corridors and the squares as rooms. These corridors converge towards the palace of the king or the *deitas* as the head of the community.⁸⁹ [FIG. 1.13] In the Baroque city we clearly find a social urban space, accomodating that larger body of a society or community finding its home in the city as a house or a palace.

The power of this model of the city as a series of public rooms and corridors becomes clear when we realize that it held sway—passing through Haussmann's Paris⁹⁰—until the beginning of the 20th century when modernism, with its 'object oriented approach,' dismissed it. We cannot unproblematically give Wright a place in that urban story of the modern movement. Wright's anti-classicism forbids us to see him operating on an urban space as a field of objects. What happens in Wright is far more complex. We must start by assessing the presence of the Baroque model. It is there, but in an inversed, 'negative' version. If the Baroque city is a city of circulation, Wright takes the consequences of speeding up traffic. The concave forms of Borromini's Oratory of Saint Philip Neri [FIG. 1.14] and Bernini's St. Peter's colonnade⁹¹ [FIG. 1.15] materialise a communal moment, a moment of embrace. When we accelerate such curves tend to stretch toward a straight horizontal. They might even collapse into their negative convex version, into forms of collision instead of communion. In the convex gesture we recognize Wright's circular and rounded-off city forms. [FIG 1.16]

⁸⁹ Wright opposed that model in *The Living City*. FLW, LC, p. 34.

⁹⁰ Georges-Eugène Haussmann was a French official who served as prefect of Seine (1853–1870), and who carried out a massive urban renewal programme of new boulevards, parks and public works in Paris commonly referred to as Haussmann's renovation of Paris.
https://en.wikipedia.org/wiki/Georges-Eug%C3%A8ne_Haussmann

⁹¹ Francesco Borromini, *Oratory of St. Philip Neri*, Rome, Italy, 1650; Bernini, *St. Peter's colonnade*, Rome, Italy, 1667.

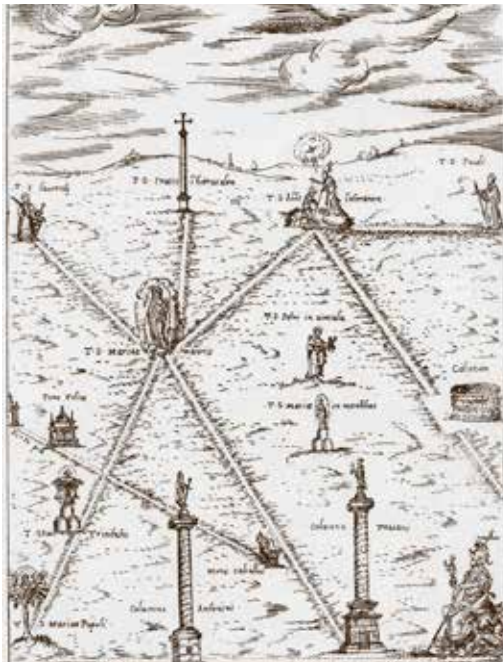


FIG. 1.10 The Baroque city, the Rome of Sixtus the fifth. Long distance attractors. [Drawing left: Giovan Francesco Bordini, *De rebus praeclaris gestis a Sixtus V, p.m. 1588* | Drawing right, Siegfried Giedion; source: Giedion, Siegfried, *Space, Time and Architecture, The Growth of a new tradition*, Cambridge (MA), Harvard University Press, 1982 (1941)]



FIG. 1.11 The Baroque city: long distance attractors. Obelisk in Piazza del Popolo, Rome. [Gaspar van Wittel, 1678]



FIG. 1.12 Short distance seductors: Francesco Borromini, facade of the San Carlo alle Quattro Fontane, Rome, 1666. [Photo: Nicolas Hartmann; CC BY-SA 4.0]



FIG. 1.13 The Baroque city: streets converging to the palace in Karlsruhe. [Photo: unknown]



FIG. 1.14 Borromini, Oratory of St. Philippi Neri, façade, Rome, 1650. [Photo: Matthias A. Peterseim; CC BY-SA 4.0]



FIG. 1.15 Bernini, St. Peter's Colonnade, Rome, Italy, 1667. [Photo: David Iliff, CC BY-SA-3.0]



FIG. 1.16 SC Johnson Administration Building, Racine (WI), 1936. [Photo: Carol M. Highsmith; Library of Congress]

1.3.3 Building speed

The SC Johnson Administration Building gives us a very pure image of speed and acceleration. The corners are rounded off because Wright imagined them to be passed with car-speed. Usually the corners are the moments in which a building rises to form the beginning of a contour that finds its fulfilment when meeting and signing off against the sky. In the exterior of this building the vertical as the moment of stance is often omitted. When Wright, speaking of the SC Johnson Administration Building, labeled it "a streamlined building,"⁹² he didn't only mean the generalized horizontal articulation, he also meant this rounding-off of the corners. [FIG. 1.17] And to complete the tectonic transformation of the façade, any signs of supporting and supported elements, of columns, floors or roofs, are left out. Wright filleted the wall-roof-corner in the vertical section, introducing the Pyrex tubes instead of the eave or the entablature and postponing the vertical moment of stance to the interior. No picture of this building is so convincing as the one taken by night, when all the glass tubes light up. [FIG. 1.18] We imagine a metropolitan street in which the lights of the car, in the long exposure of the negative, have become lighting lines, sometimes going around the corner, sometimes just continuing straight-on. The SC Johnson Administration Building shows us an era celebrating and fully consuming speed as one of the apexes of civilization. A building 'going on,' 'going ahead' and 'going around' at the same time.

Wright takes it all: if speed is the main determinant of this urban space,⁹³ the façade itself as a screen for messages is virtually erased because the possibility of reading a nearby sign is undone by speed itself. Speed may destroy distance, as it is often said, but it certainly also destroys proximity, a world 'nearby.' There are no signs to be consumed by the driver. The blinded and smooth facades correspond to a suspended community that will no longer find its medium in exterior city space but only in the interior. The façade testifies of the fact that speed destroys the social bond, it is dissociating the community, which in the Baroque city found a house in city space. The messages, virtually inaugurating a community, are washed away by the tide of traffic movements. We find no invitations to come in, only centrifugal gestures.

Again entering the building is complicated. Two brick boxes are drawn out to lead the visitor into a 'tunnel' that turns out to be the gear-box to slow down to enter the building. We enter 'secretly' by passing the horizontal rails of the entrance sash in the rotating movement of the revolving door. In that moment we transubstantiate from anonymous drivers to the employees of a working community.

⁹² Jonathan Lipman, *Frank Lloyd Wright and the Johnson Wax Buildings*, New York, Rizzoli, 1986, p. 31. Wright stated: "High time to give our hungry American public something truly 'streamlined'..."

⁹³ "...an accelerated and painfully forced circulation." FLW, CW3, 83.



FIG. 1.17 SC Johnson Administration Building and Research Tower, 1955. [Courtesy of SC Johnson]



FIG. 1.18 SC Johnson Administration Building and research tower. An era fully consuming speed. [Courtesy of SC Johnson]

1.3.4 A first grotto

After this comparison of Baroque city space and its late 'negative' in the SC Johnson Administration Building, we will enter the interior. [FIG.1.19] The convex forms of the outside are inversed to concave gestures. They are incidentally interrupted by new convex ones, developing their own rhythm in the flowing space. [FIG.1.20] One thing immediately strikes us: the circular movements do not stop. The interior is not a static domain, even the famous 'dendriform' columns are horizontally articulated, they rise up in a circular movement, in a going around and going up while dilating. The vertical, the moment of stance, is again only *implied*. We may have slowed down, we are still moving around.

It has often been said that this room has a subaquatic character, due to the somewhat 'thick' light coming from above and the dark, claylike walls rising at the periphery. According to Hitchcock, "the light has a very special quality. With the special forms of the piers, there is a certain illusion of sky seen from the bottom of an aquarium."⁹⁴ We are certainly moving through another medium in the interior, a 'liquid' mixture of earth and light, a medium corresponding to the changed speed. The forest of columns invites one to circulate around them. The rounded forms of the furniture affirm this 'circling around.' The table tops and their shelves above and beneath seem to float while the drawers and chest-bodies remind us of the hull of a ship. [FIG. 1.21] These drawers and chests literally turn around the table legs that function as hinges. Everything partakes in a slow waltz of human bodies and things. In the chairs we find a remarkable constellation of verticals, of which some are captured between horizontal bars, while the rest are tip-toeing on brass 'ballet-pumps.' They give the chairs their dancing staccato rhythm. The open circular foot bar overlaps with another circle, cutting the sitting domain in a front and back area, suggesting an interlocking or floating apart. In posture theory, sitting is often considered a special case of standing. Both become problematic in this slow dance. We have vertical legs, there is no denying it, but in the overall picture they appear as moving parts in the circulation of messengers and messages in that "office building of the future."⁹⁵

⁹⁴ Henry Russell Hitchcock, *In the nature of materials. The Buildings of Frank Lloyd Wright, 1887-1941*, New York: Da Capo Paperback/Hawthorn, [1942], p. 92.

⁹⁵ According to an article in Life magazine. CF. Jonathan Lipman, *Ibid.*, p. 93.



FIG. 1.19 Johnson Wax Company Building, overview of the great hall. [Photo: Carol M. Highsmith, Library of Congress]



FIG. 1.20 SC Johnson Administration Building: play of convex and concave. [Photo: Carol M. Highsmith, Library of Congress]



FIG. 1.21 SC Johnson Administration Building, furniture. [Photo left: Sailko, CC BY-3.0; photo right: courtesy of SC Johnson]

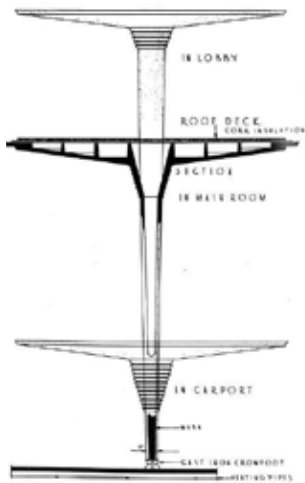


FIG. 1.22 SC Johnson Administration Building: columns, section. [Courtesy of FLLWFA (MOMA / AA&FALCU)]



FIG. 1.23 SC Johnson Administration Building: fountains of matter. [Courtesy of SC Johnson]

“The columns are made to stand up and take over the ceiling, the column is made part of the ceiling.”⁹⁶ In the capitals the circles of the columns widen and tend to infinity at roof level. [FIG. 1.22] Their profile seems to describe, if even in fits and starts, a hyperbola. The hyperbola finds its asymptotes in the implied vertical, connecting sky and earth, and in the flat horizontal roof as the meeting line between these two realms. In the interior we find ourselves ‘below the horizon.’ We have descended into earth. The horizon is climbing down over the implied verticals, the light igniting the spiritual medium we move through. Just like in Unity Temple, the interior is a fragment of nature. It doesn’t matter that it is a construction, that it is artificial: nothing more artificial than this interior. Nature produces highly artificial things and the ‘great Artifex’⁹⁷ constructs nature. The white columns are at the same time stalactites hanging from the sky penetrating this subterranean cave, *and* fountains of matter eclipsing the glowing backlighting veil of the sky. [FIG. 1.23] They define the interior as a submarine grotto, the highly Mannerist abode of Nereids and water-gods, and of the marvel-matters of the earth as the great belly of all wonderful things, the belly of the great ‘architect-artifex’ or of creative nature.

⁹⁶ Lipman, *Johnson Wax*, p. 22.

⁹⁷ Wright’s name for creative spirit, comparable with the ‘I’ in Whitman’s *Leaves of Grass*, thus also a historical power. Cf. James Dougherty, *Broadacre city: Frank Lloyd Wright’s Utopia*, *The Centennial review*, vol. 25, summer 1981, pp. 239-256. Cf. FLW, LC, p.40-41.

1.3.5 The terrestrial and the celestial city



FIG. 1.24 SC Johnson Administration Building, advertisement department, cupola and screen of Pyrex tubes. [Courtesy of SC Johnson]

The 'circling circle' reappears everywhere in the building. One of the most beautiful examples we find in the cupola of the advertisement department. It is a glass dome materialized in the same Pyrex Tubes that we find everywhere in the building. [FIG.1.24] Behind the inner cupola we find a steel construction, consisting of steel

tubular rings becoming smaller when approaching a central oculus. In its transpiring contours this construction seems to be something like a steel wickerwork used as a frame to hang the inside bowl. On the outside we find a second dome making the whole rainproof. With its slow curve the glass dome remembers us of the Roman Pantheon, now translucent. The Pyrex tubes appear as a series of circles decreasing their diameter towards the top. The 'circling circles' of the Pyrex tubes seem to depict the radiating waves of the broadcasting actions of the company.

The Johnson Company was very keen on marketing and Herbert Johnson, Wright's commissioner, saw the building as a large advertisement object for its activities around the USA and thus as part of the image-building of SC Johnson as a modern firm. The advertisement department would be the perfect place to show this image. The place emitting messages and radiating images. Broadcasting waves transmit in ever widening circles and the dome seems to convey this image. It constitutes the evidence of an awareness that all buildings not only stand 'under the sky,' as the old phenomenological formula rings, but also in an ether spanning the earth, a sphere populated by wave-frequencies and by all other forms of transport. In his book *Angels, a Modern Myth*, Michel Serres, the French philosopher connecting the realm of the exact sciences with that of art and literature, speaks of a terrestrial and a heavenly city.⁹⁸ The upper one is the intercity of transport and of messaging, of flying, moving, beaming and networking around the earth, the sphere of an immaterial existence between the ports and the interfaces. This celestial city is the realm of angels, only appearing for a moment on the threshold of the terrestrial city, delivering their message, then disappearing. The earthly city is all that happens on the surface of the planet, its body also being our material body.

We must read the formal logic of the cupola in terms of the messaging era. The cupola is the place where the messages enter and leave. The central ring beams the messenger up or down: "beam me up Scotty." It is the transmitter. In the middle of the room we find a wooden desk, the place of decryption or of 'incarnation.' From that point the incoming messages are distributed to the rooms around a convex screen, again made of the same Pyrex tubes. Following the process in inversed direction, we see that the silhouettes of employees walking behind the screen are 'analysed,' immaterialized and even 'vectorized' as is often seen in comics when looking at accelerating figures. They tend to become horizontal lines, fragments of Morse codes. It is the first step in the encrypting process, in which everything is coded in terms of the horizontal, the line of speed and communication. In the cupola the horizontal is transformed to curves: the circles extend and contract.

⁹⁸ Michel Serres, *Angels, a modern myth*, Paris: Flammarion, 1995 [1993].

Expanding, they will meet other senders, they will intersect and interfere, foaming up that ether of signals around the earth. Waves and waves and waves. Bubbles. The invisible 'bearing' structure behind the cupola gives us an image of that electronic exoskeleton of interfering circles around the earth, the skeleton that will 'bear' the project for the future city, the city of speed and communication.



FIG. 1.25 The Baroque city: nature in the public spaces.
[Photo: Cezar Suceveanu, CC-BY-SA 4.0 International]

The SC Johnson Administration Building gives us the image of an interlocking of the celestial and the terrestrial city. The celestial city is the technical city in which humans only appear 'at the end of the line.' The ends are the subterranean abodes in which the angel-messengers incarnate in an ultra-material medium, the terrestrial city of interiors. In a way the exterior 'tells' us the same story. Its streamlined form was the product of speed: speed erasing all signs of communication on the screen of the façade; speed compressing distances but also destroying proximity; speed immaterializing the domus of the city and postponing the communal moment to the interior.

If we return to the Baroque city of Rome, we would see that in God's domus—in the squares as rooms and on the corner of the streets—we often find sculpted fountains spilling their water over enormous shells and rocks against backgrounds of stone plants. Big fishes, wild horses, lions and bees cross the picture. Wind blows the cloaks of angels and saints. Despite the circulation, despite its communicating, indeed radiating character, God's city still appears as a terrestrial city, a city of nature. [FIG.1.25] What about Wright's disappearing city? Behind the gloss of the bricks and the multiplied horizontals that reflect the light of speed, the SC Johnson Administration Building appears as a massive block of earth, a degree zero of nature. [FIG.1.26]



FIG. 1.26 SC Johnson Administration Building, “a massif bloc of earth.” [Photo: pasa47]

1.4 Broadacre: The reappearing city

1.4.1 Introduction

With Unity Temple and the SC Johnson Administration Building we have distilled a first image of Wright's ideas about the city. For Wright the city is the city of speed. Wright doesn't oppose the car, he embraces it. If speed erases the city as a communal civic domain this is a logic that corresponds to a dispersal of the community as a result of speed. Speed is the beginning of a metropolis collapsing. The metropolis will leave itself to raise in small, dispersed, but integrated communities.⁹⁹ For Wright this is a natural development. Speed is the beginning of a new, positive city, "the extended instead of the contained one."¹⁰⁰

For every architect there comes a time to explicate his ideas of city life and to substantiate them in a design. Following Levine for Wright that moment came in the thirties, a period of intense involvement with city planning and the design for several projects in the city.¹⁰¹ A time in which we saw Wright reviewing planning developments in Europe and at the same time formulating his ideas about the contemporaneous and the future city. This intense thinking on the city condensed in several urban projects, but above all in the model of Broadacre.

It has often been said that Broadacre city is not a plan or a design.¹⁰² But this is too easy: a model has been made of it, a model exhibited in expositions together with plans and designs for buildings populating it.¹⁰³ Even if the plan was quite open and provisional, it contained many clues how a modern county-town could work and look like. Wright himself took Broadacre city as "the country itself come alive as a truly great city."¹⁰⁴ It was the design for an exemplary city, one with the status of a Utopia in

⁹⁹ See for all these aspect: FLW, *The Disappearing city*, CW3, pp. 82-83; pp. 324-326.

¹⁰⁰ FLW, *LC*, p. 21

¹⁰¹ Neil Levine, *The urbanism of Frank Lloyd Wright*, Princeton & Oxford: PUP, 2016.

¹⁰² "(...)Broadacre city does not represent in any way a proposed plan, a fixed formal arrangement." Lionel March, in H. Allen Brooks, *Writings on Wright*, Cambridge (MA), 1981, p. 204.

¹⁰³ As can be seen in Frank Lloyd Wright's *The Living City*.

¹⁰⁴ Quoted in March, Lionel, *An Architect in Search of Democracy: Broadacre city*, 1970. In: H. Allen Brooks, *Writings on Wright*, Cambridge MA, London, 1983 [1981], p 202

many ways coinciding with an ideal America, but ideals are there to be realized. Wright never stopped working on Broadacre during the second half of his career, revising texts, detailing it, injecting new building designs, remarkably also those designed for the dystopian, “disappearing city.” If Broadacre is an evaluation of ideas on the city, it certainly also embodies a shift from a vision on a dystopian, dying city, to an Eutopian (a good place) “living city.” For that very reason we should take it seriously.

Many of Wright’s writings on the city abound in diatribes against all the epiphenomena of the Metropolis. They condemn congestion, damn “centralization winding up” and show the citizen disappearing “in the shadow of the wall.” In *The Living City* a positive image of a natural, ‘organic’ city, nonetheless transpires. We cannot dismiss Broadacre, as Levine does, as something pushed by his fellows in the Fellowship, something reluctantly done and “an anomaly” in Wright’s oeuvre.¹⁰⁵

1.4.2 **Broadacre: studying the model**

Before starting our analysis, it is necessary to see how Broadacre today appears for us. Broadacre is a plan; it is a model; it is a series of drawings, some of details or elements, some areal perspectives; it is a series of texts all to a certain degree mixed, containing both commentaries on the “disappearing city” and explanations of an already appearing, but still to be designed city. Finally it is a philosophy in which Wright formulates his ideas about democracy, economy, agronomy, modern technique, social life and individuality. These ideas are embodied in all the hardware mentioned.

I will start with a short description of the model of Broadacre.[FIG. 1.27]

It represents a 4 square mile low density area with housing, industry, farms, markets, sport facilities, schools and amenities. At one side of the model we find a highway with two exits connecting to two regional roads crossing the highway. These roads in their turn are crossed by two other regional roads which are cut off at the border of the model supposedly continuing parallel to the highway. The model being a square, it can be divided into four sub-squares (it actually was in order to transport it), which are crossed in their centre by two of the perpendicular regional roads. In that way the sub-squares are again divided into four sub-squares. The complete area thus comprehends 16 of these sub-sub-squares, each measuring one quarter of a square

¹⁰⁵ Levine, Neil, *The Urbanism of Frank Lloyd Wright*, p. 179.

mile, equalling 160 acres.¹⁰⁶ [FIG. 1.28] The central 4 sub-sub-squares are areas reserved for dwelling, one house per acre. The twelve remaining sub-sub-squares, surrounding the central square are occupied by all the amenities, by small and larger farms, orchards and vineyards and again partly by housing, and by more explicit landscape elements such as a river, a lake, a little forest and a mountain. [FIG. 1.27]

After this description we may tackle the themes of the project.



FIG. 1.27 FLW, Broadacre, model, 1936. [Photo: courtesy of FLLWFA (MOMA / AA&FALCU)]

¹⁰⁶ I follow the interpretation of Donald Lesley Johnson. *Broadacre's Geometry: 1934-1935*. The journal of architectural and planning research, 5, No.2, Summer 1988, <http://www.jstor.org/stable/43028877>.

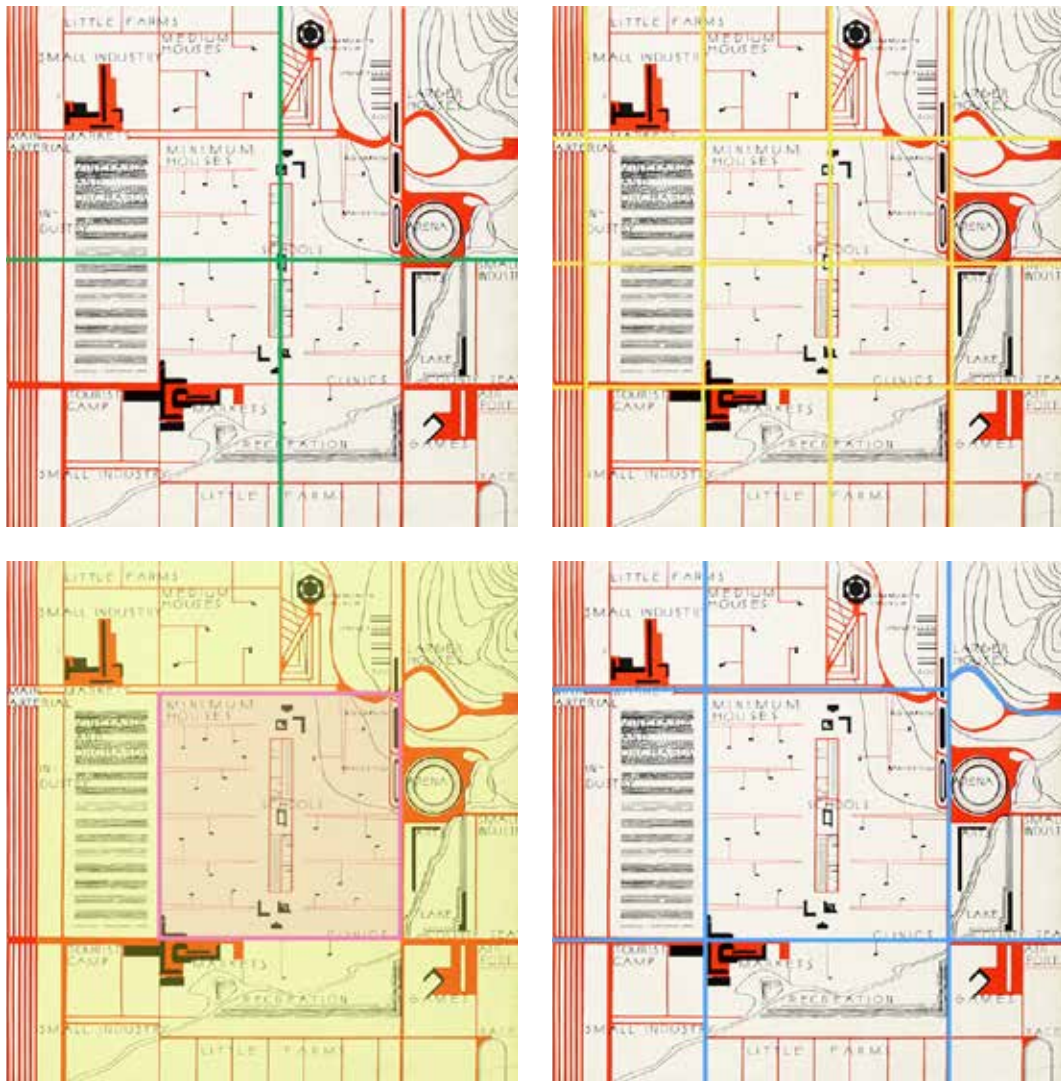


FIG. 1.28 Broadacre, divisions. [Colour schemes: Frans Sturkenboom | Urban plan: courtesy of FLLWFA (MOMA / AA&FALCU)]

Green lines: division in 4 squares of one square mile each, according to the actual model.

Yellow lines: division in 16 sub-sub-squares

Pink lines and pink surface: central area district, largely acres/residential, in total 1 square mile.

Yellow surface: 'hospitality zone,' 3 square miles.

Blue lines: regional roads

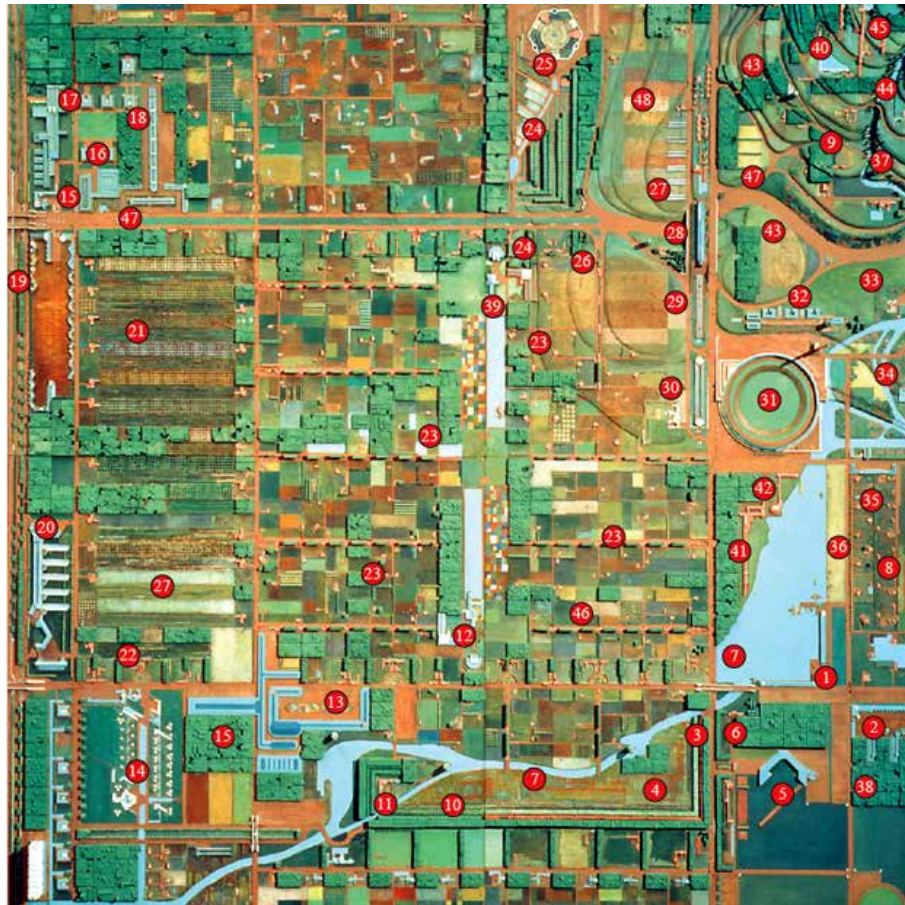


FIG. 1.29 Broadacre, 'land uses.' [Courtesy of FLLWFA (MOMA / AA&FALCU)]

- | | | |
|---------------------------|---------------------------|-------------------------|
| 1 County seat | 17 Commercial | 33 Country fair |
| 2 Airport | 18 Service business | 34 Sanitarium |
| 3 Stables and track | 19 Main parkway | 35 Industrial units |
| 4 Sports fields | 20 Industry | 36 Medical clinics |
| 5 Baseball field | 21 Vineyards and orchards | 37 Apartments |
| 6 Athletic clubs | 22 Live/work | 38 Dairy |
| 7 Lake and stream | 23 Residential | 39 Elementary school |
| 8 Small farms | 24 Schools | 40 Taliesin equivalent |
| 9 Custom residential | 25 Worship center | 41 Design center |
| 10 Interior parks | 26 Guest houses | 42 Cinema |
| 11 Music garden | 27 Research center | 43 Forest cabins |
| 12 Physical culture | 28 Arboretum | 44 Reservoir |
| 13 Market center | 29 Zoo | 45 Automobile objective |
| 14 Roadside inn | 30 Aquarium | 46 Garages and stores |
| 15 Employee residential | 31 County fair | 47 Gas stations |
| 16 Industry and dwellings | 32 Hotel | 48 Educational center |

1 Settling at the highway

The first thing that strikes us when looking at the model is the highway we find on one side of it. In Wright's vision the highway is exactly one of the forces that will tear the metropolis down and that will build the new, "extended instead of contained" city.¹⁰⁷ That city will develop naturally: at several points in his texts, accompanying the model, Wright explains that his first ideas about Broadacre were born when he saw spontaneous developments around highways. At the place of gas-stations, markets popped up at the roadside in which the people of the region offered products, and eventually small commercial 'settlements' developed. In the sketches and the model itself, we find roadside markets at the side of the highway or the regional roads. Wright makes us believe he only systematizes what already takes place. "America needs no help for Broadacre city. It will haphazard built itself. Why not plan it?"¹⁰⁸ Broadacre is the name for an exit of the highway and the story of a development or 'colonization' which may take place consequentially. It is the story of a settling in the American 'wilderness' but with the knowledge of today. It romantically evokes the idea of *The New Frontier*, which was the subtitle of the Taliesin publication of *The Disappearing City*. And doubtlessly this frontier was no longer the physical frontier pushed forward by the expansive forces of America's colonization, Frederick Jackson Turner's *Frontier*.¹⁰⁹ It had already become an intellectual frontier in which the possibilities of 'the machine,' of the new transportation and communication means, would open up to a new way of life in a city as a countryside. According to Wright in this new way of life architecture would meet nature instead of destroying it, and America "would rise out of the confusion of a communal life in the city to a creative civilization of the ground."¹¹⁰

¹⁰⁷ FLW, *LC*, p. 21.

¹⁰⁸ Frank Lloyd Wright, quoted by James Dougherty, *Broadacre city, Frank Lloyd Wright's Utopia*, *The Centennial Review* Vol. 25, No. 3 (Summer 1981), pp. 239-256 Michigan State University Press, p. 241. <https://www.jstor.org/stable/23739336?read-now=1&seq=1>

¹⁰⁹ Frederick Jackson Turner, *The significance of the Frontier in American history*, 1893.

¹¹⁰ FLW, *LC*, p.27.

2 The orthogonal order

A second character we find in the strict orthogonal order of the plan. Where in the first sketch of 1934 winding roads cross the entire area, in the 1935 model they are restricted to one corner in which a mountain rises up. Though orthogonal, we cannot exactly speak of a grid of roads rationally dividing the traffic. Branching from the 4 regional roads, smaller roads do not always continue: they feed the acres as lanes or branch into the acre area giving access to the lots.

3 The acres

When we speak of the acres we must be precise: the whole plan is based on an acre unit (=4046,86 m²), designed not as a square but as a rectangle, approximately measuring 50,3 x 80,5m. The model thus counts 2560 of such plots, as a drawing accompanying the models shows. [FIG.1.30] In the model these plots are not always recognizable. Only the plots meant for single housing have clearly delineated contours.

The measure of an acre is not the result of an exact calculation meeting a certain program, it is before all an intuitive and symbolical surface area: “In the city of yesterday ground space was reckoned by the foot. In the city of to-morrow ground space will be reckoned by the acre—an acre to a family.”¹¹¹ And certainly this acre is meant to provide the inhabitants with enough ground to produce their own crop—when needed in harsh times—but it is as much about “a sense of spaciousness”: “These modern means of transit also cultivate in our citizen a new sense of spacing.”¹¹² This spacing coheres with a sense of freedom to use the lot as one wants. In the model the allotment makes the ground a real patchwork, confirming Wright’s idea’s about individuality leading to variety.

Yet there is also another element that must be mentioned: the acre is a very old surface area measure. The word “acre” stems from the Greek words *Agros* and the Roman word *Ager* (field) and from the middle-ages onward it was supposed to be the area which one farmer could plough with a yoke of two oxen in one day.¹¹³

¹¹¹ FLW, CW3, p. 151.

¹¹² Ibid., p.150.

¹¹³ The Romans however had another unit: the *juger*, measuring 750m². The acres of the Romans were square.

The original medieval *aecers* were based on a 'fur-long' (200m), referring to the fur ploughed, and a 'chain' or 'rod.' (20m) [FIG. 1.31]. They grossly equal the American acre (4046,86m²) as a surface area. The rectangular form of Wright's acres (50,3m x 80,5m) is however in no relation to the width/length ratio of the Anglo-saxon *aecer* (1:10). The Broadacre ratio is most probably the result of considerations concerning the more or less efficient tillability of the area.

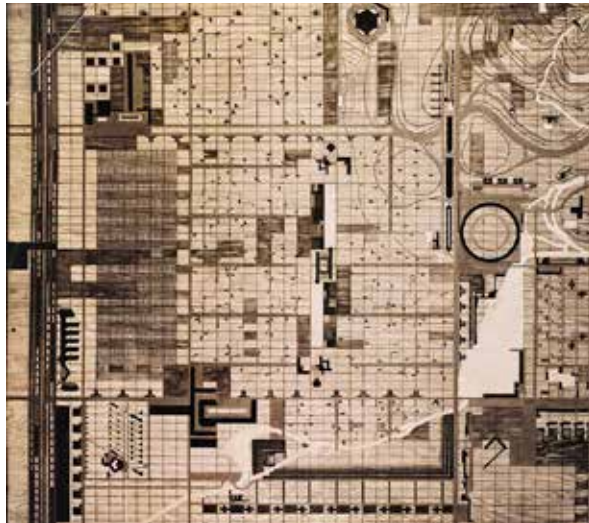


FIG. 1.30 Broadacre, 2560 acres. [Drawing: courtesy of FLLWFA (MOMA / AA&FALCU)]

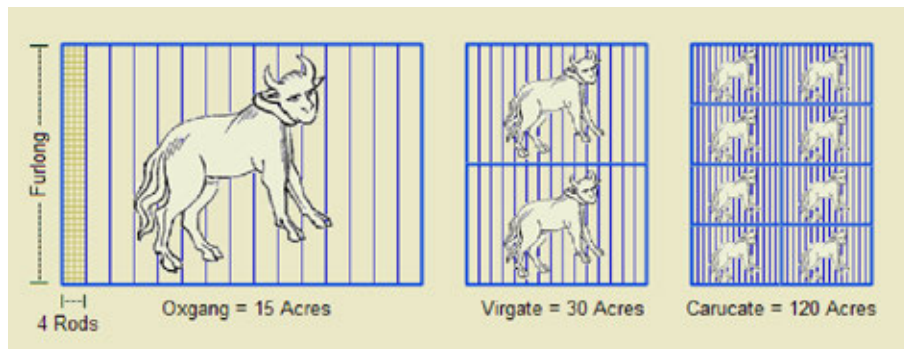


FIG. 1.31 Acres and furlong. [Photo: Unitfreak]

A city with the name Broad-acre emphatically refers to a city of cultivators, cultivating their acres. The model indeed has a definite agrarian character and Wright spoke of Broadacre as “an agronomy intelligently administered.”¹¹⁴ Not only were the inhabitants of the acres supposed to till their own field and were they offered the possibility to sell their surplus crop on the roadside market. We also find small and medium farms on the sides of the model and long vineyards and orchards between the highway and the central area.

The ‘*Ager Romanus*’ shines through everywhere. Interesting here is the occurrence of a ‘county architect’ in the earlier versions of texts on Broadacre city, “an agent of the state in all matters of land allotment and improvement.”¹¹⁵ This figure strongly resembles the Roman surveyor, distributing the land among the new colonists according to the *centuriatio*.¹¹⁶ This surveyor-architect seems to refer to a virtual polis regulating land distribution on the local or regional level, as soon as a new settlement spontaneously emerges.

4 A complete city

The predominantly agrarian character of Broadacre doesn’t say Wright’s proposal is an exclusively agrarian dream. Wright planned factories along the highway. Believing in ‘the machine’ he also believed in machine born production.¹¹⁷ He was aware of the necessity of cultural institutions of which we find several in the plan. He believed in science and for that reason there are schools and a small university. For Wright Broadacre was a real city covering all the needs a modern human being may have. We must never forget that in Wright’s vision the old metropolis would die and only the Broadacre type of city, ‘the rural city,’ would remain. This fact counters the often heard critique that Broadacre would be the very model of urban sprawl because sprawl—the endlessly proliferating suburb—fully depends on the metropolis for its existence.

¹¹⁴ FLW, *LC*, pp. 35-37

¹¹⁵ Dougherty, *Broadacre city, Frank Lloyd Wright's Utopia*, p.243

¹¹⁶ *Centuriatio*: the allotment of the land according to the ‘Roman Grid.’ Lots were approximately 750 x 750 m, but could also be subdivided.

¹¹⁷ It is even the third point of his commentary on Broadacre. FLW, *Broadacre city, a new community plan*, The architectural record, 1935, p.345. <http://courses.washington.edu/gmforum/Readings/Wright.pdf>

5 Natural artefacts

A last striking element are the natural 'relics.' A mountain and a river are completely 'built in' by the orthogonal order. A vehement confrontation: the lines of the grid collide with the capricious contours of nature, the free lines of nature are 'caught' in the orthogonal mesh. We become aware of the striking difference between the two. We may again refer here to the *Ager Romanum*: reconstructions of the allotment of the Roman countryside show how the rationality of the Roman surveyor and maybe even a religious tradition of cross-like parcelling¹¹⁸ drove the Romans to a same sort of collision between nature and culture (in the sense of the cultivation of the land). [FIG.1.32]

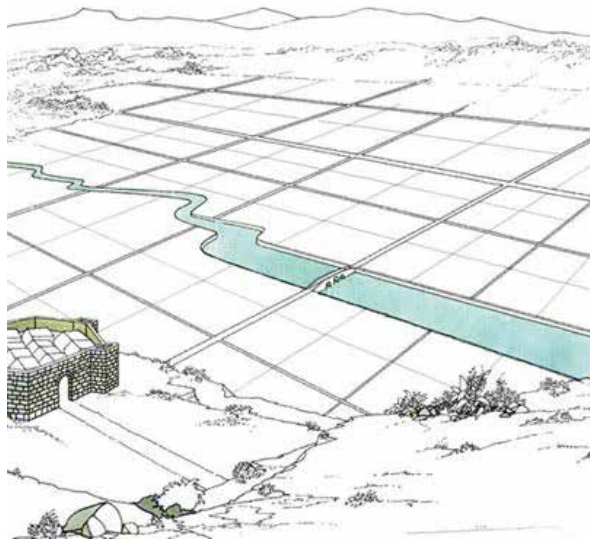


FIG. 1.32 *Ager Romanum*: confrontation natural artefacts and orthogonal parcelling. [Source: Jeremia Pelgrom, *The Roman rural exceptionality thesis revisited*.]

The reason why Wright included these natural artefacts is not entirely clear. Wright seems to indicate that only where nature provides a relief, only where it specifies the site vertically, Broadacre may 'land.' The crucial thing is that the plan is entirely dominated by the idea of transport and communication. These are forces erasing natural distances and geographic differences. In such a plan based on horizontality as the line of traffic-movement, a natural relief will be the only visible token of an earth connecting to the sky on the level of the landscape itself. It moors Broadacre to the earth, the earth as a building produced by nature. The perspectives made of

¹¹⁸ Cf. § 2.2.1.

Broadacre corroborate such a reading: we always find a river or a mountain in the surroundings. This already makes Broadacre to a regional plan, connecting it to an idea of landscape and it also defines the Broadacre denizen as an inhabitant of a terrestrial community.

6 The borders of the plan

We now come to a difficult question. How to see Broadacre on a larger scale? Are the borders of the model the borders of a city? If yes, is this city repetitive? Or is it a fragment of a city, or even a model for the endless colonization of the earth? In other words: what is the status of the border of the model?

In the absence of clues given by Wright himself, much has been said about this question. The relative density of amenities does in no way correspond to the limited population living on the acres, in the villas on the mountain, the farms and in the few skyscrapers. For that reason, Donald Lesley Johnson has drawn the conclusion that the actual model must be seen as a county-capital referring to other 'Broadacres' to find a support-base.¹¹⁹ [FIG.1.33]. Broadacre would imply a regional planning model. Levine initially seems to come to a similar conclusion, referring to some remarks of Wright himself on the feasible 'radius' (of 150 miles) of operations for "all forms of production and distribution in the automobile age."¹²⁰ Broadacre would then refer to a county of 36 square miles of which it would occupy one-ninth of the area reckoning in terms of a linear city. But he also points to the fact that the city does not seem to stop at the borders of the model and suggests the possibility of its boundless character.

It is beyond the scope of this study to give any definite answers here to this question. If Broadacre is a plan and a design, which I think it is, it must have an 'operativity' not necessarily bound up with an overall spatial scheme of repetition. In my view Broadacre may pop up or 'land' anywhere and if it does certain elements must be present and certain conditions must be fulfilled to make it work. This is what Wright meant when he said that Broadacre was an "everywhere and nowhere city."¹²¹ And it is also the reason he often spoke of the plural Broadacres.¹²² I will come back on these elements and conditions as the bearing ideas of Broadacre in the next paragraphs.

¹¹⁹ Johnson, Donald Leslie, *Broadacre's Geometry: 1934-1935*. The journal of architectural and planning research, 5, No.2, Summer 1988, p. 140.

¹²⁰ Levine, *The Urbanism*, p.176.

¹²¹ FLW, *CW3*, p. 325.

¹²² Dougherty, *Broadacre*, p. 345.



FIG. 1.33 Broadacre in regional model. Drawing: Donald Leslie Johnson.

According to Johnson the actual model of Broadacre would be a county-capital in a network of smaller Broadacre-towns. Source: Johnson, Donald Leslie, *Broadacre's Geometry: 1934-1935*. *The journal of architectural and planning research*, 5, No.2, Summer 1988

After having made the inventory of the main elements of the plan we must now interpret them in the light of the 'negative' of a city we processed in our studies of Unity Temple and the SC Johnson Administration Building. We must keep in mind the following.

- 1 We spoke of the interiors in the existing metropolis as fragments of nature and of the overexposed exteriors in which we saw nature shimmering through in a sort of after-image. We characterized that city as the terrestrial city. Is Broadacre such a terrestrial city and if yes: what are the constituents of such a 'city of the earth'?
- 2 We also spoke of a celestial city, the city of speed and of the new communication means such as broadcasting, telegraph and telephone, the compressed city of reduced distances.
- 3 We spoke of urban metropolitan space as the non-space of a dissociating community. Wright spoke of Broadacre as "A new community plan."¹²³ What is the 'common' binding this community?

¹²³ FLW, *Broadacre city, a new community plan*. *Architectural Record*, 1935, pp. 345-349.

In order to come from an inventory to a construction we must more actively relate elements by ordering them in sections, routes, 'procedures' and indeed combine them in perspectives. We will do so by following two 'routes' in order to 'cross-section' Broadacre city. In the first route we will begin on the highway, in the celestial city of speed, to come down and finally 'land' on our acre of ground in the terrestrial city. We will interpret this route as a modern process of settling. In the second route we will follow the inverse way, cross-sectioning all the communities and commonalities binding the Broadacre citizen to end up in the celestial city, the city of transport and communication.

1.4.3 **Settling: from the city of speed to the city of the earth.**

We already characterized the transport network as part of a heavenly city, the city of speed and reduced distances. Leaving the highway means coming down to the earth, the exit being the first gearing down, a form of landing. Then, moving perpendicularly to the highway on one of the regional roads, we will probably see the mountain, or we will cross the river, we become part of a landscape that continues outside the model (the mountain and the river are cut off at the model-border). We move within a regional horizon, region meaning nothing else than 'in the region of this mountain or this river.' The terrestrial relief makes us co-inhabitants of a sky and an earth and of a corresponding landscape. Riding the regional road we steer between a zone of varied activities, the periphery of 12 sub-sub-squares, and the central square mile of the acres. We again turn the corner—second gearing down—to move to our house. We cross the acres now, the heart of what Wright saw as the community, a community of neighbours, of neigh-bours corresponding to that Anglo-Saxon etymology of the neigh bour as the *neah-gebür*, the *nächste Bauer*, the farmer living nearby. We cross the fields with their crops, to then again turn the corner—third gearing down—to enter our lot. We finally arrive at the house. We park the car in the "three-car home."¹²⁴ Wright did not develop any specific dwelling typology for Broadacre, he typified the houses by counting their parking facility true to his philosophy of a general mobilization of the Usonian.¹²⁵ Walking to the house—last gearing down—we walk towards the chimney. Touch down. We have landed.

¹²⁴ FLW, *Broadacre, a new community plan*, p.348.
<http://courses.washington.edu/gmforum/Readings/Wright.pdf>

¹²⁵ FLW, *Ibid.*, p.345.

We must see this process of gearing down in which we descend from the city of angels to the city of farmers as the progressive, stepwise incarnation of the driver in the body of the American earth. The driver, whose body is still very ethereal on the highway, thinking in large radii of action and enjoying sublime but far off landscape pictures, materializes by incarnating in the landscape, the acres, the walls and the hearth. With a flash forward on the coming chapters, incarnating means a meeting with the local ground, Wright's organic buildings "growing out of the ground into the light."¹²⁶ This local nature individualizes and even 'baptizes' the new born earthling, the one coming home.¹²⁷ But even without this flash forward, strictly following Wright's texts on Broadacre, the inhabitants eat from their own produce, they swallow the local earth. In the car and its flying twin, the *aerator*, Wright's version of a helicopter, one is almost a naked soul, but gradually we enter an extended world. Gearing down one wraps up in the earth.

If one enters one's own acre, the house is a residence but it is also a farmstead. Broadacre offers its inhabitants an existence close to the earth. The inhabitants may work elsewhere in another quarter of the city, in another city practising some other trade, they are also, let's be straight, they are firstly colonist, ploughman and farmer. Wright's city appears to suffer from what the Dutch anthropologist Ton Lemaire has called "the neolithical syndrome," in which culture in first instance means the cultivation of the land and in second instance the culture of building.¹²⁸ Again according to the etymology of the word 'bour,' meaning both the *Bauer*-cultivator and the *Bauer*-builder. As Wright puts it: "Here architecture is landscape and landscape takes on the character of architecture by way of the simple process of cultivation."¹²⁹

¹²⁶ FLW, *AB*, p. 363.

¹²⁷ Baptizing: I am referring here to the fact that Wright regularly named his designs after specific natural phenomena. Cf. § 4.4.4.

¹²⁸ Ton Lemaire, *Filosofie van het Landschap*, p.152.

¹²⁹ FLW, *Broadacre City; a New Community Plan*, p.346. See also: FLW, *CW3*, 312. "But I believe that culture—in spite of urban education—has done something for us, and think that culture should and will go on to do more by way of agricultural training."

1.4.4 Neighbours

Wright's Usonia, the name he gave to his version of a democratic America, appears to begin on the lot. In the great redistribution program that Wright proposes, "a minimum of one acre goes to the childless family, and more to the larger family(...)." ¹³⁰ According to Wright ground is a birth right for any human. Eating what the ground produces is like a first communion. Broadacre is a chthonic community. It is at once the smallest and the largest community. The smallest: a personal assignment for the modern settler to root on a strange earth. The largest: it refers to Jefferson's ideal of America as an agrarian community. For Wright every American lives in that neighbourship of the earth.

A second neighbourship is that with the real neighbour, the neigh-bour, the agro-citizen on the next acre. As we will see later, sharing a border or even a part of a lot, may be the stratagem to foster a creative community. Building the lot means building one's individuality, it means differing from the neigh-bour.

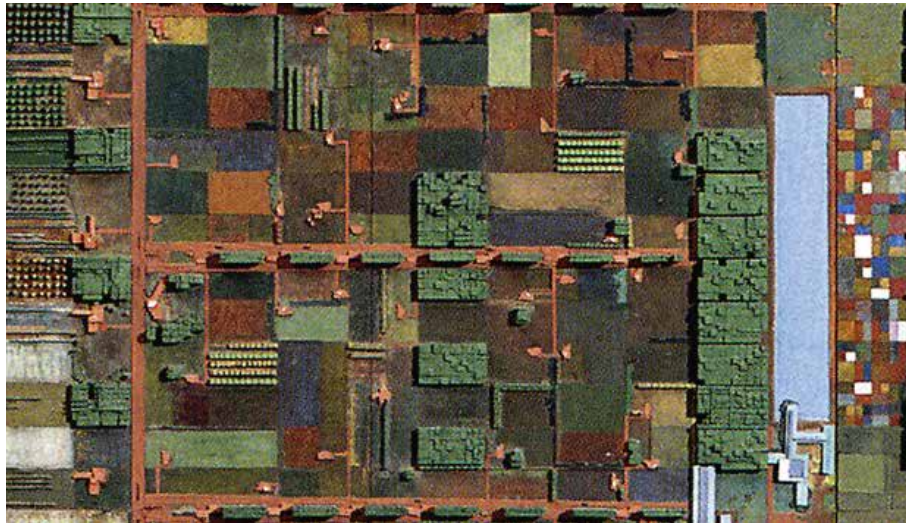


FIG. 1.34 Broadacre. Central area acres with school strip with little acres to the right and vineyards and orchards to the left. [Photo: courtesy of FLLWFA (MOMA / AA&FALCU)]

Note the different colours both in the acre area and in the school strip with the mini-gardens. The acre is where the Broadacre citizen builds individuality and such a 'living differently' must be learned at a young age.

¹³⁰ Ibid., p. 346.

The central square mile with the acres is sectioned by an empty strip of land and water with adjacent strips of sometimes continuous, sometimes interrupted woodlands. On the short sides of the strip we find a school and a centre for physical culture. Education is at the background of all the activities of the community: “the poor man’s children growing up in the free city we see making first hand contact with more of the freshness and sweetness of their birth right.(the ground, FS)”¹³¹ In the school one “teaches the ground to the world.” In the central strip we see mini-gardens as the ‘young versions’ of the acres, a pied carpet produced by small hands learning to enjoy the ground.¹³² [FIG.1.34]

All the acre-villagers find themselves in the neighbourhood of the mountain and the river which compose their country-side. A third level of neighbourhood. The Broadacre community is docked to those natural artefacts giving a regional colour to their lives. These artefacts already ‘decentre’ the community of farmers. As inhabitants they are connected to the mountain, which they may visit by car finding their weekly or monthly communion in the “automobile objective”¹³³ built in in the mountain. It makes the Broadacre-citizen a country-human, the natural relief being the new vertical organizing Broadacre as a ‘beyond the acre.’

It is important to note that the mountain and the river find themselves in the ‘outer zone’ of the city, the zone of the twelve square quarter-miles surrounding the central acres. In this ‘zone’ we find all kind of buildings that seem to be less bound to the ground. A hospital, commercial buildings, service business, the arena, larger schools, a research centre, a music centre and a theatre, a worship centre etc. At the highway-side we find industry buildings, a motel, and the markets in which the local population may offer their products. But we also find area’s with more expansive housing, small and medium farms and skyscrapers. I will call this zone the “hospitality-zone”: it is excellently accessible from the highway and fed by the regional roads. In many respects it is the zone of transactions between the acre-people and the road-travellers, between the specific products of the country and the generic ‘materials’ coming from afar, a zone of exchange between acre cultivation and high-brow culture, between the acre-villagers and “the urbanites.”

¹³¹ FLW, *LC*, p. 169.

¹³² FLW, *LC*, p. 209. “Each young worker should learn of the potentialities of the soil.(...) Learning to listen to music in the sounds of animal cries, wind in the trees, water flowing and falling.”

¹³³ “Automobile objective” was Wright’s name for an interesting landscape or landscape feature preferably framed by architecture and to be reached by car. FLW, *LC*, p. 193.

“The urbanites”: Wright used that term to designate those inhabiting the high-rise, i.e. inhabiting more distant horizons, those who were not ready yet for their own acre. The skyscrapers in the model are “infirmaries for the untrained urbanites”: those ‘spoiled’ by a metropolitan past.¹³⁴ In a way these inhabitants live further off of the ground, they have voluntarily renounced their birth right, they live more closely to the city of angels, the city of speed and messaging. On Wright’s skyscrapers, helicopters and ‘aerators’ may land on the decks on top, or near the tops, the real top often ending up as a typical Wright antenna, beaming and broadcasting around the earth.¹³⁵ Wright’s designs for skyscrapers often look like giant ladders, the floors signing off in the façade as if they were the horizontal rungs which the eye uses to climb up to the sky. They connect the terrestrial and the celestial city.

The ‘zone of hospitality’ is the zone of the urbanites: those traveling through all the social layers offering their services, those travelling the country offering art and theatre, organizing sport as body culture, offering materials as primary resources from the factory. Wright calls the market centre “a country-fair,” but actually the whole zone feels like such a fair in which the local and the regional, the regional and the superregional communicate. It is a zone of transactions between the terrestrial and the celestial city, the city of farmers and the city of angels. In fact, its exact measure in acres doesn’t matter at all, Wright saw it organized “by great roadside pleasure.” All these roadside activities imply new part time communities, all introducing new rhythms into Broadacre, new free associations and new, more abstract ‘neighbourhoods.’ They introduce new radii of action into Broadacre, some referring to long-distance broadcasting, some to regional exchange. In the zone of hospitality the farmer becomes the eccentric in his own town, meeting far-off bours and bours already half angels, becoming a cosmopolitan bour, a citizen of the global village.

¹³⁴ Ibid., p. 133.

¹³⁵ Quite recently, Mark Wigley has conceptualized the celestial city in his exhibition: *The Human Insect. Antenna Architectures 1887-2017*. Frank Lloyd Wright is indeed one of his subjects. <https://dissidentgardens.hetnieuweinstituut.nl/en/human-insect-antenna-architectures-18872017>

1.4.5 **Broadacre: spatial organization.**

It is difficult to get a grip on the spatial organization of Broadacre. It is certainly not a grid, the grid with its typical indifference to the occupation of the plot, such as we know it from the American city. Neither is it linear, it does not speculate on a repetition of 'functions.' And it is not concentric even if there is a real difference between the periphery and the central quarter. Everything happens at the roadside, and it does so asymmetrically. We have two sides of the regional road, on one side the acres and their 'terrestrial community,' on the other 'the zone of hospitality' with all kind of other possible communities organized in 'urban interiors' such as arenas, medical centres and factories. This zone 'wraps around' the central quarter. It depends on larger radii of action, on 'higher speed.' In this zone the farmer-citizen 'communicates' with a vaguely defined human substance sharing certain interests, hobbies, or pleasures, building regional, super-regional and even cosmopolitan 'commons.'

It is the difference between the zone of the public interiors (based on virtual commonalities) and the area of the acres that is the true organizing principle. We should not be mistaken by the fact that in the outer quarters we regularly find residential areas too, just as we find vineyards, orchards and real 'professional' farms in that same zone. Wright follows a political program. All of the texts written to explain Broadacre begin with the question of "the poor man" (we are in the early thirties of the previous century with its vehement economic crisis), the "wage-slave" sucked out by "multiple rents" by the tenant, the banker and the ground owner.¹³⁶ "In the free city (Broadacre, F.S), where is your poor man? On a basis of equality he now has the same quality available to him as the rich. He can say his soul is his own because on his own ground opportunity has opened to him in natural ways."¹³⁷ The birth right of the acre is the real stake. The rest is a question of hospitality, of exchange. The larger dwellings are 'guest-dwellings,' even if they are permanently inhabited and may be owned by any urbanite. The farming areas in the outer zone only indicate that real farms are still necessary, even if in Broadacre they are already specialized in local products.

¹³⁶ FLW, LC, Subchapter: "Social and economic disease," pp. 33-40.

¹³⁷ FLW, LC, p. 168.

If the organization is factually a double roadside organization, how must we assess the order of a central quarter with an outside zone? Is it merely a political question, the poor man and his acre symbolically placed in the central quarter? A raking up of Jefferson's ideal of America as an agrarian nation? The poor man the new colonist? The central school, as we saw, an agrarian education? Certainly all these aspects play a role. But as we already saw, Wright strove for a complete city. The true reason is the fact that for Wright only on the acres humans become individuals. In the outer zone we can be anyone, our identity will be based on 'dividuality.'¹³⁸ The farming acre-owner becomes divided because part of the time sharing non-farming interests and passions with a part of the other farmers and non-farmers. Acre-owners become statistically organized as baseball lovers or music-lovers or needing care in the hospital. This part of their life is accommodated in the outer zone. For Wright true individuality emerges when we are (re-)born by being 'of the earth,' by having gone through the earth. It is the ground that gives us individuality. "Every true home should be actually bound to grow from within to dignity and spiritual significance: (...) grow out of one's own good ground and better self into everybody's light,(...). Every man's home his 'castle'."¹³⁹ The quote shows us that individuality is the true dignity the poor man may acquire when 'building' (*colere*) his ground. When building his ground he builds his individuality, his own culture (*colere-cultus*). This is why in the eventual model only the central area is a true patchwork of nuanced, differentiated colours and indeed the school area, already building that cult, is a mini-patchwork at the heart of that area. And doubtlessly only when individual the acre-owner will build a truly individual house as the token of that dignity. This is why "architecture + acreage = landscape."¹⁴⁰ A multicolored landscape, a landscape alive. Only on that base, communing may acquire a sense. Only when one is able to contribute a difference, 'commons' may arise which are more than only based on the greatest common denominator. More than only *mobocracy*, Wright's favourite term to designate the wrong democracy, the ruling of the grey, only quantitative mass. A mass produced by a wrong use of the machine, a machine using and wearing off the human instead of a human using a machine.¹⁴¹

¹³⁸ The concept of "dividuality" needs an introduction. It was coined by Gilles Deleuze in his *Postscript on the Societies of Control*. A 'dividual' is a physically embodied human subject that is endlessly divisible and reducible to data representations via the modern technologies of control, like computer-based systems. <https://wiki.p2pfoundation.net/Dividual>

I will use the term here positively to designate that such partial interests, which may split up and recompose subjects as a means of control, are the very base of all kind of gatherings and communities, sharing and celebrating such interests and thus marking all kind of cross-sections through society.

¹³⁹ FLW, *LC*, p. 233.

¹⁴⁰ *Ibid.*, p. 123.

¹⁴¹ FLW, *LC*, p. 171.

The ground makes us individuals. It is the ground that gives us a name, that baptizes us a second time. It is the own piece of ground that brings the community alive as a true multitude, a true multiplicity.

With the central place of the acres and their residences we find an inversion of the Roman town, with its common institutions in the centre, guarding the community-spirit of the colonists. [FIG. 1.35] In the ancient city, we found the temple of Vesta, guarding the communal fire of the native town of the colonists, at the place of the *umbilicus mundi*.¹⁴² All kind of temples and other institutions might be built around that centre. Outside the pomoerium, the city wall, we found the area of the acres, the land distributed to the colonists by the surveyor, Wright's county-architect. Again we find Wright's Usonia, a Utopian America, as the 'other' of Europe, as Rome inside-out. The reason for this inversion is clear: the common institutions of the new city are facultative, based on free association, they are no longer centralized institutions reigning the 'flesh' of society. It is up to the dweller farmer to 'steer clear' between individuality and 'dividuality.'

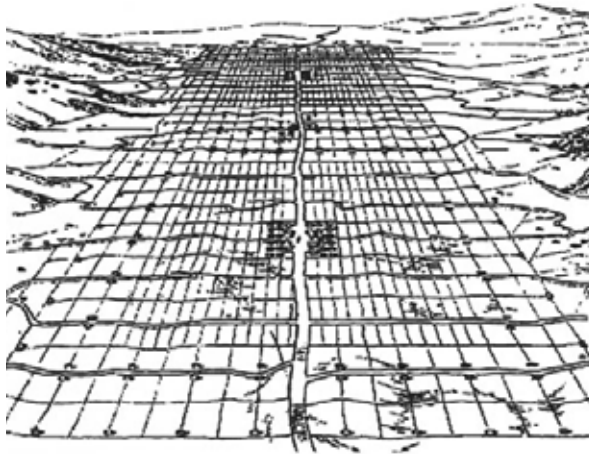


FIG. 1.35 Roman town; division in central area and acres around. [Source: Jeremia Pelgrom, *The Roman rural exceptionalism thesis revisited*.]

¹⁴² *Umbilicus mundi*: the navel of the world. Cf. §2.2.2.

1.4.6 **Twin city**

Broadacre is a twin city. It is the interlocking of the heavenly and the terrestrial city, the city of Hermes and the city of Quirinus. The regional road is their common ground. It ends up in all kinds of public interiors, spaces of exchange and communal enjoyments, but it also branches to the acres and their grotto-homes “growing out of the ground into the light.” Angel and farmer, the two sides of the Broadacre inhabitant, they both live on the road—the ethereal one up in the air, the highway of communication, and the traffic-way on the ground. Both get embodied in Wright’s ultra-material, ‘cave-like’ interiors, in which they inhabit the earth. On all the public interiors we may find antennas [FIG. 1.36], connecting to the celestial city. In their turn, in all of Wright’s houses, we see artificial skylights, the light fixtures above tables and other communal spaces in the house, which like softly glowing light-pads remind the inhabitant of an electric–electronic existence ‘in the air.’



FIG. 1.36 Antenna on the Marin County Civic Center. [Photo: User: nandhp, CC-BY-SA 2.5 generic]

The most intriguing ‘gadgets’ of Broadacre are without doubt the aerators [FIG. 1.37] and the futurist cars. The former, taking off from the upper stories of the skyscrapers, look like robotic angels: with their featherlike rotor blade-wings, they seem to flutter above the acres. The latter appear as crossovers of tractors and high-speed dragsters. [FIG. 1.38] The enormous back-wheels seem to insure high acceleration while the thickness of the tires guarantees enough grip on the ground. The circles in the rim say that the wheels have already buckled up the globe a thousand times. The front wheel is a spherical wheel, “insuring stability and short turns.” “Steering by tiller” says the caption.¹⁴³ The angel of speed has become the farmer ploughing the acre. The new Usonian. [FIG. 1.39]

Do we find a new urban space then in Broadacre? No: city space as a continuous public space does not return in Broadacre city. We cannot redraw Nolli’s map, with its dark plaque of private interior space and its white corridors connecting all public white rooms. The organizing difference has shifted from public/private to that of celestial/terrestrial. On the one hand a celestial non-space, too thin and too filiform to draw on a map, an ether of destroyed distances, and on the other the terrestrial city in which the citizen incarnates. Or to formulate it somewhat differently, with the words of Peter Sloterdijk: city space has become “compressed space,” in which only “connectivity, conductivity and mediality” have remained as the functions of the old 3-dimensional space, while extension and distance have disappeared.¹⁴⁴ Public space is only to be found in the large urban interiors, but not in any form of intermediate space.

The situation in Broadacre does not differ all too much from the one in the metropolis. If all public urban exterior space is characterized by ‘being on the way’ from one interior to a next, regardless the character of the community or society harboured in that interior, exterior urban space is a nobodies-land. Consequentially it is a nowhere city, a city without inhabitants, an ether of messaging. Put still more concisely: even in Broadacre there are only interiors and no exteriors. If Wright’s buildings kaleidoscopically reflect their surroundings, using local materials and local light, it is also in order to hide in the landscape.¹⁴⁵ To make architecture and landscape become one. Only interiors, no exteriors. This somewhat weird, monadological conclusion—already substantiated by the erased exteriors of Unity Temple and the SC Johnson Administration Building—only wants to say we lose exteriority when passing from one interior to a next. To use Serres’ metaphor: we become angels. That does not say we have no bodies. The body is postponed, it becomes a thread.

¹⁴³ FLW, *LC*, p. 137. Normally, the tiller is the handle with which to steer the plough.

¹⁴⁴ Peter Sloterdijk, *Het Kristalpalais*, p. 271.

¹⁴⁵ FLW, *LC*, p. 238: “(...)just as his house becomes integral part of neighborhood landscape.”



FIG. 1.37 Aerators flying above Broadacre and antenna on skyscraper. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

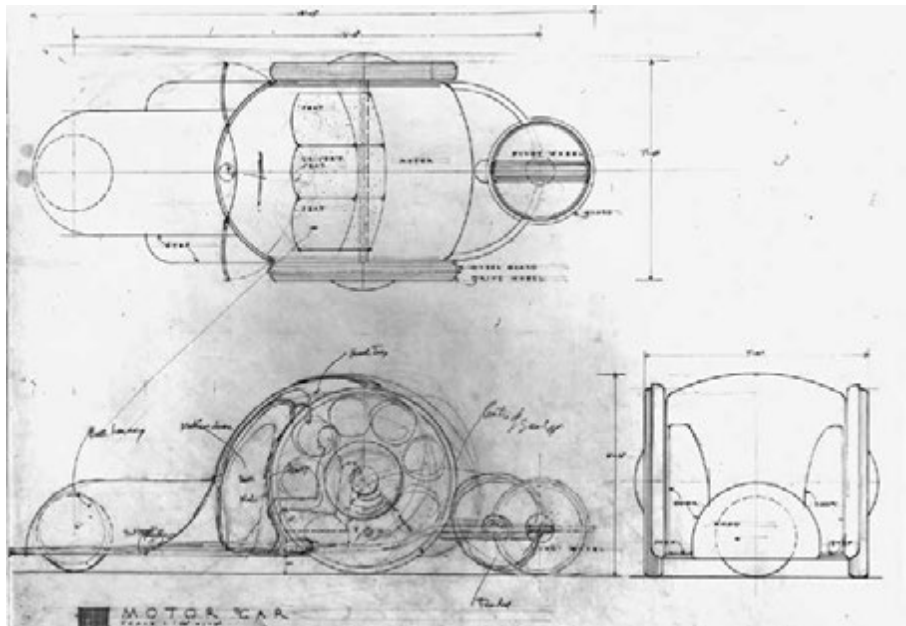


FIG. 1.38 Broadacre car: "steering by tiller." [Courtesy of FLLWFA (MOMA / AA&FALCU)]

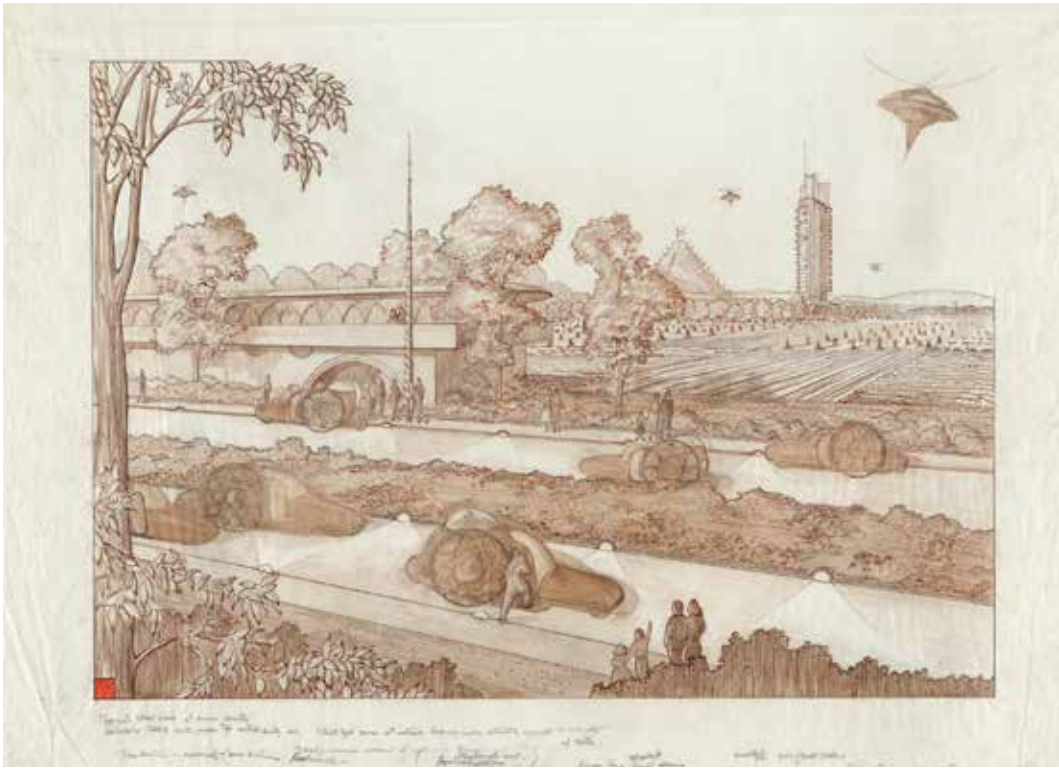


FIG. 1.39 Broadacre, cars on the regional roads. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

1.5 Wright's urbanism

1.5.1 Levine's stance on Wright's urbanism

We have seen that Broadacre is an entirely positive proposal for a new type of city. To a large degree it coheres with Wright's negative stance on the existing metropolis. The disappearing city which is allowed to return to nature is its presupposition.

Recently, in his book *The urbanism of Frank Lloyd Wright*, Neil Levine has taken a more or less opposed stance. He calls Broadacre a 'deviation'¹⁴⁶ in Wright's oeuvre. He dismisses the plan as incoherent with other urban proposals Wright made in the thirties.

Levine gives priority to these proposals because they seem to point to a positive stance on the existing city. In an evaluation of several case-studies of projects like Philadelphia Crystal Heights,¹⁴⁷ Madison Monona Terrace [FIG.1.40] and Pittsburg Point Center [FIG.1.41], he argues that Wright's urban projects were an integral part of a national and international tendency to revitalize the heart of the city. A city that suffered from a "disembowelment of the downtown core"¹⁴⁸ as a result of automobilization and the correlative dispersal of the population fleeing to the suburbs.

Levine describes Monona Terrace as an effort to save the centre of the city of Madison. He distillates the formal urban gestures as an effort of forming a civic centre for Madison by connecting the city heart to the surrounding lake and the mountains on the background. He might be right. The only question is, would Monona Terrace be a new heart for the city? Would it strengthen the existing heart? The grand view from the terrace to the lake might certainly have attracted many people, but in itself it would have been nothing more than an evening or morning outing. "Take photograph here." Monona terrace is a so called "automobile objective," Wright's term for an attractive natural artefact, disclosed and transformed by architecture.¹⁴⁹ The connection to the dome of the state capitol as the supposed centre of the city will always remain ambiguous, given Wright's intense dislike of such

¹⁴⁶ Levine, *The Urbanism of Frank Lloyd Wright*, p. 385.

¹⁴⁷ Crystal Heights, Washington DC, 1940.

¹⁴⁸ Levine, *The Urbanism of Frank Lloyd Wright*, p. 385.

¹⁴⁹ Among other places: FLW, LC, p. 193.

symbols of centralized power. Plugged in the main traffic arteries, Monona terrace is meant to be visited by car, possibly by train. Its true aim are the lake and its shores, the sunken gardens and the glass domes of the courts and the auditorium, designed as part of the complex, *not* the old city heart.



FIG. 1.40 Madison Monona Terrace, Madison (WI), 1938, aerial perspective. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

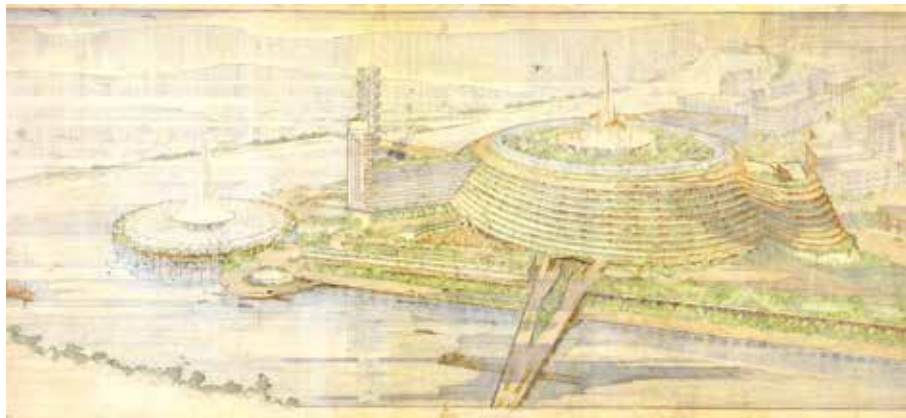


FIG. 1.41 Pittsburgh Point Center, Pittsburgh (PA), 1947, aerial perspective. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

The same question, and even more pressing, arises for Pittsburgh Point Center, a super dense project with a multiplicity of functions. In fact, Levine already notes its ambiguity by pointing to the fact that we might see it as one of those “automobile objectives” which could be visited by everyone. It is the magic lantern showing any car-driver the beauty of the site. Wright designed it in such a way that one

was not obliged to leave the car. If one would leave, all the activities would be internally oriented (a concert hall, the aquarium, a “coliseum”) affirming the interior character of the building. The exterior is the winding road, wrapping around the other elements. It is a highway-station. If we look at the Pittsburgh plan, taking into account its character as an “automobile objective” and following its consequential being plugged into the main traffic arteries of the city and the region, it even inserts more decentralization. It drains the centre or the heart with more bypasses, with more speed, giving it the last blow. “Pittsburgh, it would be cheaper to abandon it...”¹⁵⁰ Levine himself makes the comparison with the shopping mall. But let us be clear: a mall is a completely internal affair, with no positive spatial or architectonic effect whatsoever on the surroundings, it is a building without an exterior.

As a result of his interpretation of these projects, Levine feels obliged to dismiss Broadacre as a “deviation” and an “anomaly” in Wright’s work.¹⁵¹ Wright would have been seduced to come to an own design for a twentieth century city because he was asked to comment on Le Corbusier’s plans for a city of one million inhabitants. His “ruralism” would have been triggered by the urbanism (*l’Urbanisme*) of the French Master.¹⁵² But such an interpretation makes Wright the mere toy of his own aversions. And certainly, this confrontation may have fostered the development of his own ideas on the city, but not as the mere negative of those of le Corbusier. One cannot build a design on mere negation. Intellectually, affirmation always comes first.

Levine is too eager to make Wright part of an international movement advocating the reanimation of the city heart. At the end of the thirties, in his lectures in London, Wright still speaks of the heart of the old city-centres as museums. The better historic parts may become recreation parks, but they are unfit to live in. They lack the sense of space of which Broadacre is the true expression. “London, its insignificant parts and slums removed to make room for trees and grass, would make a wonderful park in which the citizens of a newer London (a ‘Broadacre’ London, FS) might take their recreation(...).”¹⁵³ Wright already sees London as an English landscape park, it is on its way to become a Romantic ruin.

¹⁵⁰ As Wright answered to a journalist asking him what should be done to make Pittsburgh a better city. Quoted by D. Hoffmann, Frank Lloyd Wright’s Fallingwater, The House and its History. New York: Dover, 1978, p.15.

¹⁵¹ Levine, Neil, *The Urbanism of Frank Lloyd Wright*, p. 385 & 179 resp.. On Broadacre: pp. 157-179.

¹⁵² Le Corbusier, *Urbanisme*, Paris: Les Editions G. Crès & Cie, 1925.

¹⁵³ FLW, *CW3*, p. 325.

Neither Levine's rejection of Broadacre as a positive proposal, nor his appreciation of the bigger city projects as testifying of a renewed belief in the big city, appear convincing. However patient, precise and powerful his reconstructions may be, the prize he has to pay dismissing Broadacre is too high!

1.5.2 Nature shining through

The fact that Wright baptized Broadacre a *city*, shows us that he is not against the city, he is against the metropolis, the big city: "To look at the cross section of any plan of a big city is to look at something like the section of a fibrous tumor."¹⁵⁴ But the problem will solve itself. The big city will return to nature as the above quote on London showed us. In such a case "certain parts may still be inhabitable."¹⁵⁵ But what is the product of "exaggeration" will eventually tear itself down: the vortex of "centralization winding up," "painfully forced circulation; comparable to high blood pressure in the human system."¹⁵⁶ The forces reigning the metropolis are forces stuck in themselves, contracting forces that do not want to give in to "the inexorable law of change."¹⁵⁷ "None the less, twentieth century mobilizations—electrifications in multiple forms—are advance agents of decentralization, fresh integration."¹⁵⁸

It is certainly remarkable that some of the 'inventions' of that same metropolis may be taken to the country. The skyscraper, exactly one of those products of "centralization winding up," of "multiple rents" piling up, of the forces producing "the big wall," returns in Broadacre. Wright sees them as part of a world disclosed by modern technique, part of the celestial city, as enormous antennas beaming in the ether. It is on the land that they may appear as a product of nature, as a natural cliff. All Wright's high-rise buildings are designed as explicit material, 'terrestrial' constellations using opportunities given by modern technique. Sheet metal will lead to copper green massifs, plate glass will give us "crystal heights." The principle of continuity of architecture and nature, which we will meet in the following chapters more often, will make them part of nature, will make them appear as "growing out of the earth into the light."

¹⁵⁴ FLW, *LC*, p. 33.

¹⁵⁵ FLW, *CW3*, p. 325.

¹⁵⁶ FLW, *LC*, p. 52.

¹⁵⁷ *Ibid.*, p. 33.

¹⁵⁸ FLW, *AB*, p. 378.

As we already saw, in such a form they may also return to the city, taking an advance on a future in which it may have become a park. The shimmering clay and transparent glass tubes of the SC Johnson Administration Building, the copper and coloured glass mass of the Life Insurance Company Building, the crystals of Crystal Heights, and even the 'Mountain of light' of the Beth Shalom Synagogue.¹⁵⁹ They constitute a wonderful earth arising.

It is true that in all of Wright's projects for big cities we find a certain ambiguity. The disappearing city will disappear *in* nature. It is not difficult to interpret the idea of the large building with its hanging greenery as the image of the Gardens of Babylon. "But apartment houses need no longer be tier on tier of glass used as curtain walls, but each extended level with its flowers- a vine-festooned balcony terrace."¹⁶⁰ In all of Wright's urban work, we see greenery growing up and hanging down from balconies and terraces, fulfilling their promise to be just a natural relief. Or should we formulate: a first stage on the way to being overgrown by plants, haunted by the idea of the Romantic ruin? Many of Wright's high-rise building projects suggest they will be overgrown by plants. [FIG. 1.42] Everything is ambiguous here: architecture becomes a true pedestal for nature, skyscrapers become pergolas, creepers and hanging plants find a home on those 'cliffs' in the city. [FIG. 1.43] On the other hand: nature becomes a pure and direct ornament of architecture. Nature and architecture celebrate each other.

¹⁵⁹ The Life Insurance Company Building, Chicago, IL, 1924; Beth Shalom Synagogue, Philadelphia (PA), 1959.

¹⁶⁰ FLW, *LC*, p. 133.

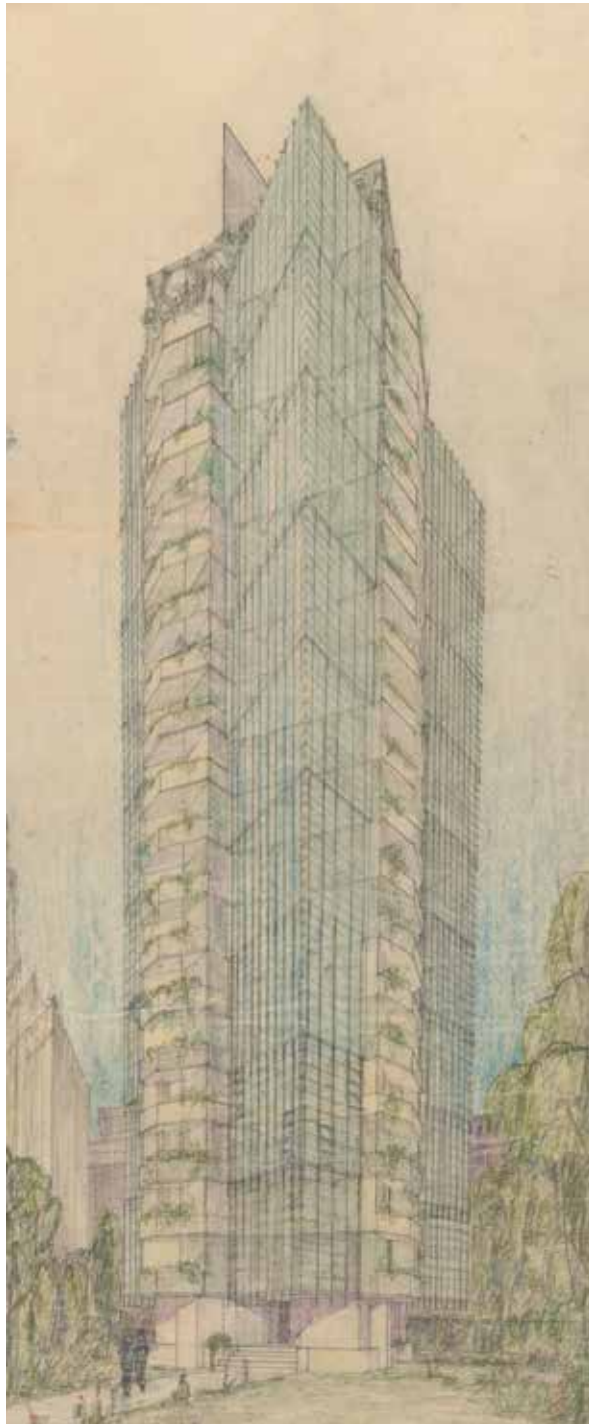


FIG. 1.42 Chicago grouped towers, Chicago (IL), 1930. [Courtesy of FLLWFA (MOMA / AA&FALCU



FIG. 1.43 FLW, Chicago grouped towers project, Chicago (IL), 1930. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

1.5.3 An organic city?

As I already mentioned in my general introduction, in the 20th century Wright became the true protagonist of “organic architecture.” For Wright organic meant: parts integrating to a whole, that whole already having a reflection on the parts: integrity as he called it.¹⁶¹ A question thrusts itself upon us: is there an organic *city* too? In what sense? Talking of Broadacre and of Wright’s ideas on the city in general, we must be aware that the idea of an organic city is quite problematical as long as we see that notion connected to the idea of a social body, embodying a *civitas* bound by some centralizing instance as the State and finding an expression in the form of city space. If Broadacre is an organic city, its organicity is not expressed in city space because that space does not exist as the system connecting all public organs.

We cannot repeat it often enough: lacking a *res publica* other than transport, city-space has nothing to do with the historical public space we know. The nowhere land reminds us of the great outside, as Flusser remarks: in the klaxons we hear the far cry of the wolfs, *-homo homini lupi est.*¹⁶² Or as Wright puts it: “man preying on man.”¹⁶³ City space is not *civilized* space. If we find civic centres in the city they are interiors. They do not organize city space, Wright wants such centres to be attractive automobile objectives “ideally situated just off some major highway in interesting landscape (...)” combined with “zoo, aquarium, planetarium, botanical gardens, art museum, libraries, galleries, opera etc.”¹⁶⁴ This community centre is an entertainment centre with no consequence for the organization of the existing or the new town. It is a world of interiors fed by roads, such as the Monona Civic Center and Pittsburgh Point Center. If they acquire a certain scale, becoming landscapes, this doesn’t prevent them from being interiors. We can reach them by car or by aerator, we can circulate inside them, find whatever we need, and then move on. Their room inside does not open up to city-space. In the era of the “general mobilization of the human being,”¹⁶⁵ urban space becomes an inhospitable if not outright inimical area. It will never become a domain in the sense of a *domus*, a house, the famous metaphor for the city haunting European architectural history from Alberti to Rossi. A metaphor that tells us that apart from being individuals or families we are also part of a larger community finding its house, its body in the *domus* of the city. City space is not the place of the *Gemeinschaft* embodied in the public spaces of the European city.

¹⁶¹ Cf. § 4.2.3.

¹⁶² Vilem Flusser, *Designing cities*, in *Writings*, translation by Erik Eisel, Minneapolis: University of Minnesota Press, p. 176.

¹⁶³ FLW, *LC*, pp. 20–25.

¹⁶⁴ *Ibid.*, p. 193.

¹⁶⁵ FLW, *Broadacre City; a New Community Plan*, p. 345.

Social space as the space of the square, the forum, the street, all those city-rooms in which the public receives a more or less organized form, the contour of a social body, no longer exist in Wright's vision. Wright takes the utter consequences of mobilization and "electrical communication becoming complete."¹⁶⁶ He associates communal urban space with the public body of the absolute ruler. But the *demos* no longer forms the body of the State. Shattered, it becomes the base of a "true democracy of the individual." This individual is free to construct and maintain any, decentralized, re-integrated but always partial social body. Social bodies condensing in 'ships' to be entered in certain frequencies. Community ships born by common ideas. Ships to be perfected as Wright meets them in Kipling's *McAndrew's hymn*.¹⁶⁷ machines embracing modern technique, doing justice to the Artifex. These are the interiors we find at the other side of the regional road in Broadacre, or at the side of any Highway. They float in a green space, a park-space, architecture and landscape becoming one. Or in the metropolis returning to nature. They float in the nowhere land, in an ether being a space of broadcasting and transport, of sending and receiving.

Again: there is no nostalgia in Wright's descriptions of the demise of the metropolis. If Wright was searching for something like an organic architecture, the idea of a stepwise organic organisation of parts reflecting their activities in a coordinated whole, we must come to the conclusion that his urbanism does not fit that model. On a local level we can only speak of neighbours, their acres and their houses; and of ships harbouring enterprises. And it is on the local level that we find another 'organicity,' that of organic buildings growing out of the ground into the light. Where architecture submerges in nature and where the individual, just like its vegetables and its fruit, learns to grow from the earth into the light.

On a higher level, organicity is something completely dispersed, a potentiality to be realized time and again on a local or regional level by gathering together around a common idea. For Wright there cannot be any all-encompassing organisation. Everything has to be organized locally, at an exit of the highway. His disgust about state interference is well known, a typical American stance. With Thoreau he even bids against Jefferson's "That government is best that governs least" with a "That government is best that does not govern at all."¹⁶⁸

¹⁶⁶ FLW, *Ibid.*, p. 345.

¹⁶⁷ FLW, *LC*, p. 41.

¹⁶⁸ FLW, *CW5*, p. 263.

1.5.4 Roman roots?

When it comes to Wright's urbanism, it is necessary to trace some historic resonance. It may further elucidate many of the aspects we already came across. Moreover, a strong image, the image of a Roman city as the precursor of Wright's city, begins to transpire and asks for some explanation.

- 1 The Roman city was an agrarian city, a city of colonists sent on a mission to colonize a foreign earth. The colonists built there common institutions in the centre of the city, a city surrounded by acres. In Broadacre Wright inversed that order, adapting the agrarian city to modern times. The institutions of communal life have moved to the periphery, to a zone of exchange with the outer world, while the acre has become the true stake, connecting the citizen to the earth.

- 2 The Roman territory was a networked territory. There wouldn't have been a Roman Empire without the Roman roads and bridges: Wright praises them in *The Living City*: "Romans built such great roads that to this day they remain.(...) What nobler agent has culture or civilization than the great open road made beautiful and safe for continually flowing traffic, a harmonious part of a great whole life."¹⁶⁹ He sees road traffic joined by air-traffic-units (...) "like modern taxicabs taking off from convenient stations to almost anywhere else."¹⁷⁰ Furthermore he sees them complemented by telephone, telegraph, and by broadcasting, the second point of the Broadacre program. Just like the Roman aqueducts, bridges and roads, they connect. And Wright designed them all: he designed highways, he designed bridges, overpasses, gas stations, antenna's,¹⁷¹ terraces on vaults, a complete infrastructure including the cars and the 'aerators.' The celestial, technical city, the city of the (Roman) engineer, is half "The Usonian Vision."¹⁷²

¹⁶⁹ FLW, *LC*, p.147.

¹⁷⁰ Ibid.

¹⁷¹ As recently remarked by Riccardo M. Villa, *The Umwelt as a project Design of the urban milieu in the age of Bio-Power*. In *Oase 104*, Rotterdam: nai010, 2019, p. 111.

¹⁷² FLW, *LC*, p.147, pp. 127-131. Recently, Barry Bergdoll has asked renewed attention for Wright's idea of "engineer and architect united." He points to the list of great engineers Wright wrote on his drawings for the Mile-high Skyscraper "The Illinois." At the end of the list FLW appears for some technical inventions like "the cantilevering principle applied to the vertical building", "the taproot foundation" and others. Barry Bergdoll, *Reading Mile-High, the Chicago skyline and the stakes of fame*. In Barry Bergdoll, Jennifer Gray (ed.), *Frank Lloyd Wright, Unpacking the Archive*, New York: Moma, 2017, pp. 208-225.

- 3 Romans were great wall builders. They sent out their walls throughout Europe, Africa and Asia, crossing deserts and rivers. They perforated them with gates and arches and rolled them up to perfect interiors like the Pantheon or the Colosseum or even to the simply closed Roman *domus* opening at the inside to sky and earth in *impluvium* and peristyle-garden. The plans of the SC Johnson Administration Building with its 'mobile' walls, its surprising symmetries, its strong internal orientation, and the light from above illuminating its rooms, often looks like a fragment of Hadrian's villa in Tivoli.

- 4 The Roman city consisted of 'containers' and ways. Interiors connecting to interiors by bridges and roads. If we look at the models of old Rome, [FIG. 1.44] what immediately strikes us is the loose arrangement of the big buildings. Like ships they more or less float in a sea of lower buildings and greenery. We see a surface of the earth, the great rough, the sea of all traffic moving in between these big buildings. All the large buildings are inwardly oriented, often with courtyards. When they open up to the surroundings, they still find strong consistency in local symmetry, simple geometric forms, curved repetition or radiating motifs. The direction of these geometries diverge. The exteriors do not shape a converging city space.

We see bridges everywhere, a celestial city connecting the interiors with the hinterland, aqueducts bringing water. No centre. A celestial city of bridges, of traffic flows: Roman Roads building the Imperium Romanum. A terrestrial, all too terrestrial city in the interiors, perfect media devoted to bodily pleasures.

Wright would have certainly found his way there. If we look at his late buildings, we see them bridging the earth, we see vaults as underground spaces harbouring the lake under the terraces of the Monona project. The arches of the Marin County Civic Center, a huge 'people-duct' bridging the landscape. [FIG. 1.45] The butterfly-bridge. But also: the Greek Orthodox church, [FIG. 1.46] a religious space with an oculus to the sky, a real Pantheon. And: interiors often dedicated to leisure and pleasure, like the theatre spaces in the Pittsburgh plan that were named *coliseums* by Wright himself.¹⁷³ Living in the age of leisure, Wright must have understood the deep correspondence with 'the Roman way,' including its *Pax Romana*, granting local communities their own way, their own religions. A first principle of multitudes and multiplicities. Certainly, often subjugated violently, but also translated, transcoded, shortly bridged according to a great contract, a possibility of talking a same language virtually while remaining multiple actually.

¹⁷³ Levine, *The Urbanism of Frank Lloyd Wright*, p. 293.



FIG. 1.44 Ancient Rome, model. The so called *plastico di Roma Imperiale*. Rome as it was supposed to be in the times of emperor Constantine (AD 306-337). [Photo: unknown]

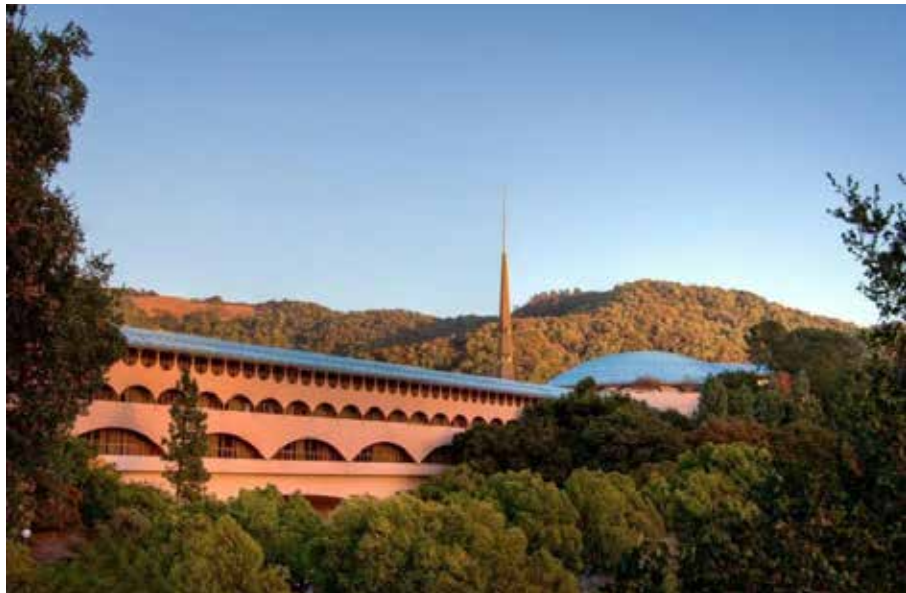


FIG. 1.45 Marin County Civic Centre, St. Raphael (CA), 1962 [Photo: unknown]



FIG. 1.46 FLW, Greek Orthodox Church, Milwaukee (WI), 1956. [Photo: Frans Sturkenboom]

1.5.5 A new neighbourhood: the round lot

Towards the end of his life Wright designed several plans for small neighbourhoods like that of Usonia-Pleasantville in New York, and the one for Parkwyn Village and Galesburg in Michigan.¹⁷⁴ [FIG. 1.47] In these plans the lots are round and in the Galesburg plan they are partly surrounded by ‘circling’ streets that jump from one lot to the next, creating a pattern of meandering roads leaving much of the lot-borders untouched. The Galesburg plan gives us an idea how Wright, towards the end of his life, had elaborated his idea about neighbourship and neighbourhood, filling in a certain ‘omission’ in the Broadacre plan, which necessarily remained abstract in regard to the quality of the lots because possibly landing “everywhere and nowhere.” I will try to show how it is exactly the singularity of place, only abstractly indicated in Broadacre in the mountain and the river, that gives rise to both an individual and a communal identification with the site.

¹⁷⁴ Cf. Michael Desmond, *Abstracting the landscape, Galesburg, above and below the surface*. In: Barry Bergdoll, Jennifer Gray (ed.) *Frank Lloyd Wright, Unpacking the Archive*, 132-147 New York, Moma, 2017, pp. 133-147. Desmond already researched Wright’s plans for small communities in his dissertation: Desmond, Michael, *A clearing in the woods, Self & City in Frank Lloyd Wright’s Organic Communities*, Cambridge (MA), MIT, 1996.

Let's start with a short description of the site by Michael Desmond: "The entire tract consisted of a section along a county highway composed of rolling hills loosely covered with apple trees and other mature hardwoods giving way to open land through a small central valley next to a fully wooded rear area. A small stream, which the members (of the community, FS) wanted to dam for swimming and fishing, occupied the northern portion of the tract."¹⁷⁵

The Galesburg plan is based on 42 lots with a diameter of 61 meters.¹⁷⁶ Wright saw the distribution of the lots in the Galesburg plan as follows: members of the future community had to choose between 2 or 3 adjacent lots, the chosen one to be "inhabited," the other(s) "refunded" to the community to be commonly held. There were only 17 houses planned. The commonly held lands between the selected lots were to be planted with shrubs such as sumac and barberry, "throwing a network of colour in pattern over the entire tract."¹⁷⁷ Near the little river and its artificial lakes we find vineyards, orchards and a vegetable garden "allotted as desired or held in common."¹⁷⁸

Neighbourship here is defined on different levels. The first one pertains to the choice of the lot: distance or proximity to the neighbour is a choice to be negotiated between the future members (member-families) of the community. That community will settle in the vicinity of the little stream in a hilly area with a ravine, again a natural relief just like in the case of Broadacre where one might identify with the mountain or the river. Natural artefacts introduce the vertical on the landscape scale. The stream, the ravine, and the rolling hills are a 'common' inspiring the community to other projects such as the orchard, the vegetable garden, the dams and the vineyards.

The individual lots have their own 'neighbourship.' The trees in the area between the selected lots give the inhabitant of the lot a dashed periphery, a private horizon and an idea of depth (of 'the far'). With the eccentrically positioned houses, boundaries approach and recede, giving distance as well as proximity. The round 'corral' becomes an irregularly perforated sphere, an interior saving the inhabitant from infinity and at the same time saving infinity changing it into a shimmering atmosphere: a shared existence with trees, bushes, grasses, a stream, hills and air and all things far away. Wright wanted the existing trees to be spared and in the drawing they often seem to 'disturb' the geometric pattern of the 'clearings' of the individual lots. The trees are always the 'closest' neighbour, defining the new house and its family as the guests.

¹⁷⁵ Desmond, *Abstracting the landscape*, p.135.

¹⁷⁶ My analysis is based on a first plan, commented upon by Michael Desmond in *Abstracting the Landscape*. In the plan that was eventually realized, the lots were larger.

¹⁷⁷ As the legend in the lower right corner of the drawing says.

¹⁷⁸ Ibid.



FIG. 1.47 Galesburg Country Homes, Galesburg (MI), 1947, plan. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

In the two 'notes' on the drawing we read the following:

Note 1:

Plan here shown for about 40 possible allotments.

Each and all private holdings the same size and outline but greatly varied in aspect or accent of typography.

Individual sites therefore have extreme individuality without impinging upon or even being in contact with other private holdings.

Certain restrictions concerning interspace held in common should be agreed upon by all holders of individual sites.

Each site approximates an acre of ground with continuous and inviolate free space 'thrown in.'

The scheme of allotment here submitted is democratic in basis in order that great individuality may ensue, enriching the whole while preserving individual privacy and freedom.

The sites may be subdivided on the basis of two or three to the individual if as originally desired.

Note 2:

Green community planting requiring no upkeep.

Red roads and entrance feature.

Private ownerships uncoldred. (?)

Lakes, orchards, vineyards, vegetable gardens allotted as desired or held in common.

Low stone walls, seat and fountain at entrance feature.

In the plan, the round lots open up to each other on their touching points, showing us a glimpse of a far off or nearby human 'neighbour.' A virtual neighbour: one may choose to live isolated from the human neighbour and only accept trees and shrubs as neighbours. In combination with the natural relief, the openings introduce the glance to new slowly curving lines, roads rising and falling away, borders appearing-disappearing, enlarging the private corral with the rooms of beings further off, just like in the endless spaces of the English park.

"Each and all private holdings the same size and outline but greatly varied in aspect or accent of topography," says Wright's text beneath the drawing, "The individual sites therefore have extreme individuality." At the same time the Sumac fields, the hills, the nearby wooded area, the lake and the little river, and all the projects added would have made it a 'communal' affair. The last commonality would have been this landscape becoming a communal garden, while the individual lot and its private associations would consolidate their 'rights.'

Potentially every lot has a centre. But in Wright's design there is a decentering movement, an eccentricity in which the houses seem to be on the move. Together with the trees randomly captured by the lot, it makes the whole order look more like a machine of turning cogwheels in which houses and trees seem to circle on their lots; in which the space of the room-corrals 'leaks away' to neighbouring lots; in which the private border-horizons seem to 'change track' at every opening. The individuality of the lot is already temporized and tempered, it partakes in different rhythms of the near and the far, the individual and the communal, tuned by the distributing-machine of the lots. The most beautiful gesture is without doubt the leaving open of the 'empty' lots, a sort of libation, an almost religious gesture binding the community.

It is difficult to compare Broadacre and Galesburg. Obviously the former must be seen as in essence a complete city, even if it is a small one. It is an exemplary city, to be filled in according to the circumstances. On the acres in Broadacre one's individuality would have been a question of building (*colere*) the lot and building (*aedificare*) the house on it. Building individuality. The mountain and the river give an abstract idea of a specificity of place but that specificity does not bear on the quality of the lots which remain indifferent to mountain and river. On the round acres of Galesburg the corrals would have been individualized on beforehand, every corral being a singular collection of trees, grasses, a shimmering lake and a piece of sky. All lots would have the same orientation while being round, but also a different orientation in the siting of the dwellings and the 'gates' to the neighbouring lots. And that individuality of the lot would have to be adopted by the future inhabitants, answering the individuality of the lot by the individuality of their homes, honouring the singularity of place. Building individuality, yes, but building individuality as the

consciousness of something already there, hearing the voices of all those having built or still co-building the site. The circle captures 'this-here' as a mood, hearing these voices in order to become situated, to become 'of the site.' It makes the Galesburg lot a drumhead, it makes Galesburg a 'while.'

In 1996 I visited the site. Though the plan was never executed according to the original drawing—a second, less ambitious plan with larger lots and no choices was used—, many of the qualities aimed at in the first plan were clearly recognizable. I saw large open tracts with eccentrically positioned houses seeking neighbourhood with trees and hill. The Curtis Meyer House (1948) [FIG.1.48] perfectly showed what it means to build 'with the others' (both the other humans and the natural artefacts), to build 'this here.' Receiving, concave gestures, and giving, convex gestures defined the geometry of the house. A concave eave was cutting out a piece of sky. [FIG.1.49] The bent 'horizons' of the wood boards still echoed the circular lots. [FIG.1.50] An enormous tree perforated the eave on more than one spot. The house opened up to the site, ready to be wounded by or already wounded by 'this here.' Honouring individuality, celebrating singularity, building *haecceities*.¹⁷⁹

¹⁷⁹ Wikipedia says: "Haecceity (from the Latin *haecceitas*, which translates as "thisness") is a term from medieval scholastic philosophy, first coined by followers of Duns Scotus to denote a concept that he seems to have originated: the irreducible determination of a thing that makes it *this particular* thing. Haecceity is a person's or object's *thisness*, the individualizing difference." <https://en.wikipedia.org/wiki/Haecceity>

Gilles Deleuze and Felix Guattari revitalized the concept to describe "a non-subjective, non-personal individualization": "A season, a winter, a summer, an hour, a date, have a perfect individuality lacking nothing, even though this individuality is different from that of a thing or a subject." ("Une saison, un hiver, un été, une heure, une date ont une individualité parfaite et qui ne manque de rien, bien qu'elle ne se confonde pas avec celle d'une chose ou d'un sujet.") *Mille Plateaux*, Paris: Minuit, 1982, pp. 318-324.



FIG. 1.48 Curtis Meyer House, Galesburg (MI), 1948. [Photo: Frans Sturkenboom]



FIG. 1.49 The concave side of the Curtis Meyer House. [Photo: Frans Sturkenboom]



FIG. 1.50 The convex side of the Curtis Meyer House. [Photo: Frans Sturkenboom]

1.6 Summary: disappearing and reappearing cities

I will now pass the review of all the concepts we have used to understand Wright's urbanism.

For Wright everything begins in the city, the big city: the metropolis. Wright thinks of that city as a disappearing city. In the first place that means the citizen disappears 'in the shadow of the wall,' in the grey mass of uniformity piled up by the centralizing forces of modern times. In the second place the disappearing city is a city that will disappear itself,¹⁸⁰ it will collapse by the very forces that built it, the forces of "acceleration" and "exaggeration."

The new traffic and communication means make the citizen disappear from the "disappearing city" to reappear in the "extended" instead of the "contained" city. That city goes by the name of Broadacre, the decentralized city, an *ager-polis* in which the citizen dedicates at least part of his life to the earth, and with the earth to the sky, growing his own crop or beautifying his own lot. The acre, a birth right, stimulates the citizen to leave the mobocracy and to build his individuality by building the lot and his tailor-made house.

The new, positive city is a twin city. It is rooted in a technical era, the era of mobility and the new communication means. It blossoms in an ether of speed and waves, it is a city of messages and messengers 'up in the air.' With Michel Serres we called this the heavenly city, a city of angels only appearing on the threshold. But this city must strike root in the earth too, it must become embodied by going 'through the earth,' it must become a terrestrial city. This dream will come true on the acre, every fur a mixing of earth and sky. And it will also come true in any interior as a medium to incarnate in a local nature, a localized 'this here.'

The terrestrial-celestial city, the city of ships and ways, is a city of ultra-material interiors and erased exteriors. The ultra-material interior, a fragment of nature, may be found in the house, on the acre, and in all communal ship-holds where

¹⁸⁰ Wright often said that the 'Old Town' (the metropolis, FS) was already disappearing and the new Town already taking its place: "My interest lies in sincerely appraising , in our own behalf, elemental changes I see existing or surely becoming." FLW, LC, p. 230.

humans become individuals, sharing common needs or celebrating a common spirit. The interior is a true medium. The erased exterior is a product of speed and overexposure, it is the form, the 'Gestalt' of the "disappearing city." Wright's exteriors in the city do not communicate with city space, they bounce off the city by their convex forms, their smooth skin and their closed façades. It is true that nature shimmers through in these city buildings in their material character, but their monolithic-monadological character makes them disappear all the same. The only thing Wright's city-buildings want to communicate is their disappearance from the city. Yes, they send, their convex Baroque forms radiate, but they send the disappearance *of* and the disappearance *from* the metropolis.

In the countryside, the erased exterior manifests itself in buildings communing with their surroundings, buildings seeking *continuity* with nature, growing out of the earth into the sky, a form of concealment in nature, as we will also see in the coming chapters. Or even better, a form in which natural and artificial are no longer to be distinguished.

The disappearing city is a dystopian city, "The Moloch that knows no God but more." The new city, Broadacre, is a utopian city, a city (yet) without a place. It is the product of freedom, of spontaneous developments along the highway, paradoxically planned and coordinated, fully embodying a new technical state of the universe, a new Frontier. "The great implements science has put in the hands of humanity are themselves carving out this new city that is to be everywhere and nowhere."¹⁸¹ Finally Broadacre is an eutopian city, a good city, changing mobocracy—the ruling of the same leading to mediocrity—into a "true democracy of the individual."¹⁸²

One might think of that city as the universal suburb, but this is only partly true. For Wright the new city is a complete city. "Decentralization is not dispersal—that is wrong. It is reintegration."¹⁸³ Broadacre is not the exemplar of sprawl. It provides all kind of public interiors, using the new radii of action corresponding to the celestial city, weaving all kinds of transversal, non-hierarchical social bonds based on free association. This was Broadacre's other side of the regional road, the 'zone of hospitality.'

¹⁸¹ FLW, *CW3*, 325.

¹⁸² FLW, *LC*, 27.

¹⁸³ *Ibid.*

The celestial city, the city of modern technique, is a city of annihilated distances, of what Sloterdijk calls ‘compressed space.’¹⁸⁴ Heidegger always persisted that such annihilation of distances by modern technique does not necessarily bring us ‘nearness,’ a trusted world of things.¹⁸⁵ For Wright, however, the celestial ‘compressed’ city and the terrestrial ‘extended’ city are complements, the one cannot do without the other.

Sloterdijk asserts that, phenomenologically spoken, compressed and uncompressed space are not symmetrical.¹⁸⁶ In the compressed space of the celestial city any distance may disappear, the terrestrial, localized city will nonetheless produce its own extendedness. It produces its own nearness, its own *Ent-fernung* (de-distancing),¹⁸⁷ and its own expansion, not necessarily measured by the universal ‘de-distancing’ brought about by modern technique. This is what we saw happening on the round lot: a revaluation of the locus, of what Heidegger called *das Ort* (the place).¹⁸⁸ Etymologically *das Ort* means the point of the spear stuck in the ground: a ‘this here.’ But the *Ort* only exists as the gathering of ways into and ways from the surroundings, creating its own ‘far’ and its own ‘nearby.’ The *Ort* depends on an *Erörterung* (conversation) with all what is there.

We began this chapter with a quote on the caveman and the wanderer. They are the inhabitants of the terrestrial and the celestial city. According to Wright, the former is a conservative bound to his neolithic ground, “Establishment was his idea.”¹⁸⁹ The latter open to change and adapting to circumstances, while ever on the move. Wright’s city is the city of both: “Gradually, in the present body of man-kind, both natural instincts work together and produce what we call civilization.”¹⁹⁰

¹⁸⁴ Peter Sloterdijk, *Het Kristalpaleis*, pp. 271. “All extendedness and all what demands space, become compressed to a minimal, slow, bloc.” (my translation from the Dutch version)

¹⁸⁵ Martin Heidegger, *Das Ding*, in *Vorträge und Aufsätze*, Pfullingen: Verlag Günther Neske, 1978 [1954], p. 157.

¹⁸⁶ Peter Sloterdijk, *Het Kristalpaleis*, pp. 280-284.

¹⁸⁷ *Entfernung* means distance but by adding a hyphen Heidegger inextricably binds that notion to its opposite: de-distancing, a ‘removal’ of distance. *Ent-fernung entdeckt Entfertheit*. (De-distancing discovers remoteness.) In *Sein und Zeit* Heidegger writes: ‘*Dasein ist wesentlich entfernend, es lässt als das Seiende, das es ist, je Seiendes in die Nähe begegnen.*’ Martin Heidegger, *Sein und Zeit*, Tübingen: Max Niemeyer Verlag 1979 [1926]. p. 105. „An essential tendency towards nearness lies in Dasein. As the being that it is, it lets beings be encountered in nearness.” (translation Joan Stambaugh, p. 97)

¹⁸⁸ Martin Heidegger, *Unterwegs zur Sprache*, Pfullingen (Neske), 1971 [1959], p.37

¹⁸⁹ FLW, *LC*, p. 23.

¹⁹⁰ FLW, *LC*, p. 25.

A first idea of time shimmers through. We spoke of chronological time as the organizing time of the city. In the metropolis, this form of time, accelerating, erases city space as communal space, it makes the exterior a deserted surface. In the interior, interrupting that 'horizontal' time, architecture may create circumstances in which a new form of communal space may reappear in a non-compressed mode. This space atmospherically surrounds the saved individual-dividual, finding a rhythm in the terrestrial 'clock' of the 'while.' Such rhythms may be found in the circular lots of Galesburg, alternating the 'far' and the 'near,' in the ploughing of the fur on the acre in Broadacre, in the metropolitan grotto of the SC Johnson Administration Building as much as in the daylight-distribution crosses orienting Unity Temple in the atmospheric cycles of the day.

2 The villa

“I and my chimney, two grey-headed old smokers, reside in the country. We are, I may say, old settlers here; particularly my old chimney, which settles more and more every day.”

Herman Melville, I and my chimney.

“On this side is the city, on that the wilderness, and ever I am leaving the city more and more, and withdrawing into the wilderness.”

Henri David Thoreau, Walking.

2.1 Abstract

In this chapter I will start by widening the horizon of my study to demonstrate that we find deliberations of time at the very origins of the architectural profession. I will go back to the treatise of the Roman architect Vitruvius to find a first formulation of the importance of time in architecture according to the double meaning of the Latin *tempus*, meaning both chronological and seasonal time and as such already implying the time of the weather. [§ 2.2.1] I will then expand on the entanglement of the notions of *templum* and *tempus*, both related to the founding rites of the ancient city of the Roman settlers, to see how an awareness of situatedness in time and space leads to a ritualistic apparatus, safeguarding a new community settling down on a terra incognita. [§§ 2.2.2-2.2.5]

Apart from the more obvious importance of embedding a study on time in architecture in a wider context, the relevance of such an exposition is based on the presupposition that in Wright's architecture settling is a theme, a theme related to an American past, the past of a people of colonists. This presupposition has already been filled in partially in the first chapter, seeing the *ager romanum* reappearing in Broad-*ager*-city. In this chapter I will particularly study how in Wright's work

the awareness of *situatedness* proper to the settler finds expression in a series of architectural gestures strongly resonating with the concepts and figures involved in the Roman auguration rites. I will argue that Wright's architectural gestures framing earth, sky, and horizon, must be seen as profaned versions of the rites of the *mundus* and the *con-templatio*, the rites embodying the reconciliation with a new earth and the inauguration of a new sky, essential for the Romans in their founding of a new town. [§§ 2.3.1–2.3.8, § 2.3.10]

I will then explicate how all the frames involved, the Roman *templa* and the frames of Wright's windows and walls, imply forms of time. [§ 2.3.9] If Wright speaks of the house as “a companion to the horizon,”¹⁹¹ it would be easy to characterize the horizon as merely the spatial delimitation of an environment. Wright's poetic formula would lose all of its magic. Instead we should see the horizon here as the edge between the known and the unknown. The settler carries a past world, which must grow into new surroundings, while at the same time a future, unknown world approaches. Dwelling—*habitare*—is exactly this ‘while’ of getting habituated, of growing habits and finding peace, a learning to rest within the new horizon.

These temporal dimensions also find an embodiment in the stirring tectonics of the elevation which—in different techniques—testify of a contraction or a rooting into the earth *and* of an expansion towards the horizon. [§ 2.4.2–2.4.3] In our treatment of this theme we will notice that in Wright's oeuvre we find a development from a single *axis mundi* to a system of multiple *axes mundi* and overlapping frames, inaugurating a real idea of mixed bodies and multiplicities. [§ 2.4.1]

Finally we will see how the story of the settler finds a renaissance in the typology of Wright's houses that must be defined as villas, the type in which a flight from the hectic and dystopian city and the desire for nature and an open horizon come together. [§ 2.5.1] I will argue that Wright's suburban houses stage the grand play of the settler, again and again, the commuter repeating that mythical first time of settling and finding peace on a terra incognita, while meeting a magical new nature. [§ 2.5.2]

My main objects will be the Robie House and the Llewellyn Wright House,¹⁹² but we will regularly ‘visit’ other houses to see how Wright's thinking finds coherence in a variety of approaches.

¹⁹¹ FLW, *CW3*, p. 287.

¹⁹² Robie House, Chicago (IL), 1910; Llewellyn Wright House, Bethesda (MD), 1957

2.2 Time

2.2.1 Vitruvius and his clocks

If we read Vitruvius, we immediately become aware of the central role time plays in the profession of the architect. Vitruvius tells us that the founding of a city begins with the erection of a *gnomon*,¹⁹³ a vertical rod “tracking a shadow” on a horizontal floor (*amussium*). This *gnomon*, often associated with the needle of a sundial, takes on different functions. In the first place it enables the architect to determine the different orientations by constructing the perpendicular two axes, the *kardo* (north-south) and the *decumanus* (east-west) according to the daily arc of the sun. [FIG.2.1] They direct the grid of the city. For Vitruvius this procedure is meant to achieve the construction of a healthy city. The cross of *kardo* and *decumanus* is immediately transformed to a diagram of the winds. [FIG.2.2] It functions as a compass. When founding a city the grid must be oriented in such a way that favourable winds are used to clean the streets of bad air, while heavy or warm winds are kept out because they might hinder or even endanger the life of the inhabitants. [FIG.2.3] This means that according to Vitruvius the grid may deviate from its ideal cardinal directions.¹⁹⁴

The *gnomon* however is also used to construct a real sundial that gives us the hours of the day. Vitruvius recapitulates the knowledge necessary to make an *analemma*.¹⁹⁵ The *analemma* will allow us to define the summer and winter solstices and the equinoxes, it gives us the seasons. The moving shadow of the *gnomon* with its varying length—corresponding to the time of the year—installs the different rhythms of a chronological and cyclical order of time. This order becomes the base of the social machine of the city. It is so important that the architect is supposed to provide alternative clocks for the periods the sun hides. For that reason Vitruvius describes the working of water clocks. Among them we find an anaphoric one even reckoning with the length of the days during the journey of the sun through the signs of the Zodiac, and also giving the month and even the days of the year.

¹⁹³ “In the very centre of that spot set up a bronze gnomon or ‘shadow tracker’ (in Greek σκιαθραξ). Vitruvius, *The ten books on architecture*. Translation Morris Hicky Morgan, New York, Dover publications, 1960 [1914], p. 26. Accordingly a *gnomon* (from Greek γνώμων, *gnōmōn*, literally: one that knows or examines) is the part of a sundial that casts a shadow. <https://en.wikipedia.org/wiki/Gnomon>

¹⁹⁴ Vitruvius, p. 27.

¹⁹⁵ *Ibid.*, p. 270.

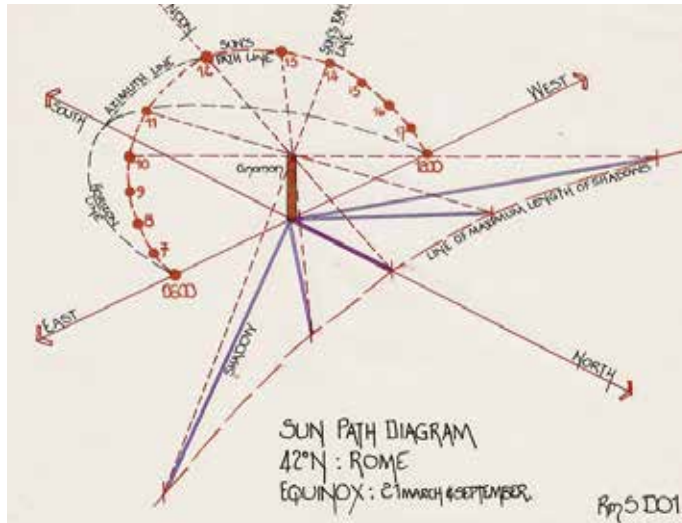


FIG. 2.1 Gnomon and construction of the *decumanus*, parallel to east-west alignment. [Drawing: Michael Ferrar]



FIG. 2.2 The gnomon transformed to a windrose.

The division of the wind rose in venturvm regiones as given in Vitruvius' book De Architectura, published by Cesare Cesariano (Como, 1521).

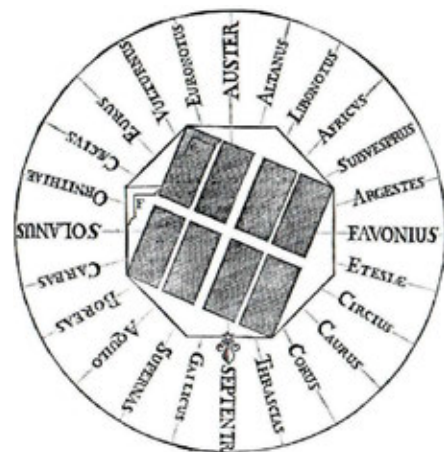


FIG. 2.3 How the city-plan may be turned on the windrose to use the favourable winds and to avoid the unfavourable winds. [According to Vitruvius, book 1, chapter 6]

It is a complex mechanism, a real-time calendar. Reading the ninth of the ten books, teaching the architect the knowledge to place his building in a series of cosmological clocks, we sometimes get the impression that the architect is nothing more than a clockmaker.

The heavens are overwhelmingly present in Vitruvius' treatise but this presence is a technical one, allowing us to take possession of our lives, to regulate and direct our existence. From many points of view, Vitruvius' books must be seen as a proto-functional treatise, honouring *utilitas*. The *gnomon* splits into a clock and a wind-rose, both crucial for life in the city. Deliberations of time can be found at the very origins of urbanism and architecture. And when saying time one immediately thinks of the fate of the Latin word *tempus* that in so many Romanic languages assumed the double meaning of both time and the weather.¹⁹⁶

There are only a few places in which Vitruvius relates weather aspects to life inside the house. He mentions the late rays of the sun penetrating bathrooms and the library, in both cases warming the rooms and, if necessary, chasing damp and moisture. Almost touching on aspects of sphere and an affective constellation in the house, even here atmospheric aspects remain functional, a question of *sanitas*. The *tempus* does not become a temper, the house is not tuned to the temperaments of the weather to produce a mood colouring our activities.

2.2.2 Templum and tempus

Joseph Rykwert tells us that proto-functional deliberations were quite common in Vitruvius' time but they were little used in the practice of building cities.¹⁹⁷ Obviously it must have been a bridge too far to violate the *kardo-decumanus* principle by freely turning the grid to adapt it to a favourable direction on the wind-rose. The reason for this unwillingness is that in the first instance the gnomon was not the turning point of a compass, the spot of its erection marked the *umbilicus mundi* (the navel of the world), it was the centre of an inauguration rite. That rite marked the very beginning of time, the time of a community of settlers and their colony. The instalment of a new clock coincided with the inauguration of a new world. Certainly orientation was a major issue in the rite but not directly for functionalist purposes.

¹⁹⁶ Rossi, Aldo, *A Scientific Autobiography*, Cambridge (MA): The MIT Press, 1981, p. 1. Rossi speaks of the double meaning of the Italian *tempo* while Michel Serres regularly returns to the intricacies of the French *temps*, time and weather. Among others: Michel Serres, *The natural contract*, Ann Arbor: The University of Michigan Press, 1998 [1992], p. 27.

¹⁹⁷ Joseph Rykwert, *The Idea of a Town, the Anthropology of Urban Form in Rome, Italy and the Ancient World*, Cambridge (MA): The MIT Press, 1988 [1976], p. 41.

It is said that before Vitruvius, the ‘functionalist’ procedure with the *gnomon*, or its mobile version, the *sciotherum*, was secondary to the true inauguration rite of the city. In this rite, the augur, beginning the founding ritual, inscribed a cross and a circle in the soil in order to determine the direction of the divination rite. This sign was called the *templum in terra*.¹⁹⁸ [FIG. 2.4] What part of the heavens should be taken into consideration? He then contemplated the sky: this con-*templation* was a gathering of the four *templa*—the regions of the sky—in one *templum*, the *templum in caelo*. The four *templa*, determined by a cross in the sky, roughly marked sunrise as the morning, sunset as the evening, midday as the summit of the orbit of the sun, and the night. They marked the *tempus* of a day. In this way the *templum* framed the *tempus*, and language sealed this relation in their etymological bond.¹⁹⁹

The celestial *templum* or *templum in caelo* was a vague area marked by words of incantation spoken out by the augur, who sat facing the south.²⁰⁰ He indicated certain objects in the surroundings and recapitulated his words in the gesture of a comprising figure, half a circle, an arch or even a square. The *templum in caelo* was so spoken out and freed: *effatum et liberatum*. The delimited area functioned as a window in the sky in which the signs of the gods had to be awaited. During the divination rite, it was not the augur himself who watched the sky, he was often blinded, it was the surveyor (*agrimensor*) standing next to him. [FIG. 2.5] The surveyor gazed into the celestial *templum* (this act was called *auspicatio*) registering certain celestial phenomena prescribed by the augur, for example the flight of vultures or the movement of clouds. The observations of the surveyor, in their turn, had to be interpreted by the augur. If the signs were found to be favourable, the founding ritual could proceed. The surveyor could extend the original circle and cross, which the augur had inscribed in the soil as the *umbilicus mundi*, to a real terrestrial *temenos*, a sacred domain severed from the profane world. The Greek word *temenos* and the Latin word *templum* stem from the Proto-Indo-European root *tem*, to cut, to sever. This terrestrial *temenos* could pertain to the area of a city, to a military camp, as well as to a temple in the strict sense of the word. The surveyor was the one who marked the boundaries and who, using his *groma*, [FIG. 2.6] extended the cross to the *quadrata*, the gridded quarters of the city.

¹⁹⁸ Ibid., p. 62.

¹⁹⁹ Hermann Usener, *Götternamen, Versuch einer Lehre von der Religiösen Begriffsbildung*, Bonn: Cohen, 1896, pp 191-192.

²⁰⁰ As Reported by Varro. Quoted by Rykwert, *The idea of a town*, p. 46.



FIG. 2.4 *Templum* of the earth, Codex Arcerianus.



FIG. 2.5 The *auspicatio* (watching the sky).

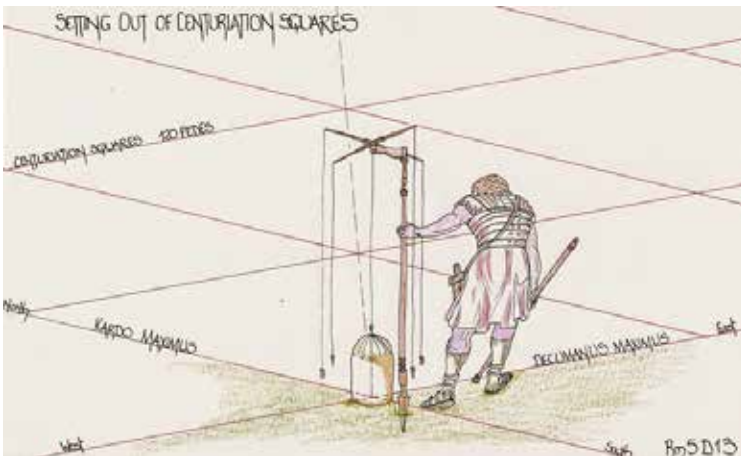


FIG. 2.6 *Groma* used by the Roman surveyor to align streets or lot-borders. [Drawing: Michael Ferrar]

What happened in this rite was not only the installing of a sacred space. This space was founded on the time of the sacred divination rite: a time of suspens, of waiting. From the moment of inauguration that suspended time would regularly interrupt the life of the settlers. In their celebrations they remembered this original awaiting, this being surrendered to the temper of the gods, with the rewarding of the becoming 'included' of their terrestrial world into the numinous one.²⁰¹

The scission between the sacred and the profane coincided with the instalment of the law, the scission institutionalized as the De-cision. The new world of the settler became stabilized in this answering of the human to the divine, the correspondence of the terrestrial and the celestial *templum*. We have a double movement here: the envelopment of earthly life in the *tempus* of the sky and the development of that cosmological, noumenal *tempus* in the terrestrial city. It may not surprise us that many of the Greek temples, certainly those devoted to the gods of the weather, were partly or completely uncovered, *hypoethral*. The temple inscribed the terrestrial *templum* in the open domain of the celestial *templum*, thus making human time into a borrowed *tempus*.

The *templum* is thus doubly defined as both a severing in the circumference and a gathering together in the cross. We find strong echoes of both aspects in modern phenomenology, especially when it comes to definitions of place and space. Heidegger's *Geviert* (fourfold) may even be interpreted as a modern version of the correspondence of the terrestrial and the celestial *templum*. It gathers together the mortals and the divinities, the earth and the sky.²⁰² At the same time we find the separated domain of the *temenos* in his idea of the "safe-guarded/saved" (*bewahrt, geschont*) area, of what is left free, what is "pacified" (*zum Frieden gebracht*) within an enclosure. In the cut of the *temenos* the *templum* begins; in the gathering aspect it is open beyond the perimeter. Or as Heidegger puts it, the *peras* is not where things stop but where they begin.²⁰³ We can see this double aspect in the Greek temple.

²⁰¹ Mircea Eliade, *The Sacred and the Profane, the nature of religion*. Translated from the French by Willard R. Trask, New York, Harcourt, Brace & World Inc., 1963[1957] pp. 73-74.

²⁰² Martin Heidegger, *Bauen, Wohnen, Denken*, in *Vorträge und Aufsätze*, Frankfurt am Main: Neske: 1978 [1954], pp. 139-157.

²⁰³ „Ein Raum ist etwas Eingeräumtes, Freigegebenes, nämlich in eine Grenze, griechisch *peras*. Die Grenze ist nicht das, wobei etwas aufhört, sondern, wir die Griechen es erkannten, die Grenze ist jenes, von woher etwas beginnt.“ Heidegger, *Ibid.*, p. 149.

The *megaron*²⁰⁴ or the *cella*²⁰⁵ (from the Latin *celare*, to conceal) is the closed sacred space, the abode of the divinity, while the perimeter remains open in the dashed lines of the *peristylia*, the colonnades surrounding the *cella*. The *intercolumnia*²⁰⁶ rhythmically connect to the landscape in which the voices of the gods insist.

I stress this double character of the gathering and the enclosure, because, as we will see later on in our discussions of the opening and closing modalities of Wright's architecture, for phenomenologists—all too often narrowly relating architecture to its direct surroundings—it remains crucial to keep seeing the open, transpiring character of place and of any pacified, enclosed domain; the near as the trusted is always cut out of the far as the strange (“*das Ferne wie das Fremde*”²⁰⁷) and remains fully dependant on it.

Allow me to give a first hint to Wright's work to pinpoint these ideas on the *templum*. In Wright's 'signature' or 'seal' from the early years of his career we find a cross, a circle and a square. [FIG. 2.7] We could easily interpret this signature as referring to the figures of the Roman rite.²⁰⁸ The cross would be the *templum in terra*, the circle the small *mundus*, their combination the original sign inscribed in the soil by the augur ; the square could be the *imago mundi*, the image of a world unfolding to the four horizons.²⁰⁹ The similarities with the roman signs of the *templum in terra* and the *templum in caelo* are striking.²¹⁰ [FIG. 2.8-2.9]

²⁰⁴ The *megaron* was the great hall in very early Mycenaean and ancient Greek palace complexes. Architecturally, it was an almost closed rectangular hall that was surrounded by four columns, fronted by an open, two-columned portico, and had a central, open hearth that vented through an oculus in the roof. <https://en.wikipedia.org/wiki/Megaron>

²⁰⁵ The *cella* was a small room meant to store food; later the notion more generally denoted a closed room; finally it became the closed central space of the temple in which the godhead hides. F. Muller/E.H. Renkema, *Beknopt Latijn-Nederlands woordenboek*, Groningen: Wolters, 1958. Cf. <https://en.wikipedia.org/wiki/Cella>

²⁰⁶ *Intercolumnia*: the open intervals between the columns.

²⁰⁷ Heidegger reconstructs the etymological bond between “*das Ferne*” and “*das Fremde*” in *Unterwegs zur Sprache*, p. 41.

²⁰⁸ Mircea Eliade even notices a more universal use of such symbols, meeting them in the symbolism of old native American tribes such as the Algonkin and Sioux-tribes, old German tribes and the Roman settlers. Eliade, *The sacred and the profane*, p. 47.

²⁰⁹ Eliade, *Ibid.*

²¹⁰ When I published this chapter a first time in the on-line magazine *Apria* (*Apria* 2, spring 2021), my peer-reviewer (who later appeared to be Michael Desmond) tipped me on this wonderful coincidence between Wright's early signature and the figures or 'symbols' involved in the Roman inauguration rites.



FIG. 2.7 Wright's signature square during first part of his career.



FIG. 2.8 *Templum* of the earth with *Kardo Maximus*(KM) and the *Decumanus Maximus* (DM).

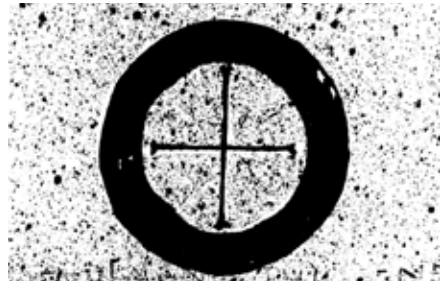


FIG. 2.9 *Templum* of the sky. Source: Joseph Rykwert, *The idea of a town*, 1976

We could however also interpret the signature in a strictly phenomenological way: the cross or the crossing would then be the gathering figure, gathering a region (*Gegend*) and providing orientation in a world, as Heidegger puts it in *Sein und Zeit*;²¹¹ the circle would be the figure of a 'being-in'(-the-world), the figure of the surroundings. Finally the square would refer to an unfolding of world, reciprocal to the gathering in the cross. The conclusion of such a double approach might be that the similarities between the 'Wrightian' and the Roman signs are indeed striking but fully rest on these phenomenological dynamics. On that ground we might indeed call them symbols. The figure *suggests* the idea.

2.2.3 Private time: the closing of the interior

With the division of the four *templa* and the corresponding times of the day, we get a first glimpse of the birth of the *templum* from the *tempus*. Of course this *tempus* can be read in the Vitruvian way giving birth to a chronological or arithmetical time. But we should not forget that the cut of the *temenos*—the severing of an inside and an outside—also entails the installing of an “immunological space and an atmospheric time,”²¹² to use the terms of Peter Sloterdijk in his monumental epos on spheres: a safe space coloured by the mood of a community that started in the *tempestus*, the last or the right moment to take the omens. The establishing of such a safe space, the closing-up of the interior,

²¹¹ Martin Heidegger, *Sein und Zeit*, Tübingen: Max Niemeyer Verlag, 1979 [1926], § 24.

²¹² Peter Sloterdijk, *Sphären I, II, III*, Frankfurt am Main: Suhrkamp, 1998-2004.

is a real *Ereignis* (event),²¹³ the formation of a new self, the appropriation of something own and thus the beginning of a world and a history. The wall as the instrument of the *temenos* includes but also excludes, it severs the proper and the appropriate from the improper or disappropriate, the *sol-ipse* from the difficult if not even 'impossible' world outside. This was the case for the Roman city-wall, the *pomerium* or *murus*, which had to protect the community of settlers from possible enemies or strangers, but it also applies to all other walls before and since. Vilém Flusser tells us the wall of the western house is always a double wall: the outer wall is politic, it protects from the uncanny outside (*das Unheimliche*), the inner wall hides the activities in the house, makes them secret business. "...und die Mauer hat das Geheimnis von dem Unheimlichen zu schützen."²¹⁴ (and the wall has to protect the secret from the uncanny)

Another sort of protection could be attributed to the roof: it is the shield under which to hide from the gaze of the gods.²¹⁵ As soon as the bond has been instituted and the gods have sanctioned our laws, we, humans, want to have a private life. We want to make our own decisions and we can only do so by cutting ourselves loose from the heavens. Private indeed means being *privatum*—deprived from that authority of the gods—and thus also to be at least partly freed from the laws of the community guaranteed by those gods.²¹⁶ For the Roman settlers this meant that the civil authorities had nothing to say about their houses and their grounds. House and grounds were the domain of the *pater familias*, who functioned as the priest of the private family gods, the deified ancestors.²¹⁷

The interior of the house is thus a secret place. For Wright this idea of the being *privatum* is bound up with the idea of the individual, a single or communal one, sharing as little as possible with the *unheimlich* (the uncanny, but literally the 'not at home') of a city out of joints; but also with the more generic American idea of an existence freed from state-interference.²¹⁸

²¹³ The word *Ereignis* (event) is used by Heidegger to mark an event that really changes a world and thus opens a new time. Heidegger, seeing the history of western thinking as the epoch of metaphysics, often speaks of a second beginning (*Anfang*). When it comes to man's there-being (*Da-sein*), this *Ereignis* means both an expropriation (*Ent-eignung*), transference of property (*Übereignung*), and an appropriation (*Zu-eignung*) of Being. The true *Ereignis* is both a contraction and an expansion of Being. In: *Beiträge zur Philosophie, Vom Ereignis*. GA 65, pp.319-320

²¹⁴ Vilém Flusser, *Durchlöchert wie ein Emmentaler*, in *Vom Stand der Dinge, Eine Kleine Philosophie des Designs*. Herausgegeben von Fabian Wurm. Göttingen: Steidl, 1993, p. 79.

²¹⁵ Ibid.

²¹⁶ Rykwert, *The idea of a town*, 1976, p 100. The *conrectio* of the town, the division into four regions, presumably placed it under the tutelage of the law-guaranteeing sky. See also: Flusser, *Vom Stand der Dinge*, p.79.

²¹⁷ Fustel de Coulanges, *The Ancient City*, p.105.

²¹⁸ FLW, *CW5*, p. 263.

2.2.4 The clock of remembrance

The saved space of a *mundus* has a special clock. Where in chronological time and its 'order of the day' we synchronize with the cosmic clock, the time of a *mundus* is accumulative. It is the time of memory and of remembrance. The nature of this remembrance may differ. It depends on the community installed and the frames, the *temenos* as the cut of inclusion and exclusion. After the wall and the roof, let us have a look at the floor which again would be such a an architectural moment of severing, of cutting loose from the all too unreliable relief of the earth and its dark subterranean depth in order to lead a smooth life synchronized with the civil clock of daily life. The *temenos* of the floor is pierced by the hearth, a veritable window to look back and to remember the mythical first time the human settled down. When? Was it the moment the cave dweller became the neolithic farmer—settling down on the floor of the earth? Was it the nomad and his wandering tribe, sitting down for the night in the tent of the heavens? Was it the moment their lives crossed each other to kindle civilization in Wright's story of the caveman and the wandering tribe uniting in the American soul, which we read in the first chapter? What sparkle, what spirits do we celebrate when we gather around the fire? For the Roman house it was clear. "Under the stone of the hearth an ancestor reposed and the fire was lighted to honour him and to preserve life in him, or it represented his soul as always vigilant."²¹⁹

Those ancestors became the Lares, Manes and Penates, the deities of the house, the fire the *Lar familiaris*. For the Greek and Roman urban communities the same could be said: it was their first task to erect a temple for the Greek Goddess *Hestia* or the Roman *Vesta*, the terrestrial divinities of the hearth, the family and the household. The sacrifices for this divinity had priority over those for Zeus and the Gods of the sky.²²⁰

Even in the less hieratic, Semperian version we would repeat a primordial moment, the event in which we gathered and settled around the fire as the centre of the corral or that of the primitive hut. "The first sign of human settlement and rest after the hunt, the battle, and wandering in the desert is today, as when the first man lost paradise, the setting up of the fireplace and the lighting of the reviving, warming and food preparing flame."²²¹

²¹⁹ Fustel de Coulanges, *Ibid.*, p.24.

²²⁰ Fustel de Coulanges, *Ibid.*, p. 21.

²²¹ Gottfried Semper, *The Four Elements of Architecture and other Writings*, translated by Harry Francis Mallgrave and Wolfgang Hermann, Cambridge: Cambridge University Press, 1989, p. 102.

If the fire burns, that past is rekindled, the human repeats a mythical first time of sitting down and of communing around the fire. Unconsciously, those who sit down around the fire repeat vestal origins and renew the bond with the earthbound gods. Hence the charm of the ritual of lighting the fire that even in the era of central heating—Wright’s era—put a spell on the progeny of the American settler. To the hearth we should add the chimney, the visible token of the fire. It is the real monument, or as Melville said, the chimney is “the king” of the American house.²²²

In the Roman rituals—the moments of remembrance—the original severing embodied in the floor or the floor stone, was undone. Michel Serres describes how in Roman culture the boundaries were blurred three times a year. On those days the well of the *mundus*, the umbilical point sealed in the *lapis niger*, the floor stone covering the vaulted *cella* in which some clods of the natal earth had been thrown, was uncovered to let some chaos come into the city. The *umbilicus* reopened and the ancestors, founders, and heroes again dwelled among the living.²²³

2.2.5 Architecture and its templa

Now we have sketched the original meaning of the *templum* and the *templa* and their relation with the *tempus* we can ask ourselves: did architects ever stop to reinvent the *templum*? Is not every frame, every line drawn by the architect, marked by that past of a rite in which an inside is sundered from an outside in order to establish a safe and a sacred domain? A safe space cut out, a clearing as an identifiable place, the place of something undividable, something whole in a scattered and often incomprehensible outside? And sure that place is a selection and for that very reason a place of election. Is not Sloterdijk’s concept of an immunological space a new version of that past? In the plan and in the section we see an inner space contracting and closing up.

²²² Melville, Herman, *I and my Chimney*, in *Billy Bud, Sailor and selected tales*, Oxford: Oxford University Press, 1998, p. 255.

²²³ Michel Serres, *Biogea*, Minneapolis: Univocal Publishing, 2012 [2010], Kobo e-book version. The chapter *Gaping Mouth*. I will come back on this ritual of the *mundus* later in this chapter.

On the other hand, do not all windows, including the modern electronic ones, open up again to the celestial *templum*? Do they not open the house for the unforeseen, the *tempus-tempestas* (the storm of an uncontrolled outside) that was never erased by the original *templum*? Deleuze and Guattari still remember that bond when they state that 20th century painting opened the house as a window to let in the forces of the cosmos.²²⁴ Of course we do not think explicitly of that past when standing in front of the window and gazing out. But it is for sure that, musing by the window sill, just waiting for nothing in a Bachelardian reverie, we recover something of that past. We repeat the suspended time, the “while” of gazing into the *templum*. It is in this posture, which we meet in more than one pre-Raphaelite painting, that someone is struck by a magic light that paints her face, like in John Everett Millais’ ‘Mariana.’ Waiting for the *tempestus*, the right or the last moment to take new omens, to be allowed a new world, a new clock ticking, a new *Ereignis*? Indeed, the window sill and all its substitutes like the desk before the window, the table top, and maybe even the threshold and the floor, they are the true altars of the house. They receive the light of the original *tempus*. How often do we return to that place at the window?

2.3 Wright and his templa

2.3.1 Introduction

In the previous paragraphs I have given an overview of the different forms of time installed by the inauguration rites of the Roman settlers, repeated and refreshed in some rituals such as that of the *mundus* and finally embodied in different architectural elements. We saw the *gnomon* installing a chronological time in the heart of the city; we saw the wall installing the “while” of a new community; the roof as the element saving us from the gaze of the gods and their delegated authority and so initiating private time; the hearth framing family time as the ‘deep time’ of lineage, the Lares, Manes and Penates being the deified ancestors worshipped around the fire.

²²⁴ Gilles Deleuze & Felix Guattari, *Qu'est-ce que la philosophie?* Paris: Minuit, 1991, p 173

We have given some incidental previews on Wright's work, preparing a way to think of Wright's architecture in terms of the concepts, actions and figures involved in the rites of the Roman settlers founding a new town. Although I think the possibility of such a transposition fully rests on more basic phenomenological correspondences, I also think that such correspondences point to the strong awareness of *situatedness* both in space and in time proper to the settler: the Roman settler, the American settler, Wright's 'play' of the settler, anyone settling in a new place, beginning 'another' life. To a certain degree every act of building supposes the idea of settling, but in Wright's case one finds an *explicit* embodiment of this idea in the gestures of his architecture. His buildings always entail the *emphatic* in-augur-ation of a safe space; the con-templation of a new sky providing the light of the day and the seasons; and the reconciliation with a local earth by letting that earth speak in textures, patterns and materials. Shortly, for Wright settling is indeed a *theme*, a theme entangled with an American past, the past of a people of colonists who tried to build a new existence on a strange continent, a theme steering both functional and artistic decisions.

If this situatedness refers to time, to a past to be attuned to a future on a strange earth, a time of habituation and of expectation, the question that will further lead us in the coming paragraphs is: how are these dimensions of time embodied in Wright's houses? The underlying question could be: is it possible to think of architecture in terms of such basic temporal dimensions?

In order to become more concrete I will now proceed by analysing the way in which Wright frames 'the situation.' When I say situation, I mean both the site and the specific circumstances, the opportunity occurring and both the technological and human possibilities at stake. I will reverse the order of my discourse, every time beginning with a frame: a *templum* in Wright's work, while sometimes flashing back to historic times. I will keep on referring to the notions we met in the first paragraphs of this chapter, which I schematize in FIG. 2.10-2.12.

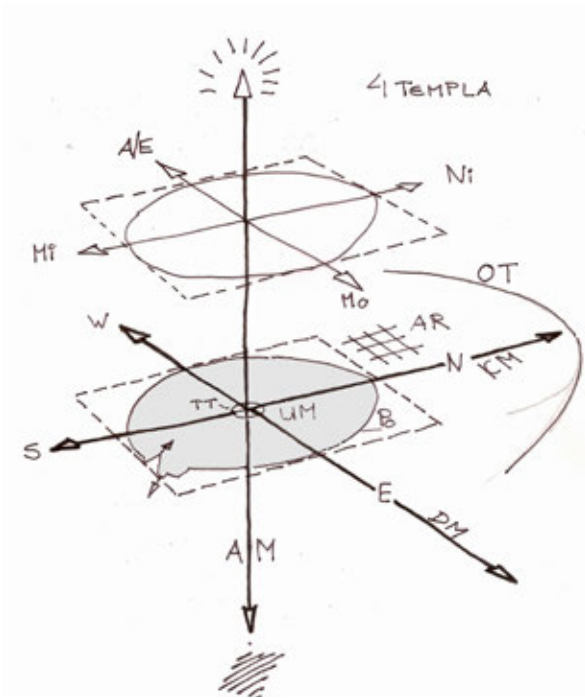


FIG. 2.10 Scheme of the *templa* in the Roman auguration. [Drawing: Frans Sturkenboom]

- A/E=Afternoon/Evening
- AM=Axis Mundi
- AR=Ager Romanum
- DM=Decumanus Maximus
- E=East
- H=Horizon
- KM=Kardo Maximus
- Mi=Midday
- Mo=Morning
- N=North
- Ni=Night
- OT=Orbis Terrarum
- Po=Pomoerium
- S=South
- UM=Umbilicus Mundi
- W=West
- 4T=4Templa

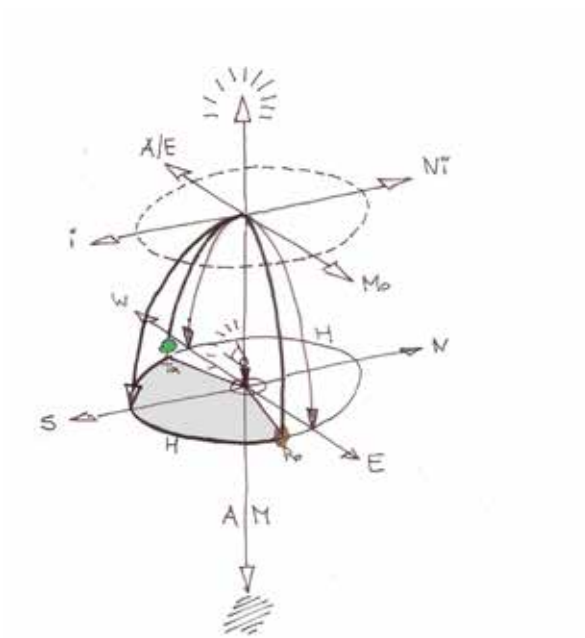


FIG. 2.11 *Effatum et liberatum est*. The establishment of the *Templum in Caelo* as the area of auspication, spatial scheme. [Drawing: Frans Sturkenboom]

- A/E=Afternoon/Evening
- AM=Axis Mundi
- DC=Decussis
- E=East
- H=Horizon
- Mi=Midday
- Mo=Morning
- N=North
- Ni=Night
- Ro=Rock
- Po=Pomoerium
- S=South
- TR=Tree
- W=West

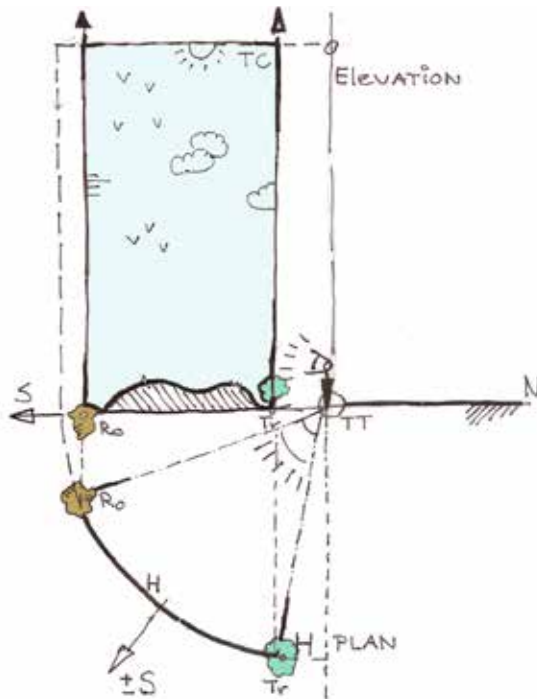


FIG. 2.12 *Effatum et liberatum est*. The establishment of the *Templum in Caelo* as the area of auspication: vertical and horizontal projection. [Drawing: Frans Sturkenboom]

- A/E=Afternoon/Evening
- E=East
- H=Horizon
- Mi=Midday
- Mo=Morning
- N=North
- Ni=Night
- Ro=Rock
- S=South
- TC=Templum in Caelo
- TR=Tree
- TT=Templum in Terra

2.3.2 The hearth and the city wall: constructing a safe space

The first frame in the horizontal section is the *temenos* of the wall installing an interior space centred on the hearth. Its perimeter is closed toward the city but it opens up when turned toward nature. In the early Prairie Houses, many of them based on a somewhat imperfect Greek or Latin cross, we find the hearth quite literally on the crossing of the axes, just like an altar in the church or the *umbilicus mundi* on the *decussis*, the intersection of the *kardo* and *decumanus maximus* in the figure of the *templum in terra* in the founding ritual of the town.²²⁵ [FIG. 2.13] In later, more informal works, the hearth may be situated eccentrically, but it will nonetheless form a spatial and social focus.²²⁶

²²⁵ Among others, the houses for Metzger, Sault Ste. Marie (MI), 1902; Willits, Highland Park (IL), 1902; Henderson, Elmhurst (IL), 1901; Hickox, Kankakee (IL), 1900.

²²⁶ The first to have noted the importance of the concept of the crossing in the work of Wright is Francesco Dal Co. 'Notes concerning the phenomenology of the limit in architecture', in *Oppositions* 23, 1981 Cambridge (MA), MIT, pp. 36-51.

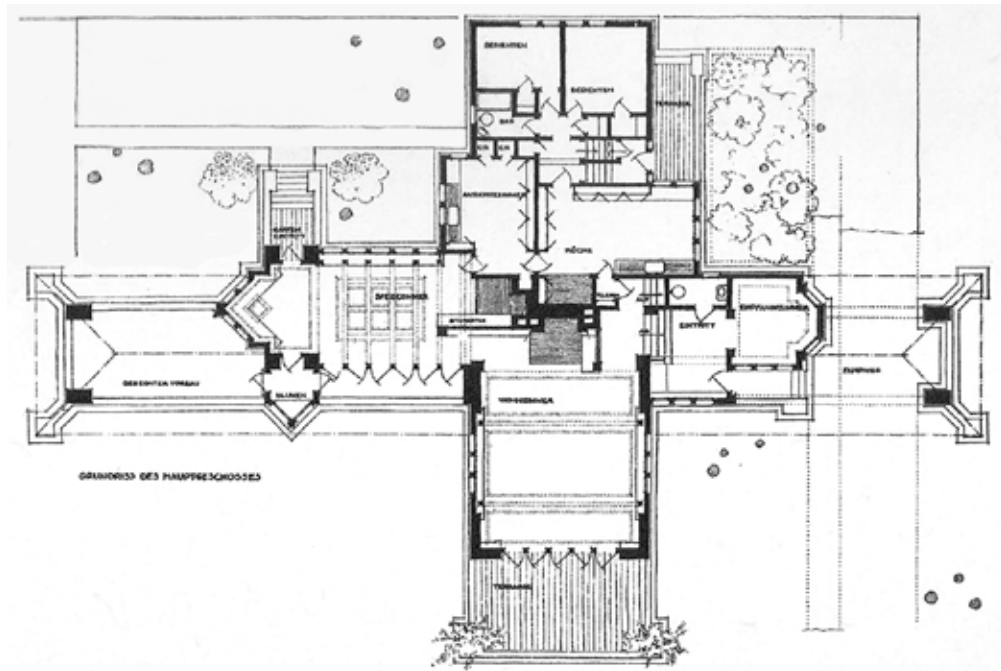


FIG. 2.13 Willits House, Highland Park, Chicago (IL), 1901, plan. Latin cross with hearth at the *decussis*. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

Wright uses different strategies to ‘immunize’ the interior.’ We saw that in the metropolis the wall reflects urban life by mirroring its overexposure, the excess of signs and speed ending up in a mono-coloured, ‘erased’ façade, smooth and hard and often rounded off, resisting and bouncing off the city.²²⁷ When it comes to the houses in the suburbs, we must make a distinction between the Prairie-period and later houses such as the Usonian. In many Usonian homes²²⁸ the front side as the public side is closed, or nearly so, leaving open only a small band of high windows or clerestory windows beneath the roof. The hard, closed or streamlined wall returns because every house has an entrance side, turned towards the city as the public—thus inimical—domain. In the Robert Llewellyn Wright House [FIG. 2.14], a late Usonian home Wright built for his youngest son Robert Llewellyn, we see a veritable donjon and a closed wall remembering us of defensive typologies such as the bulwark and the castle.

²²⁷ Cf. § 1.3.2.

²²⁸ Usonian homes: In the thirties Wright began designing houses with a new building system based on a wooden sandwich-panel, a thin floor-slab with heating pipes and brick fireplaces. This new building system was explicitly meant to reduce building costs. They were called Usonian homes, Usonia being Wright’s name for a better America.



FIG. 2.14 Robert Llewellyn Wright House, Bethesda (MA), 1957. Donjon in front facade. [Photo: © Yukio Futagawa]

Shooting or spying holes on the first floor confirm this ‘unease.’ Flusser reminds us that the etymology of the Latin *murus* and its European successors, from the French *mur* to the German *Mauer*, are related to the Latin *munire*, to protect and to fortify, to build walls.²²⁹ Sloterdijk’s notion of immunology has the same root. ‘Immunized’ means immured, protected, fortified. The front wall of the Llewellyn Wright House forms a real munition against the city.

We meet a special case in the Jacobs-II House,²³⁰ another Usonian home. At the public side it is dug into a fortifying wall, while a band of windows on top of the wall seems to scan the front part of the lot on inimical manoeuvres.²³¹ [FIG. 2.15-2.16]

²²⁹ Flusser, *Vom Stand der Dinge*, p. 79.

²³⁰ Jacobs-II House, also called *the Solar Hemicycle*, Madison (WI), 1946-48.

²³¹ Factually these windows are just high windows providing the sleeping rooms on the first floor with light.



FIG. 2.15 Jacobs II House, "Solar hemicycle", tunnel. [Photo: Frans Sturkenboom]



FIG. 2.16 Jacobs II House, 'Solar hemicycle'. Front side. [Photo: unknown]

In the Prairie Houses²³² Wright's strategy somewhat differs: we see that he draws up the stylobate²³³ to the band of casement windows immediately beneath the roof on the second floor, usually harbouring the living room. In that way the distance toward the public area is maximized. The cantilevering roof conceals the interior in deep shadows. Although apparently more open, the privacy remains guaranteed.

Wright's strategy for the Robie House is famous. He had to work on a shallow lot with a relatively large program, a combination that excluded taking distance on the lot by using a front garden. [FIG. 2.17] Moreover, the public side was the south side, the ideal side for a terrace which made it difficult to completely close it off. At the south edge of the lot we find a first low wall separating the pavement from a sort of moat, the deepened terrace of the billiard room and playroom in the basement. A second parallel wall, the parapet of the main balcony, 'floats' above this moat. In the section it recedes and steps up, distancing itself from the street while cutting off the glance of the passer by walking on the pavement. In their turn the multiple doors to the terrace keep back under the eave, remaining in the shadow, obfuscating the view from the street. Finally this gesture of receding is repeated on the upper level, where the sleeping room disappears in the dark shadow of the large overhanging roof.

²³² Prairie Houses. The houses built before 1911. The Winslow House (River Forest (IL), 1893) is often considered to be the first Prairie House. In the Prairie Houses Wright strove to build in accordance with the landscape of the prairie by building low (eliminating the basement and the steeply pitched roof) en by accentuating the horizontal elements (eave, parapets, band-windows, frieze) which echo the floor of the prairie. For a more elaborate description see § 3.2.2.

²³³ Stylobate: In Wright's time the term 'stylobate' was no longer reserved for the highest tread of the stereobate as the base of the temple — [Photo: Frans Sturkenboom] its original meaning. It had a more general meaning of any element marking the transition between the ground and the rising wall, visually functioning as a base. In his 1908 essay '*In the cause of architecture*,' Wright wrote on this watertable-stylobate rising to the sill of the second storey. *CW1*, p. 93-94.

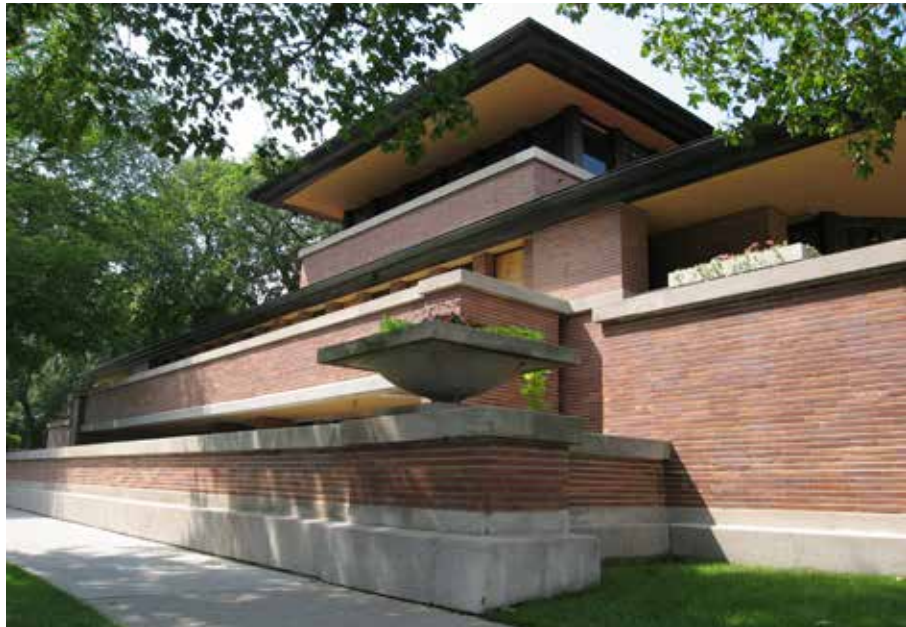


FIG. 2.17 FLW, Robie House, Chicago (IL), 1911. [Photo: David Arpi; CC BY 2.0]



FIG. 2.18 Robie House. "The eave now becomes the hand above the eye, scanning the horizon on possible manoeuvres of 'the enemy.'" [Photo: By Teemu08; CC BY-SA 3.0]

We find a same mobility in the horizontal sections in the architectural figure of the ressalt, the stepping back and forward of the wall. [FIG. 2.18] This mobility makes it impossible to identify a front, there is no confrontation, only evasion, as if the house was already leaving the city.

2.3.3 The ritual of entry



FIG. 2.19 Heurtley House, Chicago (IL), 1902. Ornamental bastion before the front door. [Photo: Frans Sturkenboom]

The first piercing of the *templum* of the interior is the entrance door, which in Wright's work is often hidden, never representative, but neither informal. The door is a difficult because paradoxical moment in the safe enclosure of the terrestrial *temenos*. Already in Roman times the plough inscribing the fur that marked the sacred boundary of the city, was carried over the place of the possible gate, knowing it would be the place of a necessary violation of that holy line. Janus, the two-faced, was the god of the gate. For a similar reason, entering a Wright-building entails a true ritualistic passage, the 'finding of a password' to open up 'the vault of the *cella*.'²³⁴ In the houses we find a manifold of strategies: in the Jacobs II House, which we just mentioned for its fortifying wall of earth, a dark tunnel connects to the back side, where we must enter without knowing where. In the Storer House²³⁵ we find a puzzling entrance via the terrace: one of the terrace doors turns inwardly and is *thus* the front door, but it is not recognizable as such from the outside. In the Robie House one enters via the backside. There are always detours to be made, puzzles to be solved, dark zones to overcome.²³⁶ It cannot be denied that in the early works we find some entrance doors

²³⁴ Seven times around the corner. As it is said for the case of Unity Temple, the Heurtley and the Robie House. See: Donald Hoffmann, *Architecture and nature*, New York: Dover publications, p. 46.

²³⁵ Storer House, Los Angeles (CA), 1923.

²³⁶ See also Hildebrand, who for a whole series of Wright Houses makes the inventory of the difficult passage towards the centre of the house. In the Alma Goetsch House, the entrance door completely misses. Hildebrand, Grant, *The Wright Space, Pattern & Meaning in Frank Lloyd Wright's Houses*, Seattle: Washington University Press, 1997 [1991] p. 123.

that might qualify as ‘frontal’—the Dana House, the Heurtley House²³⁷—but already in these early works we find complications. The two low piers in the masonry around the Dana-entrance seem to slide laterally to close the gap of passage. In the Heurtley House we are forced to approach sideways in what seem to be the foundations of an unfinished bastion. [FIG.2.19] In a Wright House architecture does not welcome you: you enter a secret domain. Twombly even speaks of “severely delimited bulwarks” with “effectively defined psychological as well as physical boundaries.”²³⁸ Hildebrandt puts it like this: the way in “is only navigable by the initiated.”²³⁹

In all Wright’s buildings we hide from the city. For that reason all his houses must be characterized as villas, even if Wright himself never used the term.²⁴⁰ His houses embody a true flight from the hectic domain of the metropolis. But for that same reason they remain bound up with it, they embody the longing of the city to escape itself: the city haunts them as a true ghost. Hence the defensive reflexes, the ‘difficult’ entry, the closed walls, the ‘donjons,’ but also the ‘watchtowers’ disguised as belvederes. They often show themselves as not more than a silhouette, like the sleeping room on top of the living storey in the Robie House. The eave now becomes the hand above the eye, scanning the horizon on possible manoeuvres of ‘the enemy.’ The chimney becomes the spine of that posture. In the Robie House we find more of such defensive reflexes. The small resault on the corners of the low wall in the front lot-line look like little ornamental bastions, crowned with urns. Avant-guards of the house in the inimical domain of public space. We must interpret them as tokens of a past in the ‘warlike’ domain of the city in which, as we saw in the first chapter, *homo homini lupus est*.²⁴¹ But let us not be mistaken on these flashbacks: we are dealing here with a transfiguration of a real armature to an ornamental one, ornament in its true sense of a decorative armature. It is the Semperian kernel of Wright’s architecture. It was Semper who wrote elaborately on ornamental motifs persisting in an evolution of different materials, but also on techniques which, when freed of their original functional merit, took on new meanings or became purely ornamental.²⁴²

²³⁷ Dana House, Springfield (IL), 1902; Heurtley House, Oak Park, Chicago (IL), 1902.

²³⁸ Twombly, *Frank Lloyd Wright, An Interpretive biography*, p. 155.

²³⁹ Hildebrandt, *The Wright Space*, p. 39.

²⁴⁰ James Ackerman, *The villa; Form and Ideology of Country Houses*, London: Thames and Hudson, 1990, p. 253: “In the nineteenth century the ideal of the villa became democratized. The plots of land shrunk and the villas were modest and they were concentrated in areas near the city. The polarity between the city and the villa became blurred. The term villa fell into disuse in the later years of that century. Wright and Richardson didn’t use the term.”

²⁴¹ Cf. § 1.5.3.

²⁴² Lars Spuybroek, *The Sympathy of things, Ruskin and the Ecology of Design*, Rotterdam: V2 Publishing/ NAI publishers, 2011, p. 90. In this context Spuybroek refers to Stephen Jay Gould’s concept of exaptation (an organ taking on a new function during evolution). For Spuybroek it are these transformations in which building becomes architecture. Cf. § 4.2.1.

2.3.4 The multiple window and the multiple terrace door

In the first instance the house is a *cella* or a *megaron*, the closed space of the ancient dwelling. As such it entails a severing from the public domain and promises a new community, a new whole, the whole also understood in its etymological entanglement with the wholesome and the holy, the uninjured. In the case of Wright, however, that whole is immediately broken up for a larger community, the communion with nature. For that reason we find the second opening of the *cella* at the other side, a side usually corresponding to a more manifest presence of nature and a more open horizon. This is the side that corresponds to Wright's famous motto of "the destruction of the box," the box being the closed interior of the Victorian House. "Destruction of the box" means the opening up to each other of the rooms inside the house, room becoming fluid space continuing across the transparent perimeter.²⁴³ This opening up is embodied in two sorts of open frames, the multiplied glass door to the terrace and the horizontal band of multiplied casement windows. We should not mistake this 'opening up' for the view, which has often been done.²⁴⁴ The horizontal windows give the feeling of being surrounded by, not of looking *at* or *on* nature. The gestures are very precise here. If we look at the terrace-doors of the Robie House [FIG.2.20], we see the upper parts filled in with stained glass, dispersing the glance, while the view through the lower part is obstructed by the parapets of the balcony. There is no view.²⁴⁵ Certainly: the view is not impossible but it is broken up and shattered, it partakes in a general orientation. There is no confrontation, no subject objectifying nature or earth outside in an image, making it to a landscape picture, like the Renaissance window did. The horizontal band of windows corroborates this idea by consistently going around the corner, making the entire house a bay window, 'hanging' into the surroundings. There are many early house designs such as the McAfee House and the Devin House,²⁴⁶ but also later ones like the Robie House, in which the glass perimeter suddenly changes direction to take the diagonal, introducing a new cross, a new gathering of 'horizons.' The house almost radiates into space, we feel a clear expansive force in this longing for the horizon, but in a certain way it is a blind one, an energy to spatialize, to fold open an existence, to rest in the open in a pure, 'disinterested' way.

²⁴³ Frank Lloyd Wright, *An Autobiography*, New York: Horizon Press, 1977 [1932] p. 166.

²⁴⁴ Even Wright himself sometimes praised the views from his houses but as we will see in the next chapter, the view implies an occupying and possessive way of looking at.

²⁴⁵ According to Hildebrand, the leaded colored glass is meant to keep out the glance of the passer-by. This might be so, but it also works the other way: it obstructs the view from the inside out. Hildebrand, *The Wright Space*, p. 45. For the difficulty of a view, see also Hildebrand, who notes the obstruction by the parapets in Wright's Usonian homes. He doesn't however take the grave consequences for his own prospect-refuge theory. Hildebrand, *The Wright Space*, p. 130.

²⁴⁶ McAfee House, Kenilworth (IL), 1894; p. 10, 11 Wasmuth portfolio; Devin House, Chicago (IL) 1896.



FIG. 2.20 Robie House, terrace doors with coloured leaded glass. [Photo: © Yukio Futagawa]

In Heidegger’s philosophy we come across the notion of the “*freie Weite*” (the free wide, or free expanse) going *beyond* the horizon,²⁴⁷ beyond what we may see appearing in the surroundings.²⁴⁸ The horizon is only the side turned towards us of this “free wide” also called “openness.” (“*uns umgebenden Offenen.*”)²⁴⁹ The “free wide” actually gathers together all things in the surroundings, it “gathers each thing

²⁴⁷ After some hesitation I have decided to translate ‘*die Weite*’ here with ‘the wide.’ Width does not seem appropriate, it too strongly refers to the measure of a body. In the latest translation of the *Feldweggespräche*, *freie Weite* is translated by Brett Davis as “free expanse.” Though correct and even beautiful, I miss the alliterating resonance with *die Weile* (while as a stretch of time), which is translated by Davis as “abiding while.” In my own translation *die verweilende Weite* (Davis: “the abiding expanse”) becomes “the whiling wide.” Both the gerund and the substantive ask for an explanation. The substantivization of the adjective ‘wide’ somewhat resonates with that of another adjective: wild as in Thoreaux’ first title for *Walking: Walking or the Wild*. I like that resonance because, indeed, “the wide” (*die Weite*) is “the wild” because it subtracts itself from every effort of humans to master it. We must see it as the falling away of the horizon as the delimitation of a world. When it comes to “whiling,” indeed to while is not a verb. I will verbalize the substantive “while” in order to capture a certain dynamic in what is usually called “presencing,” referring to the *par* in *par-ousia*. Martin Heidegger, *Country-path conversations*, translated by Bret W. Davis, Bloomington/Indianapolis, Indiana University Press, 2016, p. 13 Kobo book-PDF version.

²⁴⁸ Martin Heidegger, ἀχ(β)ασοῦν, *Ein Gespräch selbstdritt auf einem Feldweg*, in: Martin Heidegger, *Feldweggespräche (1944/45)*, GSA, band 77, Frankfurt am Main: Vittorio Klosterman, 1995, p. 114.

²⁴⁹ Heidegger, *Ibid.*, pp. 112: “*Das Horizonthafte ist somit nur die uns zugekehrte Seite eines uns umgebenden Offenen, das erfüllt ist mit Aussicht ins Aussehen dessen, was unserem Vorstellen als Gegenstand erscheint.*”

to itself and all things to each other”²⁵⁰ to become a world of which we may have a view, but it does not appear itself, it is the “while” (*die Weile*) and the “wide” (*die Weite*) belonging together: “*die verweilende Weite*.” The band of casement windows is the window in which we feel to be resting in the “free wide.” It makes the inhabitant *belong* to the surroundings and not the other way around: the surroundings belong to the house, which would be the case in the view. In Wright’s palette of windows it is especially the band of casement windows that confirms the *being-in* as a being surrounded, a being part of the region (*Gegend*) that in its turn rests in the “free wide.”

The built-in benches inside, which we often meet in Wright’s houses, repeat this ‘not-looking at.’ The back of these benches is often turned toward the windows because we are gathering around the hearth, the *umbilicus mundi* in the centre of the house. These benches are descendants of the original settee, posited immediately at the side of the hearth, they have—so to say—wandered away from the fire to a second ring but are still turned toward the hearth. Sitting, we are suspended between the contracting force of the hearth and the expanding force captured in the window. This inversed position, where nature outside is only a vague image at the back of our minds, the edge of a clearing in the woods, allows that same outside to come close, to “near,” to use Heidegger’s words.²⁵¹ The horizon draws its imprint on the façade outside. In the Robie House the prairie flowers from the surrounding fields engrave their image in the stained glass. The horizon touches the house in the repeated horizontals of the stressed eaves, the wall caps and the window sills, and the deepened horizontal joints in the masonry. [FIG.2.21] We recognize Wright’s signature: the horizon drawing near, engirding the house, becomes its tattoo.

Though I admit it is quite precarious to have a philosophical notion such as “the free wide” (*freie Weite*) play a role in the explanation of an architectural element—nothing can be proven here—we cannot disregard all the clues given. The ‘aroundness’ suggested by the going around the corner; the ornament in the windows sacrificing at least part of the view; that same ornament manifesting itself as an imprint, a touch of the surroundings on the house; the not-looking at and the sitting ‘backwardly’ towards the surroundings, which we can only do when trusting what is behind us; the closed parapets which cut of the view from the surface of the earth as the field of possible actions; they all point toward a ‘without hands,’ a letting be or serenity (*“Gelassenheit”*) towards the surroundings. “The free wide” is a spatio-temporal notion. It points to a free domain, a lighting ring of possibilities, it is the promise

²⁵⁰ Heidegger, *Ibid.*, pp. 114.

²⁵¹ Heidegger, *Ibid.*, pp. 152-157.

that draws us to the window. Linguistically this spatio-temporal 'stretch' is best captured as a gerund. The "whiling wide" (*die verweilende Weite*), the *abiding* expanse. It returns in the magic of architectural words like dwelling, abiding, living, and surrounding. The "free wide" is probably the most basic and hidden temporal dimension of whatever happens in and around the house, whatever happens as the house.



FIG. 2.21 Robie House. Masonry of 'Roman bricks'; deepened horizontal joints, vertical header joints set flush with the face of the bricks and coloured red. [Photo: Mike Sirotnin]

2.3.5 Furniture

The horizontal window is marked by a diastole, the expanding force of a longing for the horizon, a going outwardly, counterbalanced by the systole or contracting, gathering force of the hearth as the *umbilicus mundi*. In the ground swell of this spatial dynamics, of room gathering and space extending, there is a need to draw a new *temenos* to save our bodies and souls. Hence the character of Wright's furniture: the smallest *templum*, the last frame, defining a new interior, a new 'sacred' space. Look at the dining table in the Robie House, with tall legs crossing the table top and crowned by four lamps. A new place of celebration, for eating-consuming the earth, like the fire in the hearth. The chairs with their heightened backs shape a real cathedral. [FIG.2.22] Gestures of holding, of making room within space.



FIG. 2.22 Robie House. "The back of the chairs shape a real cathedral." [Courtesy of Frank Lloyd Wright Trust, Photo: James Caulfield]

Even more precise is the couch. Its back folds to a flank holding the human body, while an excessively large horizontal upper rail, continuing in the cantilevering arm layers, functions as a collar. [FIG. 2.23] This collar, folding the back horizontally, stretches out to go with the centrifugal flow. We see that movement repeated in the ceiling where the mouldings of the lower parts mark a centrifugal movement, while in their upper part—ceiling folding to wall—they hold or try to contain the space. The outward movement in its turn joins the comprising movement of the cornice marking the perimeter of the room. Even the smallest frames, the temples of the fixed and mobile furnishings and the ornamental finishing are therefore marked by that paradox of contraction and expansion. The pattern in the carpet is subject to that same law: while clearly stressing the length of the nave and as such counterbalancing the lateral contraction in the ceiling, the motifs multiply the lines in lateral direction to gather around a red brown pit in the middle. [FIG. 2.24]



FIG. 2.23 Robie House, Couch, settee with fireplace sunk into the floor, chimneys and double flue. [Courtesy of Frank Lloyd Wright Trust, Photo: James Caulfield]

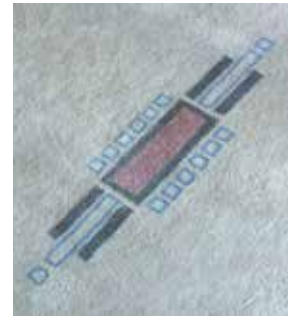


FIG. 2.24 Robie House, rug on the floor of the living Room. [Photo: unknown]

2.3.6 The clerestory and the high window

The heightened ceiling functions as a pause, a moment of suspense in the flow. The repeated lamps, defining a sort of halo, hallow that sacred, uninjured place, holding in the play of spatial forces. Usually Wright seeks to light his houses in a more natural way: “*God’s way*” as he calls it in *The Natural House*.²⁵² In his early houses he sometimes uses high windows. In the Dana House, these windows are again partly filled with stained glass. Wright uses earthly colours. Ochre, light brown, sienna, moss-green. They differ from the transparent glazing, which tends to give a more white light while ‘backlighting’ the darker coloured glass. This division between transparent and coloured parts, which we already met in Unity Temple, corresponds to a transition of the celestial *templum* to the terrestrial *templum*, breaking the cosmic light to a terrestrial multiplicity of colours. Even the ‘white light,’ however, never becomes abstract. It remains bound to atmospheric aspects, to the hours of the day, the seasons of the year, shortly the temper of the weather. Looking upwards, the earthly colours function as offerings, little bits of earth burning in that light.

In Wright’s Usonian homes, the electric halo of the Robie House finds an architectural translation in the clerestory window, the old church window, corresponding to a heightened part of the ceiling. This ‘ring’ of light again gathers the *templa*. When Wright speaks of the necessity of the clerestory window, he explicitly refers to the surveyor laying out the city according to the cardinal directions and thus never

²⁵² FLW, *The natural House*, CW5, p. 114.

taking into account an ideal “30-60° orientation to the south.”²⁵³ The clerestory is a means to give a house an ideal orientation in the sky, when the city plan does not allow for it. [FIG. 2.25] The clerestory orientates the house in the sky and “serves as a lantern to the house.” It functions as an atmospheric clock, placing the house in the long temporal cycles of the *tempus*, the circles of the days and the seasons, and the short unpredictable shocks of the *tempestas*. Before all it enables the architect to honour the sun, “the great luminary of all life.”²⁵⁴ The stretches of high windows allow the house as the earthly temple to become tuned, “*gestimmt*,” to the celestial one. When the glass of the clerestory is set in panels with cut out wood patterns, the somewhat capricious contour eats the vibrating light to make the same connection between the earthly *templum* and the heavenly *templa*. Wright called these patterns of light and dark “eye-music.”²⁵⁵ [FIG. 2.26-2.27] If we analyse them we see they always contain an idea of stretch or legato, and rhythms of going up and down, introducing the horizontal and the vertical in a fluid but rhythmical way.

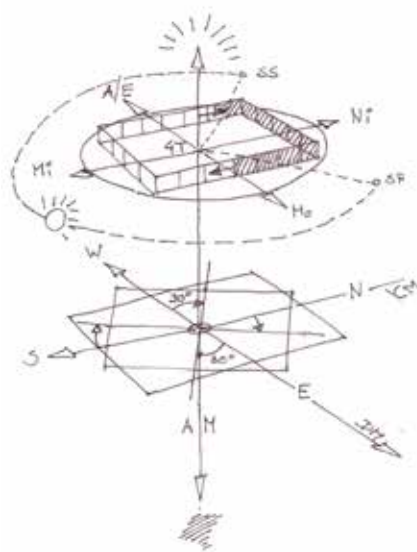


FIG. 2.25 Wright's ideal orientation turning 30° from *Kardo Maximus* (South-North). The clerestory is a means of orientating the house in the celestial *templum*. [Drawing: Frans Sturkenboom]

- A/E=Afternoon/Evening
- AM=Axis Mundi
- DM=Decumanus Maximus
- E=East
- H=Horizon
- KM=Kardo Maximus
- LN=Lapis niger
- Mi=Midday
- Mo=Morning
- N=North
- Ni=Night
- S=South
- SR=Sunrise
- SU=Sunset
- W=West
- 4T=4Templa

²⁵³ FLW, *Ibid.*, p. 114, 115. Off course this surveyor is the American surveyor laying out the grid of plots and the corresponding grid of a city. For Wright the 30° orientation was also a means of loosening any design from the cardinal grid typically followed by city or county roads in the areas in which he built. By such a shift he also facilitated a more explicit perception of the natural characteristics of each particular site. Cf. Desmond, Michael, *A clearing in the wood. Self and city in Wright's organic communities.* (Dissertation MIT, 1995) p.318.

²⁵⁴ FLW, *Ibid.*, p. 115.

²⁵⁵ Bruce Brooks Pfeiffer, *Frank Lloyd Wright, Selected Houses* 6, p. 13.



FIG. 2.26 Schwarz House, Two Rivers (WI), 1939, clerestory panels. [Photo: unknown]

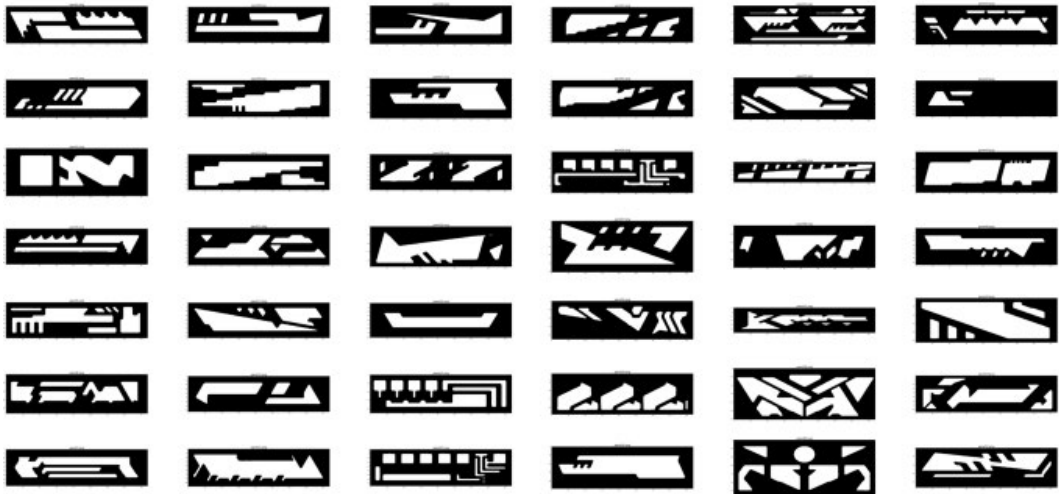


FIG. 2.27 Clerestory panels, overview of all designs, 2018. [Drawing by Tangibit Studios]

A remarkable gesture concerning the high window can be found in the Loren Pope House²⁵⁶: the panelled clerestory suddenly changes direction to come down to the floor as a ladder-window. [FIG. 2.28] If Wright's "eye-music" can be seen as an overtone colouring the interior, here it explicitly interrupts the daily going around through the house to form an exclamation mark. The eye is drawn up to remember the existence of the house under the sky, in the clerestory redrawing the sides of the celestial *templa* as the four *tempi* of the day



FIG. 2.28 Loren Pope House, Falls Church (VA), 1939. Clerestory panels and ladder window. [Photo: Lincoln Barbour]

²⁵⁶ The Lauren Pope House, Falls Church (VA), 1939, was deconstructed twice and can be found today on the Woodlawn Plantation in Alexandria (VA).

2.3.7 The electric skylight

A last interior frame must be mentioned: that of the skylight. When I say “skylight,” I must immediately make a restriction: in Wright’s houses we find few real skylights lighting the house with natural light from above (in larger, public or semi-public interiors we find plenty of them). We find some in the so called workspaces and in some in study-rooms, and a clear one in The Hollyhock House adjacent to the chimney. For some reason the *umbilicus mundi* does not find a direct counterpart in the Zenith, the light of the day only enters according to its distribution in the four *templa* as the four cardinal points. Instead of skylights giving daylight we find what I would like to call ‘electric skylights,’ built-in light fixtures with coloured glass. Sometimes we find them in front of the fireplace and its chimney (as in Fallingwater) but they seem unrelated and do not appear to be the elements of a same *axis mundi*, a vertical axis relating earth and sky and unfolding a world. The hearth and its chimney are marked by the same horizontality as the rest of the masonry, often cut off by a trim, thus contributing to the floating character of the interior. The electric light bathes the interior in a weak and artificial light. I propose to consider these light fixtures as a form of ‘television,’ a condensing of the electrical signals in the ether. We can see them as early, interiorized versions of the antennas appearing on many late buildings. They mark the moment in which the inhabitant becomes part of a technical city, the celestial city of transport and communication, the electric-electronic community. They seem to drift around freely in the interior but mostly we see them appear on gathering places such as the spot in front of the fireplace, dining tables etc. The house, centred on the hearth as the crossing marking the *umbilicus mundi*, is decentred in the electric skylight as a second crossing, a second *umbilicus*.

The first time we met the *templum of the sky* it was that vague area marked by the gestures of the augur, inaugurating the area of divination. But Herman Usener reminds us that in Greek texts, among them Homer, we also find it as a crossing of beams in the construction of the roof.²⁵⁷ Gathering the directions of the spans. We may be sure then that it is no coincidence that many of the electric skylights in the Prairie Houses bear the pattern of a cross or of a regular fourfold.²⁵⁸ In the dining area of the Willits House we find them together. [FIG. 2.29-2.30] The gathering of the constructional span of the beams and the fourfold as the *templum* gathering the electric ether-expanse. Both meanings of the *templum*, the constructional and the visual one, coincide here.

²⁵⁷ Usener, *Götternamen*, p 191.

²⁵⁸ Electric skylights: those above the dining table in Wright’s first home in Oak Park (1898-1895), the Willits House (1901) on many places, the Frank Thomas House (1901) in the vestibule leading to the porch, the Boynton dining area (1908), The Evans House (1908); all these skylights testify of the idea of a crossing or intersection or fourfold remembering the heavenly *templa* repeated in an ornamental architectural span.



FIG. 2.29 Willits House, Highland Park (Illinois), 1901, dining area, with electric templum. [Photo: Shortline Garage]

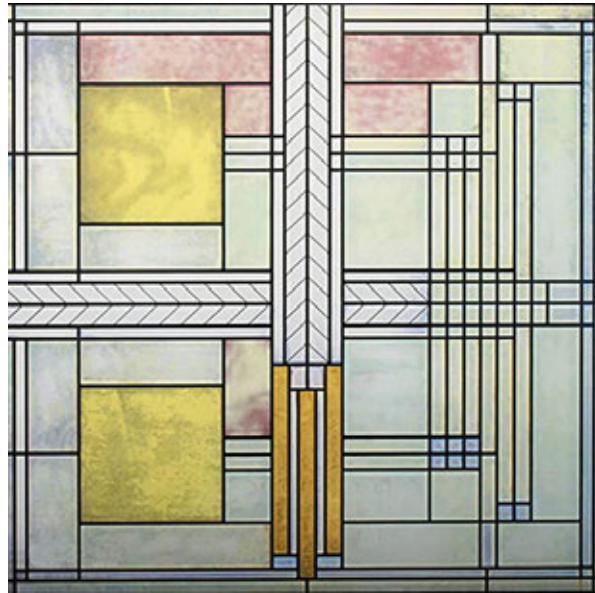


FIG. 2.30 Willits House, pattern in the glass of the electric *templum*.

The electric skylight embodies a special crossing in the roof or the ceiling. It corresponds to the fourth side, the night side of the celestial *templum*, it appears to electrically complete the arc of the sun. It lights the house where it becomes too dark. It may drift away from the terrestrial crossing with its centre in the hearth. The terrestrial and the celestial *templum* do not coincide spatially, there is a displacement of the *axis mundi*. This shift or even fracture, in which the virtual vertical axis is dislocated, gives us the beginning of a movement, a 'drifting away' of the interior from the hearth. From the 1930s onward, even the chimney itself is 'broken,' multiplying its vertical and as such finding continuity in the resault of the walls. [FIG. 2.31] This drift corresponds to the possibility of turning away from the fire and leaving the community for the outside. It also opens the possibility of a 'many,' the fourfold further folding open to a manifold, resisting the unifying force of the one, the *umbilicus mundi*. In the interior the inhabitants act like the vestals, devoting their lives to maintaining the fire, consecrating place as the centre of a familial community. They celebrate their own Lares and Manes as the ancestors, the roots of their life. The life around the hearth is sacred, the circle magic. But the intensity of the fire also distracts, its radiating beams being one of the images of

Bachelard's reveries in his *Psycho-analysis of fire*.²⁵⁹ This moment of turning away, the moment of 'treason,' is only the logical consequence of the first treason in which the house turned its back towards the non-community of the city. Flusser captures that moment nicely when he says that when we have freed ourselves *from*, comes the moment when we ask, freed *for* what? We may be freed from the city, but what then? Staring into the fire new plans well up and we split up dreaming of far horizons. We leave through the *manifold* terrace door, that typical trait of Wright's houses, to become the many and to have our private reverie on the balcony.



FIG. 2.31 Schwarz House, Two Rivers (WI), 1939, fireplace. [Photo: A. Johnson]

²⁵⁹ Gaston Bachelard, *La Psychanalyse du Feu*, Paris: Gallimard, 1992 [1949], pp. 24-25. Gaston Bachelard (1884-1962) was a French epistemologist who complemented his work on science with analyses of the poetic imagination.

2.3.8 The terrace, the balcony and the eave

We have seen a whole array of frames now instituting enclosures as 'saved' spaces but also opening up again to the outside as the possible place of a next 'association.' The repeated terrace or balcony door functions as the stressed invitation to go outside. Going outside, we enter a new frame, directed upwards: the parapets of the balcony are closed. Unconsciously we repeat the act of the augur, placing ourselves in the great cosmic outside, looking up to gather the *templa*. The edge of the parapet becomes the terrestrial boundary of a celestial *templum*, marked by some signs in the surroundings, but from there on going up into the sky. We become part of a meteorological *tempus*. *Meteora*, *Meta-aeiro* signifies the movement of lifting up in the sky, of leaving the horizon, to re-enter the celestial *templum*.²⁶⁰ Meteor: an old word for any atmospheric phenomenon. If in Wright's career there is a certain tendency to ornament the edges of the parapet (Storer House, Ennis House,²⁶¹ Llewellyn Wright House) or to soften them (like in Fallingwater), one could even be inclined to see such a gesture as the *effatum et liberatum*, the explicit clearing of the *templum in caelo* by the augur.

The frame of the parapet gets doubled in the eave. Eaves overhanging the terraces also border the sky. When the eaves draw a whole perimeter around the house they are part of this logic of opening the mass of the house to the sky. For that reason they are often ornamented, they wreath the sky as the celestial *templum*.²⁶² Sometimes the edge is rounded so the arc can soften the light making the transition to an earthly realm. [FIG. 2.32] Wright also perforates the overhanging eave, as if it was lace, introducing the *templum* in a smaller 'preview.' The Hagan estate [FIG.2.33] with its hexagonal holes repeating the hexagonal module of the plan on a smaller scale, is a good example, but we find many others. [FIG. 2.34-2.38] And let us not forget Wright's trellises, often posited above windows, explicitly framing the sky in a multiplying of the *templum*.²⁶³ [FIG.2.39] All ornamented eaves draw the glance upward to see the house cutting in or cut in by the sky, interlacing or interlocking with it as if the roof was a kite finding its true element in the atmospheric domain of the *meteora*.

²⁶⁰ <https://www.etymonline.com/word/meteorology>

²⁶¹ Ennis House, Los Angeles (CA), 1924.

²⁶² Like in the eaves of the Hagan estate, Kentuck Knob (PA), 1954; 1936; The Fawcett House, Los Banos (CA), 1961; and many others.

²⁶³ As in Fallingwater, Bear Run (PA), 1936; the Pew House (Madison (WI), 1939; the Lloyd Lewis House, Libertyville (IL), 1939; The Loren Pope House; the Sturges House, Los Angeles (CA) 1939; and many others.



FIG. 2.32 Lowell Walter House, Cedar Rock, Quasqueton, (IA), 1945



FIG. 2.33 Hagan Estate, Kentuck Hill (PA), 1956, perforated eave. [Photo: Klaske Havik]



FIG. 2.34 Randall Fawcett House, Los Banos (CA), 1961: perforated eave with cornice. [Photo: Jim Gimmons, courtesy Crosby Doe Associates]



FIG. 2.35 Allen Friedman House, Bannockburn (IL), 1956, perforated ornamented eaves. [Photo: chicagogeek]



FIG. 2.36 Allen Friedman House, Bannockburn (IL), 1956, perforated ornamented eaves. [Photo: chicagogeek]



FIG. 2.37 Ornamented edge of the Greek orthodox church, Wauwatosa, WI, 1961. [Photo: Gillfoto, CC BY-SA 4.0]



FIG. 2.38 Weltzheimer House, Oberlin, Ohio, 1948. Perforated eave with cornice. [Photo: Patrick Kilkenny]



FIG. 2.39 Pew House, Madison (WI), 1938, 'trellis' above window. [Photo: Huellas de Arquitectura]

Another aspect of Wright's balconies must be mentioned here: many of them are tectonically suspended between the earth and the sky, especially when cantilevering. In the drawings, certainly those with a mole's eye perspective, they sometimes give the impression of pateras: our time on the balcony, leisure time, is a time of offering. [FIG. 2.40-2.41] We are lifted into the original *templum*, delivered to the temperaments of the weather-gods. If the twentieth century is the era in which *otium*, the time of the villa, was generalized as leisure time, the terrace and the balcony are the altars of a true religion of the sun, corresponding to the body cult of tanning. When Wright proposed to paint the balconies of Fallingwater with a gold paint, it surely was an answer to this cult of being "prostrate to the sun."²⁶⁴

The balcony and the terrace appear to be the true counterpoint of the hearth. Where the hearth and the chimney are indissolubly bound up with terrestrial stories, the balcony and the perforated or ornamented eave point to the sky, to a belonging of the house to the realm of the meteors. All the high frames or edges must be seen as profaned versions of the celestial *templum*, gathering together the meteors high in the sky, relating them to the house. The ornamental and tectonic gestures -the notched, serrated or jagged eaves, the curving of the soffit- receiving or opening up to the light, confirm such a reading. What actually happens is that in such gestures the distance between the house and the sky with its meteors is visually annihilated: the blue of the sky, the light of the sun or the stars in the night, approach to become part of the constellation of the house. In Heidegger's first *Feldweggespräch* (country-path-conversation), his essay on the "Gegend" and the "Freie Weite," we find a beautiful image of the night being the "Näherin" (the seamstress). The *Näherin* is both the needlewoman and the one that "nears," who makes all things (in this case the stars) come near to each other. It is the veritable image of a sewing together of the different times of the stars, the ages of the universe.²⁶⁵ Certainly the night is an exceptional image here, one of the purest one may think of when it comes to the idea of the far "coming near" (*näheren*). It is however the "ent-fernung" (the de-distancing) that counts, and it counts in all the ornamented eaves and the laced parapets where the sky is stitched or seamed to the house. Such an approach of the far only happens when architecture opens up its edges—its *templa*—for "the free wide" (*die freie Weite*). Architects often take it for granted that all buildings have surroundings, but when architecture doesn't point towards such surroundings, when it doesn't open up in gesture or posture to the "free expanse," there are no surroundings.

²⁶⁴ Wright used that expression for all life in the desert. FLW, *Autobiography*, p.334.

²⁶⁵ „Weil sie die Fernen der Sterne einander nähert.“ Heidegger, *Feldweggespräche*, GA 77, p.157.

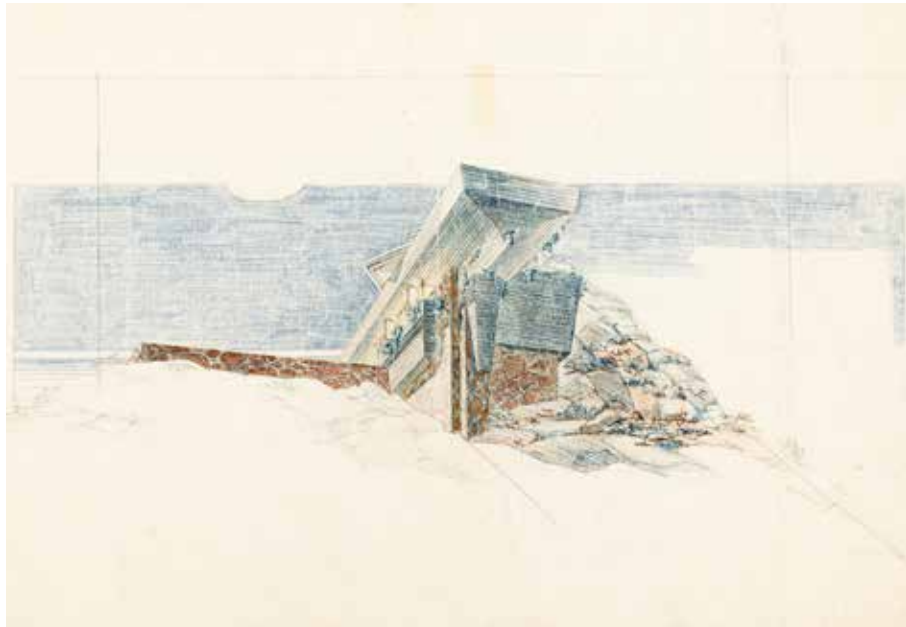


FIG. 2.40 Arch Oboler House, Malibu (CA), 1940: "Eaglefeather." [Courtesy of FLLWFA (MOMA / AA&FALCU)]



FIG. 2.41 Huntington Hartford project, Hollywood Hills (CA), 1947. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

There may be neutral space, but there will be no encounter, no play. This was exactly Wright's critique on the International Style, with their white boxes abstracting (in the sense of withdrawing) architecture *from* the environment.²⁶⁶ The ornamented eave and the laced parapet are seams, they seam together the sky and the house.

The importance of the balcony cannot be overestimated. We can even see a certain tendency to multiply this outside frame. Fallingwater is off course one of the clearest examples—every room having its private enjoyment, its private 'auguration' of the sky. But there are also plenty Usonian homes in which the balcony is repeated in smaller versions, such as in the Lewis House or doubled as in the Sturges House with its balcony and roof terrace. In the Storer House the terraces correspond to the different levels of the floors. We may add that in many a Usonian home, the perimeter of the house finds its off-set in a terrace edge, giving all rooms their terrace-zone, even if such a zone is not explicitly limited by a parapet.

2.3.9 Inaugural gestures in the light of situatedness

Before proceeding to see how all these *templa* interact and are dynamically related to each other, I will come back briefly on my remarks at the beginning of my explanation of the different frames or *templa* in Wright's work.²⁶⁷ I suggested that the idea of settling implies a sharpened awareness of situatedness, an awareness which steered both the rituals of the Roman settlers and the emphatic gestures *vis à vis* the surroundings in Wright's architecture. It is the time of arriving and of having left home that makes the settler aware of the temporality of any abode, the abode as the "while" between an arriving and a possibly moving on again. And it is in this "while" that the settler has to get acquainted to the situation, has to attune a past to the possibilities of a new world. This means that settlers do not merely sit down, as the etymology of sitting-setting-settling-*sedere* says, they must learn to dwell according to the Dutch root *dwalen* of this word. *Dwalen* means to wander around and even to miss the right way, to be mistaken. Dutch people may even get *verdwaald*, they may get lost, literally or figuratively. One can only dwell (live, be) if one has dwelled 'around' in order to get habits, to habituate, to acquire a habitat. It is this aspect of

²⁶⁶ FLW, *AB*, p. 328.

²⁶⁷ Cf. § 2.2.1.

getting oriented in, 'finding ways into,' the emphatically 'opening up to,' that gives every Wright House the feeling of a "being in." Already in *Sein und Zeit* (Being and Time) Heidegger relates the *in* of "being in" (being in the world: *insein/ in der Welt sein*) to *innan*: *wohnen, habitare* (both: to dwell), while he relates the *an* of *innan* to: I am used to, familiar with, I take care of (*colo, habito, diligo*). And he etymologically associates *bin* (*Ich bin*: I am) with *bei* (near/in the neighbourhood of). I am means I dwell, I stay near....the world as something familiar in such or such a way.²⁶⁸ Familiar here is the translation of *Vertraut*: trusted, accustomed to.

As we saw, the different frames all have their role in this idea of a sojourn (*verweilen*: abiding, dwelling) under a new sky and on a new earth. All the frames open up as new *templa*, gathering the light of the *tempus*, celebrating family time framed by the hearth, learning to find peace, to become free of concerns ("zum Frieden gebracht"²⁶⁹) by resting in the environment as "the free wide."

Abiding as the time of "the while" is a form of time that we often forget when thinking of the house as a functional machine or as a place of relaxation, or as a machine offering the pleasures of the view. But it is the pure base gathering all other forms of time.

²⁶⁸ Martin Heidegger, *Sein und Zeit*, Tübingen, Max Niemeyer Verlag, 1979 [1926], p. 54: „*in*‘ stamt von *innan*-, *wohnen, habitare, sich aufhalten*; ‘*an*‘ bedeutet: *ich bin gewohnt, vertraut mit, ich plege etwas; es hat die bedeutung von colo im Sinne von habito, diligo. (...) Der Ausdruck ‘bin’ hängt zusammen mit ‘bei’; ich ‘bin’ besagt wiederum: ich wohne, halte mich auf bei... der Welt, als dem so und so vertrauten.*“ Stambaugh translates: "‘In’ stems from *innan*-, to live, *habitare*, to dwell. ‘An’ means I am used to, familiar with, I take care of something. It has the meaning of *colo* in the sense of *habito* and *diligo*.' In: Martin Heidegger, *A translation of Being and Time*, translated by Joan Stambaugh, New York, State University of New York Press, 1996. p.51.

²⁶⁹ Heidegger associates the enclosure as the safeguarded domain with peace. Peace (Friede) in its turn is associated with the free (das Freie). Heidegger, *Bauen, Wohnen, Denken*, in *Vorträge und Aufsätze*, p.143.

2.3.10 Profanation

If there is a strong convergence between the gestures of Wright's architecture and the rituals of the Roman settler, there is certainly a divergence too. In Wright the con-templation of a situation no longer refers to any religious meaning. In all these figurations of frames we have to speak of profanations.²⁷⁰ Profanation is related to religion, to the sacral, or even better to the border between what is sacral and for the gods and what is for humans. It pertains to a certain blurring of that border. According to Giorgio Agamben, religion doesn't stem from *re-ligare*, a new bond between people and the gods, but from *re-legere*: a careful rereading of the boundaries between the sacral and the profane. In profanation what was of the gods is given back to the human. Though the original religious meaning may be lost, the religious sphere does not entirely disappear. Religion is based on a unity between the *myth* that tells us a story and the *rite* that reproduces and stages it. If the conjunction of the two is broken and only one part remains intact we have to speak of play or game, a wordplay or *jocus* in the case the myth is still told, a *ludus* or play in the case the rite and the rituals are repeated without the mythical contents. In Wright the rituals have been saved, there is a free play of the *templum in terra* related to the *templum in caelo* and of the *umbilicus mundi* and its *orbis terrarum*. It is a *ludus* of settling, a grand play of the settler. It is this play that is played by the commuter every day. Every morning the commuter goes away to return in the evening, at the end of the day having only a short "while" to dwell around, to find peace around the hearth, to rest in the surroundings, and to breathe "the free wide." The play is framed by architecture as a free line. Architecture draws the different templa with free ornamental lines redefining itself as the pure terrestrial ornament of the sky.

²⁷⁰ Giorgio Agamben, *Elogio della Profanazione*. In Giorgio Agamben, *Profanazioni*, Roma: Nottetempo, 2005, pp. 83-106. My explanation of Wright's 'profanation' is entirely based on the notions Agamben offers here.

2.4 Multiplication and dynamics of the frame

2.4.1 From the one to the multiple

Two aspects still ask for our attention. They both pertain to the organization of the different frames. The first one concerns the horizontal frames of the plan, the second the vertical dynamics of these frames. In this paragraph I will treat the first aspect, in § 2.4.2 the second.

We see a certain development in Wright's oeuvre in which the frames of the plan, framing the activities in the house, become looser and looser. From the original crossing and its simple fourfold of squares or rectangles, found in the Greek and Latin crosses of the prairie-period, we go to a constellation of overlapping and interfering frames drifting around multiple centres in the plan. A certain dynamics is already latent in the earliest plans but freezes into a more rigid, sometimes even symmetrical or strictly centralized plan during the Prairie-Style-period. It then gradually develops to a completely free constellation in the Usonian homes, a freedom in its turn systematized in the deformed grids of the late Usonians.

If we look at the house Wright designed for his son Llewellyn, [FIG.2.42-2.44] we see a veritable foam of circles and lens-shaped figures resulting from overlapping circles. The lens-form figures already tell us so many stories. The first one is told by the hull of the house, constituted by the overlap of two large circles finding their epicentres far outside the house. The first one refers to the city-side, the other to nature at the back of the house. In the house we remain citizens even if we celebrate our belonging to nature. The gestures are again very precise: the front convex side is a real *adversus*, a being turned against the city, with a focus in the 'donjon.' Yet the city is already inside. Its circular boundary passes through the garden façade while in the multiple doors it loses itself in the surroundings.

Then we find the little hassocks, shaped by two, smaller, interfering circles. Though we cannot be sure to what 'collections' these circles point, it seems plausible to say that one circle at least refers to the hearth as the centre of family life. The other, inversed one, would have to be interpreted as a more personal belonging to the great outside. The nice thing, however, is that these little hassocks manifest themselves as canoes, free to wander through the interior and to become part of any virtual or actual circle in the design. They could 'moor' to the cocktail table, a larger ship in the

interior, to the wall with bookshelves, anywhere. They are the true vehicles of what we earlier called 'dividuality,'²⁷¹ the freedom to fully or partially associate, 'overlap' with any social circle.

Finally, at the edge of the balcony, we see a lens-shaped pond, [FIG.2.45] cut out by the interfering circles of the balcony-parapet and an unidentified perimeter finding its centre in ...? We do not know, maybe in some tree on the wooded slope. The pond is filled with lilies.

Overlapping sets of time. A loose set of circles. All frames bear the mark of diversified times: times profane and times sacred, urban and private times, times materialized in heavy stone masses and times framed by light wooden hulls, times of being bound to the earth and times of sailing the world. The overlapping circles mark human's belonging to multiple worlds, that of the city and that of nature, the profane and the sacred, to world and to earth. The house becomes an altar for a nature-religion, erected on the outer circumference of the city. In the lens-shapes the centres are always outside the frame. The house and the hassocks define the inhabiting sitter-settlers as doubly eccentric. Dependant on the city, dependant on nature, they 'pend' in between.

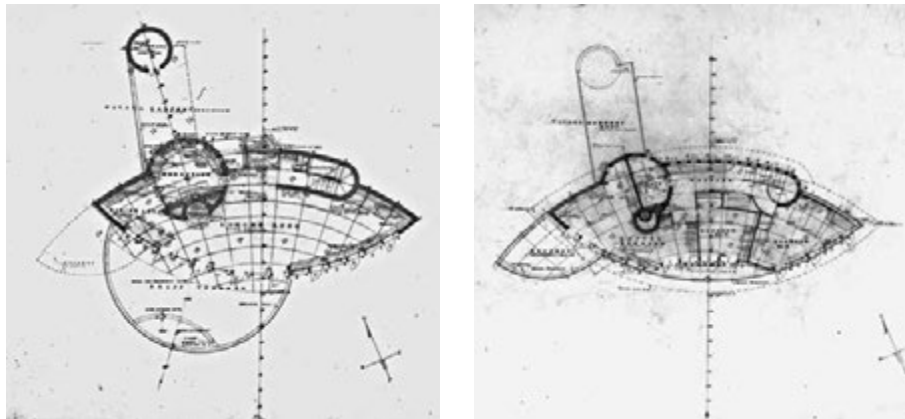


FIG. 2.42 Robert Llewellyn Wright House, Bethesda (MA), 1953. Floor plans. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

271 Cf. § 1.4.5.

The multiplicity of circles [FIG.2.46] is the sign of a certain dissociation. In the first place the house dissociates from the city without entirely coming loose. In the second place there is a dissolution of the social bond embodied in the hearth as the family altar, which becomes only one of the possible centres of association. The fact that some of the circles find their centre in the surroundings without these midpoints being visually marked, make the surroundings a true environment, the word environment coming from the French *environ*, the 'approximately' of vague surroundings. The citizen-inhabitant may associate with a tree, with the river down-hill, with a cloud in the sky, all these associations become "lines of flight" from the city, opening up to only partial human assemblages.²⁷² It is exactly in the overlaps that the house finds its quintessence. In its outer circumference the city radiates into nature, while nature in its reciprocal circle 'infects' the city. The *temenos* as the cut now institutes an already mixed domain. If the inhabitant associates with nature, it is as a citizen. As we already posed: Wright's houses must be seen as villas, the architectural type in which the city flees the city, finding a time of association with nature.

The multiplicity²⁷³ finds its most explicit sign in the pied, multi-circular carpet. [FIG.2.43-2.44] It appears as a pattern of circles of which the overlaps change colour. The main segmentation of the carpet is in two parts, one clearly with its centre in the hearth, the other one not clearly indicating its centre but immediately multiplying the circles in a tapping of new centres. The doubling centre gives birth to a multiplicity in a veritable foam of circles. The coloured fragments show us that, even if the parcels are the results of a geometric overlap, in their colour they cannot be reduced to the mixed dyes of the overlapping segments. They have their own hue and witness of an own life, irreducible to the whole.

²⁷² A "line of flight" or a "line of escape" (French: *ligne de fuite*) is a concept developed by Gilles Deleuze and Félix Guattari in their work *Capitalism and Schizophrenia*. It describes one out of three lines forming what Deleuze and Guattari call "assemblages," and serves as a factor in an assemblage that ultimately allows it to change and adapt to said changes, which can be associated with new sociological, political and psychological factors.
https://en.wikipedia.org/wiki/Line_of_flight

²⁷³ This tendency toward multiplicities was first noted, as far as I can see, by Michael Desmond. Cf. Desmond, Galesburg *Abstracting the landscape*, p.137.



FIG. 2.43 Robert Llewellyn Wright House, interior. [Photo: © Yukio Futagawa]



FIG. 2.44 Robert Llewellyn Wright House, interior. [Photo: © Yukio Futagawa]



FIG. 2.45 Robert Llewellyn Wright House, terrace. [Photo: © Yukio Futagawa]

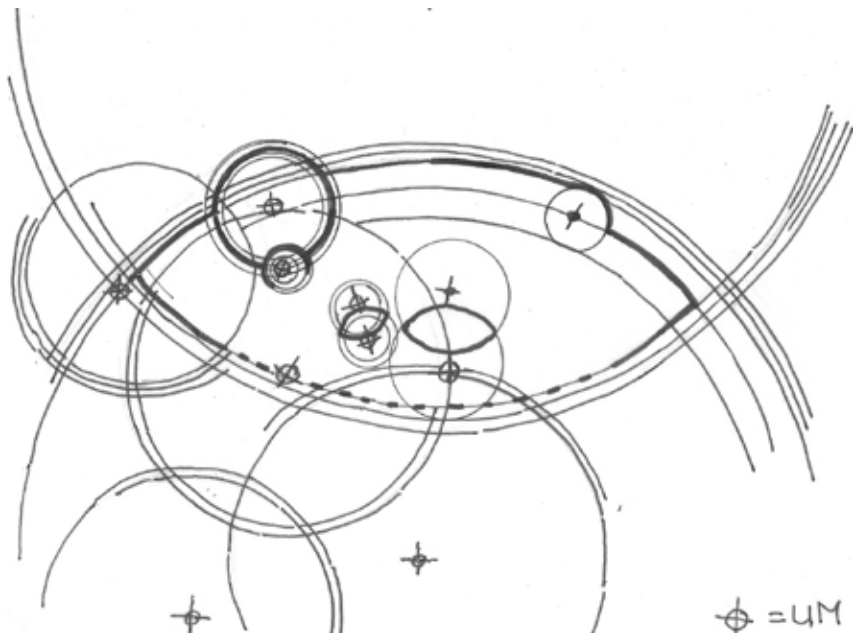


FIG. 2.46 Robert Llewellyn Wright House. Multiplication of the *umbilicus mundi*. (UM) and thus the axis mundi. [Drawing: Frans Sturkenboom]



FIG. 2.47 Robert Llewellyn Wright House, rear facade. [Photo: © Yukio Futagawa]



FIG. 2.48 Robert Llewellyn Wright House, 'prow.' [Photo: © Yukio Futagawa]

2.4.2 Tectonic aspects of the dynamic frame

The dynamics of the plan are answered by a dynamics of the section. The house as “a companion to the horizon,” expanding and contracting, is characterized by a ‘stirring’ border elaborated in different techniques of masonry and of overlapping boards. In this regard, it is interesting to monitor the development of the different board cladding techniques in Wright’s career. In some so called cottages from the prairie period²⁷⁴ we see a horizontal batten and board system. In the early Usonian the boards sandwiching a plywood kernel produce a horizontal groove. Both are simple techniques to streamline the wall. But in the late Usonian we often see a technique of overlapping horizontal boards, remaining vertical in their stance, which means that every new board takes a little step outwards. This technique extends the perimeter of the house. [FIG. 2.47-2.48] In the Llewellyn Wright House we find a countermovement in some parts of the masonry, especially that of the hearth and its chimney and that of the donjon, which contract when going up by stepping back a tiny little bit every two layers of masonry. [FIG. 2.49] The result is that in widening the ‘wooden circles’ towards the sky, the house makes a receiving gesture, while the earthbound masses, in increasing their perimeter towards the ground, anchor the house to its place. In the section the house finds itself in the overlap between these two paradoxical postures, defining the human abode as the interlocking of the heavenly and the terrestrial *templa*. [FIG. 2.50] The widening overlapping board-technique powerfully affirms the metaphor of the ship and the prow—so often used by Wright—while in the concrete ‘pyramidal’ masonry we cannot evade the language of the never wavering stronghold. A ship mooring to the site.



FIG. 2.49 Robert Llewellyn Wright House, sleeping room. [Photo: © Yukio Futagawa]

²⁷⁴ Among others the Steward Cottage, Montecito (CA), 1909.

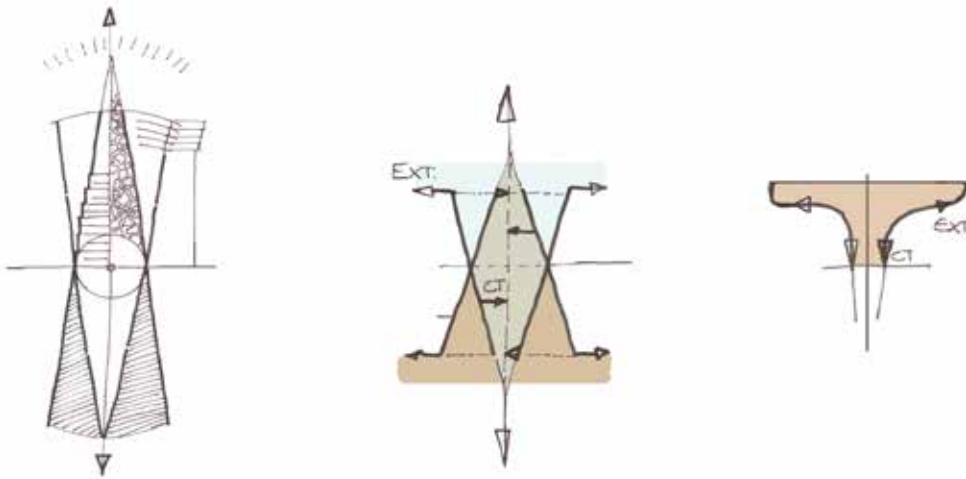


FIG. 2.50 Llewellyn Wright House/ Pauson House: tectonic schemes. [Drawings: Frans Sturkenboom]

left: interlocking of the heavenly and terrestrial templa. Masonry contracting when rising, overlapping boards extending when rising.

middle: The hull of such Usonian homes as the interlocking of extending and contracting volumes.

right: Llewellyn Wright House: original scheme of the terrace/garden fluidly contracting when going down and extending when rising.

Wright strove for a way to materialize this dynamics of contraction and expansion in every building technique he used. In many late works these tectonics become explicit in simple tapering figures. We meet them in the pedestals of the Harold Price House²⁷⁵ and in in the walls of the Fawcett House and in countless others. The most powerful one is the Pauson House²⁷⁶ with its pyramidal fragments in 'desert concrete' and the hull-like volumes in overlapping boards. [FIG.2.51]

The endless repetition of curves displacing themselves horizontally while rising also determines a formal, geometric principle. We met it in the dendriform columns of the SC Johnson Administration Building. A fluid version of such a widening column was also planned as a pedestal bearing the terrace and garden of the Robert Llewellyn Wright House [FIG.2.52]: we can see that Wright tried to grasp the ideal figure of his tectonics even if it would become a fluid parabolic figure. Eventually he found this figure in the spiral that expands while it contracts.

²⁷⁵ Harold Price House, Phoenix (AZ), 1952.

²⁷⁶ Rose Pauson house, Phoenix (AZ), 1942.



FIG. 2.51 Pauson House, Phoenix (AZ), 1942. [©The Estate Pedro E. Guerrero]



FIG. 2.52 Robert Llewellyn Wright House, first scheme, pedestal terrace & garden. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

Permanently displacing the perimeter, Wright multiplied his frames. [FIG.2.53] The clear cut, separating the *temenos* from the great outside is dissolved. It is important to note that for Wright there was always a certain equilibrium to be checked. The contracting movement indicating a 'finding place' had to be balanced by the flight toward the horizon. This means that buildings never become static, all the verticals remain virtual. All stance is stirring, a never ending unrest embodied in the tectonics of the house. A sign of the Romantic wanderer.

This unrest was already present in the earlier works. If we return to the Robie House we see a same shifting of perimeters in the elevation. Earlier in this chapter we noticed the stepping back of the different parts of the south-elevation, the storeys receding when going up, where in the horizontal section the *ressault* embodied a stepping backward and forward. We can even recognize a rhythmical systole/diastole—a heartbeat—in the recession of the rooms beneath the roofs while the terraces and the eaves extend into space. The contracting movement culminates around the main chimney, finding a clear towering moment in the silhouette. Again the verticals are constantly displaced in the sections, the longitudinal and the latitudinal one, but now mainly on the level of the different architectural elements—walls/parapets, windows/French doors, roofs/eaves. There is never a clear expression of a supporting structure in the elevation indicating a definite vertical. The window piers of the living room retreat in the shadow of the overhanging eaves that seem to hover, the more because the heavy visual weight of a steep roof misses. In the basement the bearing piers again disappear in the shadow, some completely, others partly. Thus the rhythm of the perimeter is stressed, not the supporting principle. It is true, we have a sort of watertable as an exterior plinth that seems to weld the house to the ground. Yet the same concrete is used in the caps of the parapets and in the window sills and their continuous going on and around again stresses the perimeter. All the verticals are suppressed, delayed or concealed. The corners 'stand,' but the repeated incision of the horizontal joint seems to function as a sort of acceleration around the corner.

However, if we follow the horizontal lines in their repeated going around the corner we see that they all begin at the back of the house where the relief is minimal. The unrest in the elevation seems to be soothed here and we even meet a modest vertical accent in the second staircase. In fact this back façade is the only place where Wright didn't "work away the wall to bring it toward the function of a screen."²⁷⁷ In the 'cuttings' that Hoffmann made of the different silhouettes, the house seems to protrude from this backside as if it was a bas-relief.²⁷⁸

²⁷⁷ FLW, *AB*, p. 141.

²⁷⁸ Donald Hoffmann, *Frank Lloyd Wright's Robie House, The Illustrated Story of an Architectural Masterpiece*. New York: Dover, 1984, p. 36.

In the longitudinal section the chimney seems to be the spine from which everything moves outwardly. For this reason we cannot simply affirm Wright's metaphor of the *Dämpfer*, the ship sailing out toward the horizon. It is clear that this longing to go away touches every detail of the house, its body is completely tattooed with the horizontal as the sign of the horizon, the inscription of the far in the near. In its overall appearance, however, the house seems to be in balance. It hovers and floats, it stirs, but remains on the spot. Moored to the chimney and the staircase.

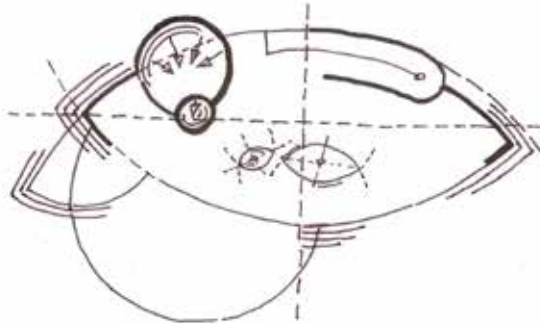


FIG. 2.53 Robert Llewellyn Wright House. [Drawing: Frans Sturkenboom]

Permanently displacing the perimeter in techniques of overlapping boards and shifting masonry, Wright multiplied the templa.

2.4.3 I and my chimney

Now let us go in. After having made our detour by following the horizontal perimeters of the masonry, to the left, right, to the right, we find the front door at the back. When going inside we see the same masonry—to the right—in the base of the chimney. It is as if the chimney has come down to receive us. It invites us to come up and go on deck. When we follow—to the left, to the left—it waits for us again upstairs as the true captain of the ship. Indeed it continues to the wheelhouse on top of the vessel, the sleeping room depicting the steering place of the ship. With Melville—in his comical story on the old, fat chimney in his own house—we could say, it is the true host of the house.²⁷⁹ It occupies the centre, and it is the only inhabitant ever remaining in place.

²⁷⁹ Melville (1819-1891) was an American novelist, short story-writer and poet. In his short story *I and my chimney* he tells us of the efforts of his wife and daughter to eliminate at least part of the existing 12 x 12 feet chimney in his home and of his heroic resistance against that attack. *I and my Chimney*, p. 248.



FIG. 2.54 Robie House, Chicago, (IL), 1911. Living room with settee and hearth. Courtesy of Frank Lloyd Wright Trust. Photo: James Caulfield].

Every element in Wright's houses is marked by a stirring and a moving around. If we look closely at the hearth with its chimney, we see the same resault—the jumping forward and backward—as in the outside perimeters.

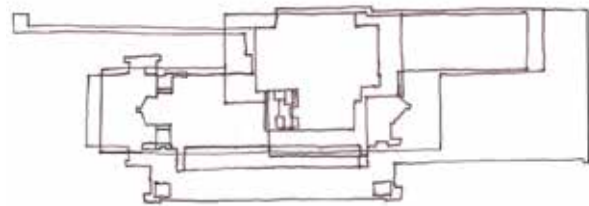


FIG. 2.55 Robie House, Chicago, (IL), 1910, scheme of the mobility on the plot. [Drawing: Frans Sturkenboom]

If we draw all the outer contours of the different storeys in one plan (which is done here with some abstraction) and we would include the roofs, we get a sort of Giacometti-portrait with multiple contours for all the parts and the whole, never being sure if it has been drawn by one or by multiple lines.

Taking into regard the somewhat ungraspable contour of the exterior of the house, receding stepwise from the plotline, we are inclined to see the chimney as a true personality *standing* in front of us. We should understand, however, that it is the smallest perimeter differing in degree but not in kind from all the extending walls. Already the chimney ‘moves around,’ marked by the same horizontals and the same resault as the walls outside, and it doubles in two flues before it reunites on the second floor. It remains a hollow space, a rift or a canal, an umbilical cord connecting to the earth. In the living room we see the chimney going down: the fireplace is sunk into the floor, we find a square pit in front of it. [FIG.2.54] It tells us of its terrestrial origins, pretending it is born from the clay of the Chicago soil.²⁸⁰

²⁸⁰ We do not know for sure if the bricks are factually made of Chicago-soil. We do however know that Chicago is built on clay, the bane of every gardener in the city.

The *mundus* begins in this smallest *templum in terra*, opening up the earth and continuing in the flue, then going out in ever wider *templa*, in ever wider extensions. The multiplication of *templa* already begins in the hearth. If we draw all the contours in one drawing we get a sort of Giacometti portrait with stirring contours of the whole and the parts.[FIG.2.55] Even in the root the house is still stirring.

In all Wright's houses we find the same double character as in the Greek temple. In the first place we find the idea of the interior as a *concealing*, with its root of the Latin *cella-celare*, the German *Verbergen/Bergen/Geborgenheit* (concealment/storing/shelter)—hiding under the roof, around the fire. In the second place we find the dissolution of the perimeter extending the house into the surroundings and vice versa—the surroundings into the house. The facades in their screening function and their rhythm of posts become a peristyle rhythmically connecting the interior to the surroundings. But where in the Greek temple these two roles are materialized in a succession of a closed and open periphery, in Wright they are usually split up in the closed front hiding the interior and the back facade opening up to nature outside as is the case in practically all Usonian; or they are distributed according to a complicated vertical rhythm of elements concealing the interior, as we see in the Robie House and in many other Prairie Houses. Schindler²⁸¹—for some time a fellow in Wright's adventures—once remarked that the surroundings in a Wright House start in the interior.²⁸² Having passed the closed wall, already the living room feels as a clearing in the wilderness. With its multiple contours it is never clear where the house stops. Every line is virtually a dashed one, defining a provisional border. A gradual transformation is the result. The house grows out into the surroundings, the surroundings grow into the house. One cannot speak of an inside *opposing* the outside but only of intensity and extension, where intensity means a standing in as a taking root, while extension means a reaching for, while arising. Only verbs express these in- and ex-tensions. Wright's tectonic figures are paradoxical gerunds, forms of time rather than space.

²⁸¹ Rudolph Schindler (1887, 1953) was an Austrian-born American architect whose most important works were built in or near Los Angeles during the early to mid-twentieth century. He worked for Wright from approximately 1915 to 1925.

²⁸² "Wright not only has a sense of gardens but his houses are always a piece of developed and refined environmental space –not imaginable without plants, sky and earthy. This should explain to you his windows. They are not wall holes but a dissolution of the building material into a grid –leaded glass- as the ground dissolves and becomes lost in the tree branches." In Hoffmann, *Frank Lloyd Wright's Robie House*, p. 64.

The double character is drawn by a single line, a line of severing, a *temenos* resulting in a *templum*. One wall. When contracting it becomes the chimney, the true *cella* of the house. In its flue it is the most contained container, it contains a secret and mythical place, a real well, an umbilical cord reconnecting to a sacred past, as we already saw for the Roman house. The hearth and its chimney secrete family time, the time of mythical settlers-ancestors. Of all architectural elements it are the hearth and the chimney that are the strongest bound up with the idea of settling, of sitting down and finding peace. If, phenomenologically, the chimney marks a place, we should be aware that place is never something static, maybe not even something spatial. Place takes place, as language tells us. "*Rien n'aura eu lieu, que le lieu*" writes the French poet Mallarmé.²⁸³ Nothing will have taken place, but the place. A mythical event, a mythical first time will have been repeated. In the case of the fireplace, it is the mythical event of people gathering around the fire, getting a common tongue, communing by telling stories. As we saw it was Semper who considered the hearth as the most important of the four elements of architecture. The other three—roof, floor, textile cladding—were commanded by the fire to protect it. The hearth is the gathering element par excellence. The chimney is its token.

No wonder that Melville, in his story on the chimney, consequently refuses to have it destroyed or brought back to reasonable proportions. It is gross with stories. "But I and my chimney must explain; and as we are both rather obese, we may have to expatiate."²⁸⁴ We do not tell stories around the hearth because it is a cosy place. No, we are told stories by the chimney because the fire in the hearth ignites the spirits of the past. The chimney is the *lapis niger* of the American house.

The plan of the Robie House appears as a literal lay-out of the chimney, a literal taking place of the chimney. The line of the *temenos* beginning in the flue as the *templum in terra*, spirals out in ever wider *templa*, it becomes a wandering perimeter, finding orientations and lights ahead, finding rhythms, meeting a world. If the chimney is in some way a personification of the settler, the perimeter is a settler already 'dwelling around,' indeed dwelling in the sense of *dwalen*. As we saw, Wright's windows suggest a lighting horizon as the promise of a future. If the balcony was the altar on which we looked up to wait for the empty omens, to find approval of the absent gods, we were also already looking into the surroundings finding directions 'to get away,' to find a whereto, to distribute the ways. Vincent Scully, reading D.H. Lawrence who writes on the deep compulsion toward movement to be found in American literature,

²⁸³ Stéphane Mallarmé, 1842-1898. *Un coup des dés*, in *Oeuvres complètes*, Paris: Gallimard, pp. 474-475.

²⁸⁴ Melville, *I and my chimney*, p. 249.

has noticed the profound parallelism with the inclination to movement in Wright's architecture.²⁸⁵ The hearth and the chimney of the settler mark the point from which to again reach for Whitman's 'open road.'²⁸⁶ Settling and travelling are reciprocal movements and we find them in the contracting and extending perimeters of Wright's houses. The 'going outward' embodied in the *Gestalt* of Wright's buildings is the posture of appetite, of 'living forwardly,' to use Kierkegaard's words.²⁸⁷

2.5 The story of the villa

2.5.1 The villa as a special frame: otium and negotium

I spoke of *the temenos* of the front wall as the cut between the city and the interior, an interior orienting itself on nature. If we capture that cut typologically we find the villa as a special dwelling type. In the villa, it is the citizen itself who cuts loose from his or her daily commerce to find peace on the land or in nature. The city leaves itself in order to acquire a proper way of life. As such the villa is the avant-garde of the city.²⁸⁸ It aims for the promised land. The villa refers to the first time of settling, the time of paradise. Its strong bond with farming, which we will meet again in the third chapter when analysing Taliesin North, reminds us of the neolithical jump from the belly of the cave to the surface of the earth, when the human began working the land.

²⁸⁵ Vincent Scully: *Modern Architecture, toward a Redefinition of Style*, In: Vincent Scully, *Modern architecture and other essays*, selected and with introductions of Neil Levine, Princeton/London: PUP, 2003, p. 79.

²⁸⁶ Scully relates that issue to Wright's often quoted sentence: "I broadened the mass out all I possibly could to bring it down into spaciousness." Scully, *ibid.*, p.79. The sentence is to be found in Wright's *Autobiography*, p. 165.

²⁸⁷ "Life can only be understood backwards; but it must be lived forwards." Sören Kierkegaard (1813-1855) is often seen as the first existentialist philosopher. Sören Kierkegaard, *Journals and notebooks, Volume 2*. Princeton: *Princeton University Press*, 2015 [1843], p. 179.

²⁸⁸ Or as Ton Lemaire puts it, the metropolis develops the consciousness of the land. Ton Lemaire, *Filosofie van het landschap*, p. 148.

We might think of the villa as elitist but in the suburbs it became a democratized ideal.²⁸⁹ As villas, the houses in the suburbs mark a negative moment as a flight from the city, but this valuation can be easily reversed. Life in the villa then becomes the true *Ereignis*, *das Eigentliche Wohnen*, the proper way of dwelling. The citizen turns away from the city towards a true self. For Wright there is a truth in Heidegger's idea that our stay with the others, characterized by our business and concerns, by *Geschäft* and *Besorgen*, must be seen as a *Verfallenheit*, a having fallen into the inappropriate, *das Uneigentliche*.²⁹⁰ A necessary and inevitable episode that *precedes* the act of becoming proper. For Wright the inappropriate coincides with the stay in the big city. Turning away from the untrue domain of the city, severing ourselves from civil life to gather around the idea of a true life on earth, is a moment of appropriation, the appropriation of an undivided self. The city is the time of *negotium*, of negotiations, of always dividing and losing oneself, a negation, the villa that of *otium*, an affirmation. The villa is a special *templum*, separating *negotium* and *otium*, an improper and a proper way of life. Originally *otium* meant the time the soldiers were not busy waging war, it was their spare time, often ultimate boredom.²⁹¹ *Otium* is not the time of *Besorgen* but the time of the care for oneself and in that sense an *Ereignis*, an event, a moment of contraction. We celebrate that impossible 'Eigen,' *das Eigentliche*, a true ghost, by gathering around the fire and telling ourselves stories. By reconnecting to the earth and consulting the gods we lost in the godless domain of the city. Stories of a past to be reignited. What Loos proposed for the dwelling in general, that it is conservative,²⁹² is a fortiori valid for Wright's suburban house.

Wright's first distinction is that between an improper humanity in the metropolis and a true humanity in the house outside the city. In this attitude he partakes in the villa tradition, in which agriculture, the enjoyment of nature, and the study of art, form the true destination of human life. We find them in the *Vita Solitaria*, Petrarch's description of a rebirth of the 'truly human' on the land. If the villa had been absent during the dangerous dark ages from the fifth to the tenth century, it was this book that inspired the Renaissance to see to its rebirth.²⁹³ The same happens in Wright.

²⁸⁹ James Ackerman, *The Villa, Form and Ideology of Country Houses*, London: Thames and Hudson, 1990, p. 253.

²⁹⁰ All these notions stem from *Sein und Zeit*. (Being and time) Heidegger doesn't refer to the city as the domain of the inappropriate (*das Uneigentliche*), this is my interpretation thinking especially of Wright's disgust of rent "ground rent, floor rent, man rent, money rent" and of the "poor man" worn by his work. Wright, *The Living City*, 1970 [1958], p. 61, p. 20.

²⁹¹ <https://en.wikipedia.org/wiki/Otium>

²⁹² Adolf Loos, *Architektur*, 1910, in: *Trotzdem*, Wien: George Prachner Verlag, 1931 [1988], p. 101.

²⁹³ Ackerman, *The villa*, p. 29.

'After' the dark ages of the metropolis, a warlike time, the villa reappears at its borders. It is again dedicated to nature, agriculture and the study of the classical texts. In the case of Wright these were not the texts of the ancients or only indirectly, it were the texts of American life seeking itself, those of the Transcendentalists—Thoreau, Emerson, Melville and Whitman. These were the texts in which the spirit of the American settler and wanderer—according to Wright the two halves of the Usonian soul—were still burning, discovering a proper 'American way of life.'²⁹⁴

Walden, or Life in the Woods, is Thoreau's version of the *Vita Solitaria*.²⁹⁵ He tells us of the joy of building his own hearth, of the sufficiency of the simple one-room home, of cultivating his own beans, of a life learning from all the other creatures in the wood and last but not least of a regular return to the town of Concord to become convinced of its "illogical" character. This autobiographical text marked the beginning of a thinking on the topic of the true American home, not to be found in the untrue city. Every Wright House is a house at Walden Pond. Thoreau studied the local flora and fauna and stared into the eyes of the earth by lying down on the ice of his pond to see how fish and frogs endured harsh times; Wright studied the habits of local living creatures—desert snakes and the Saguaro cactus—to transform them to the typologies and to the ornaments of a '*truly American architecture*'.²⁹⁶ He evoked the spirits of that same American earth, learning their characters and seeing how they shaped that earth to an American landscape. *Otium* is the time in which to exercise these skills.

According to James Ackerman the villa is a highly paradoxical type because, though being conservative to the bone, in the history of architecture it is also a revolutionary type, an incubator of ideas about new ways of living and new ways of building.²⁹⁷ It is the place of an avant-garde eager to propagate its ideas. This tension can be felt in every Wright home as the tension between the serving character—aiming at a simple family life around the hearth—and the need to carry such an ideal outwardly by an architectural image. The image of the house must be a *propaganda fide*. The inhabitants may gather around the hearth to celebrate a mythical first, 'unspoiled' time of settling down, but musing and staring into the fire—enchanted, enthused—, the true way of American life, the true house, reaches out to become real. The house expands, it sends, it wants to carry out such an ideal American way of dwelling reconciled with the earth. Loos thought of architecture and of art as being to a large

²⁹⁴ Wright, Frank Lloyd, 1958, pp. 23–25: *The Shadow of the Wall, Primitive Instincts still alive*.

²⁹⁵ Henri David Thoreau, *Walden, or life in the woods*, Boston: Ticknor and Fields, 1854.

²⁹⁶ We will come back on these issues in chapter 4.

²⁹⁷ Ackerman, *The villa*, p. 34.

degree mutually exclusive.²⁹⁸ The former was conservative, the latter opened new ways to the future. Wright, by contrast, thought of a house as both architecture and a work of art. A house should be comfortable and serve its proprietor, but it should also beam, shine, send, it should be revolutionary. Wright and Loos might have agreed on the fact that the only true culture is the one of the farmer, for Wright that culture had to be carried out.

2.5.2 The villa as a theater: staging the settler

A last remark must be made on the nature of the villa. If Walden is a story *about* settling and wandering through nature, then Wright's architecture is a story *about* settling on the land. The villa becomes the stage for the grand play of the settler. This is one of the most fascinating aspect of the Robie House. The arriving, mooring to the site and the leaving: all being staged. One can see a doubling between the backstage volume, the 'second vessel' as Hoffmann called it,²⁹⁹ and the vessel staged in the foreground. [FIG.2.56] It is as if the first vessel steps forward from its double in the coulisses, to play this play. As we saw, everything in the approach and the entering of the building, including the arrival on stage, is set up. The stepping forward on the city stage might even be the true movement of the whole building. The inhabitant plays the flight from the city, the arrival on the quasi land, the settling, then the treason. And let us not be mistaken, there is a civilized public, it is a play for the citizen.

The back vessel seems to mirror the movements of the front vessel as a sort of rehearsal before the premiere. The chimney is doubled in the staircase, the courtyard at the right mirrors the open lawn on the left.³⁰⁰ The stepping onto the terrace at the front side inverts the entering at the back. At the topmost storey, the looking out over the prairie, is mirrored by the looking forward and backward in the length of the ship in the other two sleeping rooms. Even in its mass the house is passing itself while staying: the play of the wanderer and the settler.

²⁹⁸ Loos, *Architektur*, p. 101.

²⁹⁹ Hoffmann, *Robie House*, p. 19. I will follow Hoffmann in his vessel-terminology here.

³⁰⁰ Hoffmann was also the first to note the reciprocal dynamics of the first and the second "vessel." Hoffmann, *ibid* pp. 19-34.

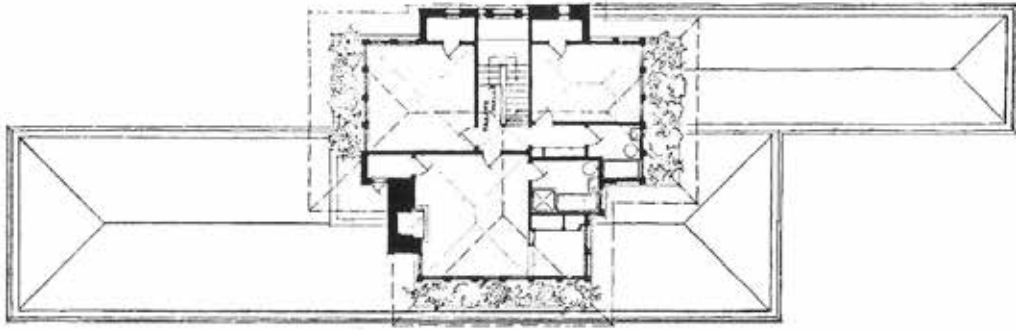


FIG. 2.56 Robie House, Chicago, (IL), 1911, plan of the upper floor, clearly showing the roofs of Hoffmann's "two vessels."
[Courtesy of FLLWFA (MOMA / AA&FALCU)]

The back vessel is a shadow vessel that is necessary to let the front vessel function in all its persuasiveness, in all its ideality. It connects the front vessel with the world, it harbours the kitchen and the employee quarters, the garage, the storage and the real staircase. Without these secondary functions backstage, the play couldn't be staged. It is a connection kit that secretly connects the world of the proper—the settler finding his true place on the earth—to the reality of the city. It is the theatre-machine producing the play.

2.6 Recapitulation and conclusion

In the play of the settler and the wanderer, performed in all Wright's houses, we observed a fundamental ambiguity. On the one hand there is the contraction on the hearth. The hearth marks the *templum in terra* framing family time, a family trying to get situated on an American earth. The floor is the *lapis nigris*: one's personal past must be reconciled with the past of the place, with the *genii loci*. The chimney is the tap root, monumentalized, memorizing the moment the ancestors of the new settler sat down for the first time to take root. "My chimney settles more and more every day," we heard Melville saying. Settling means to become part of a strange past, already there, a past that has to be appropriated by integrating organically with the surroundings. One becomes proper—one settles—by becoming improper, by becoming the propriety of a *terra incognita*.

The surroundings again have a contradictory sense. Wright spoke of the house as a “companion to the horizon.” The horizon implies the border of the known and the trusted, the “*zum Frieden gebracht*” (pacified) within the enclosure. It is the region in which we dwell (both live and wander) to find ways, to get habituated, in order to learn to rest in the environment. The horizon is the part turned toward us of the free wide, “*die freie Weite*,” it is an *orbis terrarum*. But that same free wide is also the ‘beyond the horizon’ as the ring of lights, the ring of possibilities surrounding every life. It implies the promise of a better life. The free wide implies the very reason why the settler wandered away from the home-country in search of a better future. One lives forwardly. We saw the band of casement windows as the *templum* framing the free wide.

Sitting down around the hearth, pondering old and new roots, the settler is always already captured by the expansive force toward the horizon. *Wanderlust*. I tried to capture this moment of unrest, so manifest in American literature, by pointing to the dynamics of Wright’s tectonics, embodying a standing *into* the earth while emerging (*ent-stehen*), and a standing up while reaching towards the horizon.

Wright’s houses belong to the villa typology. The villa is the place where the play of the settler and the wanderer is staged. The villa is the *temenos* cutting off from the city in order to find one’s own, one’s proper existence on the land or in nature. Looking back, we can again observe a strong tension in Wright’s houses. On the one hand the villa frames a paradisiacal, ‘proper’ existence on a new earth, unspoiled by the city. On the other hand we find the necessity of a mixed, improper existence, in which nature and the city become confused. The geometrical scheme of the Robert Llewellyn Wright House manifested itself as the overlap of an urban and a natural environment. For Wright that would have meant an overlap of the improper and the proper, pointing to an impossibility to ever become one’s own.

The villa exemplifies the longing of the city to turn away from itself and to become part of nature. It is the city in which nature and the land are born as a second culture, as the play of the countryside, a play we also observed in the doubling of the Robie House in a coulisse-house and a real stage. It is the city that invents the grand play of the settler, a play we met in Broadacre too.

3 Descent into the earth

*“Quand le masque de l’homme s’applique au visage de la terre, elle a les yeux crevés.
(When the mask of man is put on the face of the earth, its eyes are pierced.)*

René Char, Contre une Maison Sèche in: Le Nu Perdu.

3.1 Abstract

In the previous chapter I studied the rituals of the Roman settlers and saw strong echoes of them in the organizing figures of Wright’s architecture. Both the Roman rituals and Wright’s architecture explicitly entailed the inauguration of a new sky and the reconciliation with a new earth, a *terra incognita* as a new climate, a new light and new grounds to be accounted for.

In this chapter, evaluating Wright’s passion for the “stony bonework of the earth,” I will show that for Wright such a reconciliation with the local earth issues in the strong desire to build with a local geological past. I will interpret both Taliesin North [§§ 3.2.1-3.2.9] and Fallingwater [§§ 3.3.1-3.3.8] as a descent into the time of formation of the earth. As such the rooms in these houses will be considered ‘grottos,’ the typology in which architecture celebrates the creativity of a subterranean nature. When visiting Taliesin North, we will see how such a conception of a house ‘dug out of the ground,’ already implies a strong critique of the renaissance idea of landscape and of the corresponding notion of the view, changing the dominating view over the land into a ‘bathing in nearby nature.’ [§ 3.2.4]

Finally, I will pose the question why the somewhat coincidental saving of the rock in the living room of Fallingwater was so important. I will argue that, just like Wright’s desire in Taliesin North to live *with* the hill instead of on top of it, this saving opens

up a new chapter in the history of architecture in which, instead of objectifying, suppressing, and dominating nature, architecture shows the clear signs of a willingness to live in a real oecumene with nature.

3.2 Taliesin or beyond the landscape

3.2.1 The Grotto

In the previous chapter we have seen that the classical relation of the house to its surroundings, a relation embodied in the view of the surroundings, was already a problem for Wright. [§ 2.3.4] He didn't accept the face to face relation of the building with nature outside, a relation transforming the earth into a landscape, the house becoming its face. During his stay in Europe he must have become acquainted with the history of the villa-typology, that type being the very embodiment of such a relation. His apartment in Fiesole was close to Michelozzo's Villa Medici with its view of the city of Florence, and close to the Villa Gamberaia in Settignano, both highlighting Renaissance country-life. It is probable that he saw some of Buontalenti's Medici-villas on the more western slopes of the Arno Valley. Going even further, more hypothetically, he may have seen Palladio's villas in the Veneto: it would have almost cost more difficulty evading than visiting them. We can imagine that in all those hypothetical cases the meeting with that past must have been a mixed pleasure. Wright publically confessed his disgust for Renaissance architecture more than once, dismissing the typical Renaissance window as a hole in the wall. In his plea for an organic architecture he disavowed Alberti's idea of composition: "Architects began to compose buildings because they no longer could create them."³⁰¹

There is, however, certainly an affinity between Wright's early work and that of certain Medici villas around Florence. We find a purely formal resemblance with some of them like the villa Medici in Fiesole and a certain programmatic convergence—that of the fortified farm—with others such as the Medici villas in Caffagiolo or

³⁰¹ FLW, *CW1*, p. 259.

Trebbio, all designs of Michelozzo.³⁰² This affinity does not erase all the differences, which historically remain crucial, but exploring the domain of the Renaissance and Mannerist villas could give us some clues for certain developments in Wright's oeuvre which appear for the first time in his own house Taliesin North. It is not on the level of form, however, or that of typology, but on a more general level of thought that this affinity must be reconstructed. The cinquecento-artist sees earth as a productive and creative force to be taken into account by the artist who works with its products, emulates its creativeness and celebrates its power of metamorphosis. If there is one domain in which this joy in creative earth becomes manifest it is the Mannerist grotto. Wright *may* have seen many of them in and around Florence during his 'sabbatical' in Europe. I am not constructing any line of influence here, the sheer concept introducing a needless and fake causality into the realm of Art. It is easy to see that by 1911 Wright's architecture was fully mature and all the elements which would later develop were already present in rudimentary form. Or as Wright put it himself: "Architecture, by now, was quite mine."³⁰³ What I am saying is that the 15th and 16th century grotto comes close to Wright's own idea of the earth as a spiritual, creative force. We see an earth perpetually birthing new forms in shells and all kinds of minerals; in sculptures from water-gods to saters to nymphs; in mythical animals and vegetation. We see a celebration of pure matter as always already alive. It might have touched a string in Wright's soul, even if the sound would have been full of dissonant overtones: he would have abhorred the representational character of it all. It was certainly not "in the nature of materials." But he may have loved the remarkable products of the earth; he may have wondered on the geometrical magic of many of the figures; he may have praised the architectural power of the spirits of the earth even melting down the architectural framework itself to recast it in a more 'natural' form. Wright *may have seen* Buontalenti's grotto in the Boboli Gardens [FIG.3.1] with its protean matter; or Tribollo's Grotto of the Animals in the villa Medici in Castello where man appears amidst the animals as an anthropoid ape evidencing the metamorphic power of nature. Yet even if he didn't see them, there is a resonance in the conception of the quasi subterranean abode as something sculpted out of the earth, nay even better, as a room full of spiritual matter teeming with images. A stream of pleasure and terror at the same time, a thrill and a shiver. I am speaking of a resonance, stemming from a proximity of concept rather than of a lineage. The SC Johnson Administration Building already gave us a first hint with its 'stalactite' columns and its subaquatic light.

³⁰² Bartolomeo Michelozzi (1396 - 1472). Italian Renaissance Architect.

³⁰³ FLW; AB, p. 192.



FIG. 3.1 Buontalenti, grotto in the Boboli Gardens, Florence, 1557-1587. [Photos: Ron Reznick]

3.2.2 Settling again

After his trip to Europe (1909-1910), Wright moved from Oak Park, Chicago, to Spring Green in Wisconsin (1911) to settle on the grounds of his grandparents, where in his youth, he had worked on the farm of his uncle. This change of habitat initiated a crucial phase in the development of his work, a phase in which Wright gradually redefined the role of “the ground” in his architecture, the ground in its double meaning of width and depth: the landscape and the earth. He abandoned the Prairie House, a conception that, according to Twombly, by 1910 had worn out and “had reached its limits.”³⁰⁴ The Prairie House had been conceived by Wright as a house strongly resonating with the extending plains of the prairie landscape. To achieve that goal he had drawn the house nearer to the earth by eliminating the basement and the steeply pitched roof; he had stressed the horizontal elements

³⁰⁴ Twombly, *An Interpretive biography*, p. 97.

such as sills, bands of casement windows and eaves, while visually suppressing load bearing elements. He had spoken of the horizontal line as the 'earthline' and saw architectural elements like sill, rail, frieze, band-window, and eave, as repetitions of that line, "making the building belong to the ground."³⁰⁵

In his focus on the horizontal elements, however, the vertical had become a movement of transport and re-presentation of the horizon, lacking an own significance. The vertical relation with the ground, which Wright had so heavily criticized in the Victorian and the Classicist neo-styles, remained problematic because merely formal. From the very first pages of his description of Taliesin North in *An Autobiography*, we can read that Wright realized that a translation of the surface of the earth into a strictly formal architectural system was not enough to win the desired proximity and intimacy with the ground that he sought. "Architecture was something in league with the stones of the field, in sympathy with 'the flower that fadeth and the grass that withereth.'"³⁰⁶ What Wright sought in his post-Prairie-career was a zone of indiscernibility between nature and architecture, a metamorphosis more than a metaphor, a real transformation of the surface of the earth into architecture. Something wilder, giving expression to nature more directly. A task Thoreau had formulated for literature. "Where is the literature which gives expression to Nature? He would be a poet who could impress the winds and streams into his service, to speak for him; who nailed words to their primitive senses, as farmers drive down stakes in the spring, which the frost has heaved; who derived his words as often as he used them—transplanted them to his page with earth adhering to their roots."³⁰⁷

3.2.3 Wright and Palladio: the villa as a stage and a face

When Wright settled in Spring Green to build his own villa, he settled on the *land*: much of the surrounding grounds were already in agrarian use. It was the land of his ancestors who settled in the region. And it is for sure that he wanted his house to be a farm, as he described it in his autobiography, a "farm cottage and an architectural workshop," indeed a strange combination.³⁰⁸ In all the successive plans for Taliesin North we find stables for cows and horses and cellars for storage. We are not so far away from Palladio after all.

³⁰⁵ FLW, *CW5*, p. 79.

³⁰⁶ FLW, *AB*, p. 192.

³⁰⁷ Thoreau, *Walking*. Digital version: The Project Gutenberg eBook of *Walking*, 1997 [1862], p. 20.

³⁰⁸ Wright; *AB*, p.195.

Agriculture has always been part of villa life, and not only symbolically. There can be no doubt that the investments in the 15th and 16th century Venetian and Florentine *Villegiatura* were not only for pleasure. The Venetian nobility sought for new ways of making their capital grow in the harsh times of Venice trade and commerce. The same goes for many of the Medici villas. Even the dependence on the produce of the land during the mean years of the crisis was all too real for the early Taliesin Fellowship.³⁰⁹ But these 'commercial' realities, this *negotium*, does not prevent the villa to be essentially a stage. What is staged is the act of an original mythical settlement, the neolithical moment man bound himself to the ground remaining seated in a fixed place. In that moment earth becomes a great regulated belly, giving all the food necessary for the human. The villa is the theatre of production. Notwithstanding the material produce and all the hard work implied, the act of settling becomes a scene. The earth flattens to a landscape.



FIG. 3.2 Palladio, Villa Barbaro, Maser, Italy, 1560, aerial view. [Photo: Google Earth]

³⁰⁹ To generate income in the mean years of the crisis, in 1932 Wright started an architecture-school, the Taliesin Fellowship. Students paid a considerable amount of money for their stay at Taliesin. Apart from their architectural education, they were supposed to work on the land and in Wright's office for the largest part of the day.

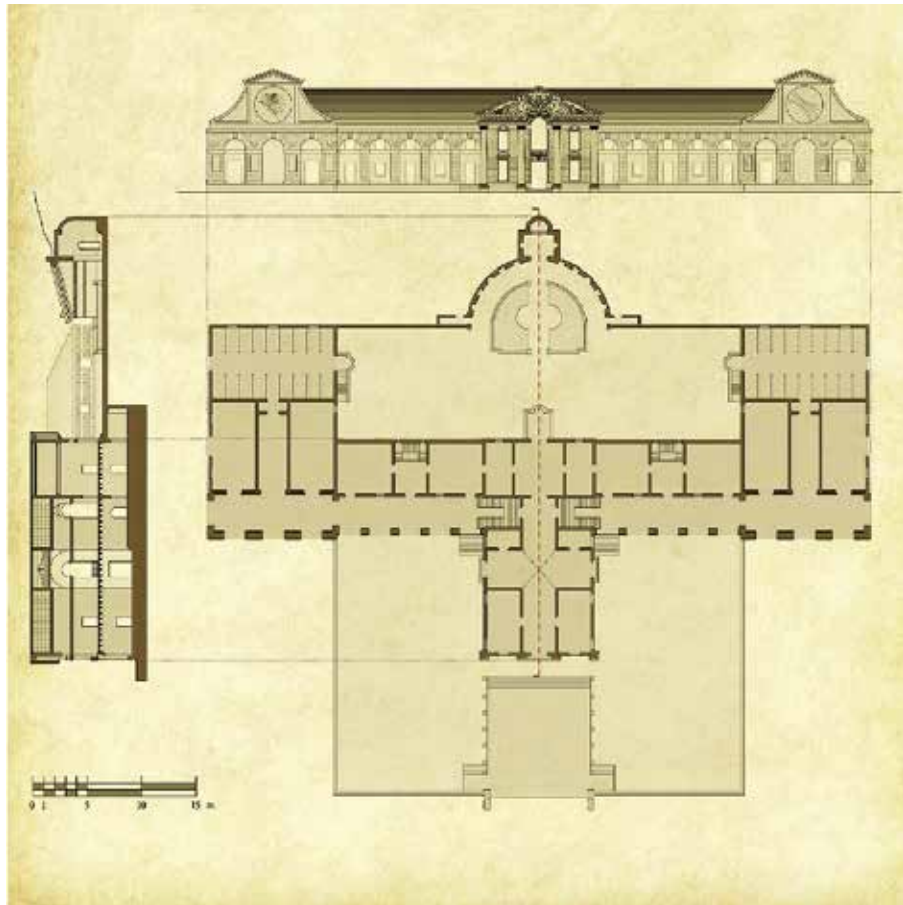


FIG. 3.3 Palladio, Villa Barbaro, facade, plan, section. [Drawing: Veronica Riavis]

Palladio's Villa Barbaro at Maser [FIG.3.2-3.3] may help us understand this theatre of production. We find Villa Barbaro at the foot of the slope of a hill in the promontory of the Alps looking out over the Venetian *Terraferma*. From the south the villa indeed manifests itself as a face, despotically overlooking the earth and in its *barche* (wings) already stretching out its arms to hold the land and to haul in the crop. Perpendicular to the villa-front starts a lane planted with trees. From a distance it leads the eye to the face-façade. The sundial on the façade regulates the time of production. The site becomes saturated with the sight of the productive land. It is a story told, a mythical landscape.

From the inside the owner looks out over the earth, which is axially pinned down on the central window and opposed to the eye as the object of human desire. The earth is projected in front of and beneath the eye of the master of the house in a master-slave relation concerning the production as produce. At the same time, however, that same earth is imagined as a primordial paradisiacal landscape giving the owners whatever they want. The villa is the built 'publication' of the land, a site becoming a face or a postcard. The great *salone* [FIG.3.4] on the first floor functions as a magical lantern. Veronese's paintings on the wall represent paradisiacal antique landscapes. Framed as if they were just views outside, they provide a historic background for the actual views. The landowner and his guests enjoyed that historic lineage as an intellectual pleasure in the saloon, while behind the villa—in the nymphaeum and its grotto—they enjoyed the fruits of the land and submerged themselves in earthly pleasures.³¹⁰ [FIG.3.5]



FIG. 3.4 Palladio, Villa Barbaro; left: wall painting as a window, right: view from central window in the salone. [Photo left: Oxxo; Photo right: Frans Sturkenboom].

³¹⁰ Originally a nymphaeum is a shrine or a grotto dedicated to nymphs and water gods. From Roman times onward it is usually a semi-circular garden element with a fountain, a grotto and a pond, devoted to a nymph or nymphs. Cf. <https://en.wikipedia.org/wiki/Nymphaeum>



FIG. 3.5 Palladio, Villa Barbaro, nymphaeum with grotto behind the villa. [Photo: Frans Sturkenboom]

3.2.4 To view or not to view.

The reason that we dwell so long on the subject of this villa is that only by knowing the ins and outs of this tradition we may be able to understand what happened in Taliesin North and to grasp the reason why Wright, despite the convergence in program, never used the word villa. Again, it would not have been the farming aspect that would have bothered Wright. He speaks eloquently of his land and all the creatures on it. The earth is abundant, flows of vegetables come to the farm in large baskets, and streams of milk, “and cream even”; we all meet them in the *Autobiography*³¹¹ when Wright retrospectively tells us of his plans for Taliesin, which read as a *Georgics*, Virgil’s lyrical poem on agriculture.³¹²

³¹¹ FLW, *AB*, p. 193-194. Some sentences from Wright’s vision: “I saw plum trees, fragrant drifts of snow-white in spring, loaded in August with blue and red and yellow plums, scattering them over the ground at a shake of the hand. I saw the rows and rows of berry-bushes, necklaces of pink and green branches: saw thickly pendant clusters of rubies like tassels in the dark leaves of the currants bushes:...”

³¹² Virgil’s poem probably dates from 29BCE.

We see that on the level of the produce, there is not so much difference between Taliesin North and the Veneto-villa: Wright's dream might have been that of any *Villegiatura* aristocrat. It is exactly in the way he looked at the land that we must seek the differences. In the Prairie Houses we already saw that the view over the surroundings is not the objective of any of Wright's windows. Despite its panoramic quality, the band of windows—so typical for many of Wright's houses—does not provide us with the possibility of an overview, neither does it place us in an opposition to the world outside. It is hard to believe, especially when taking into account the heart-breaking natural beauty of the sites Wright had the opportunity to design for. Yet the position of the inhabitants remains decisive in all Wright's houses: they are gathered around the hearth, the back of their heads turned toward the world outside. In the great living room in Taliesin the entire periphery of band windows is occupied with cushioned benches oriented on the hearth preventing a position directly at the window with a corresponding clear view of the outside. [FIG.3.6] Only in the going around, in the walking through the house, we may have a glimpse of the landscape—but the view remains scattered. This is the more so because a large part of the house is packed in trees. The windows provide orientation but avoid a focus on the landscape, the focussed prospect being the moment in which the world outside becomes opposed to the spectator inside.



FIG. 3.6 Taliesin-North, Spring Green(WI), 1911-1925). Band of windows in the living room in the architect's quarters. [Photo: Stilfehler, CC-BY-SA 4.0 international]



FIG. 3.7 The Birdwalk, a long balcony projected from the living room of Taliesin, 1953. [Photo: © Yukio Futagawa]

It is true that the complex ‘converges’ towards the apartments of the architect which, seen from the outside, come peeping through the wooded perimeter. We find a series of terraces and balconies here but these always ask us to perform the ritual of going out and thus to take some pains to come closer to nature. Nature is not *available*, it doesn’t lie passively in front of us ready to be taken by the view. This is the meaning of the so called “Birdwalk,” a long balcony projecting into the open from the living room and “riding out through the branches of an oak tree,” as Bruce Brooks Pfeiffer formulates.³¹³ Walking on the Birdwalk means taking a stroll in nature, not to stand in front of it. It does not mean to view, but to be *touched by nature*. [FIG.3.7] To hear the birds, to feel the wind on the forehead, to linger amidst the branches of the trees. If it would have been a device for the view, Wright could have sufficed with a balcony with a ‘back-cover’ from the façade. Instead of a frame determining a sight, it is a pier where the house seems to hover in mid-air—suspended—so that all the events in nature may flood it.

³¹³ FLW, *Selected Houses 2*. p. 25. The name ‘Birdwalk’ stems from Wright himself.

The relatively late Birdwalk (built in 1953) is not different from the stairs to the hill en all the loggias at the hillside and not different from the pergolas in earlier versions of Taliesin.³¹⁴ They are based on a principle of continuation and extension of the house into nature. They seek proximity with, not the view over nature. They do not lead the eye to the climax of a landscape-image, a postcard to be consumed from the house, like the drive-ways or the long tree-lanes of the Renaissance architects, pinning the land on the villa and thus producing the landscape as a face mirroring the house. Nature does not become an object, something posed in front of and opposite a subject looking from a window.

Though not completely forbidding a view of the valley, the house primarily opens to the hill itself. The house moves around the hill. At the valley-side it is enclosed by trees. Taliesin is partially built into the hill, which is perceived everywhere as an overwhelming earth, flooding the eye. When looking out of the windows it is the rising earth and all that rises from that earth of which we are constantly reminded. Sometimes it is the sandstone, which rises in the walls and stairs of the garden [FIG.3.8]; sometimes a trunk blocking the view, sometimes the vegetation flourishing in the lower parts of the garden directly adjacent to the building. This 'courtyard' between the house and the hilltop already looks like an exterior grotto, dug out of the hill. We peer into the hollow of the earth. From the interior the subterranean character is also confirmed by the overhanging eaves that do not stop cutting off the upper part of the view, the sky. At dusk the hill becomes the dark rising silhouette of a swelling surf.



FIG. 3.8 'Courtyard' between hill and house or the "Hill garden" at Taliesin North. [Photo: Rick McNees]

³¹⁴ Wright started building Taliesin I in 1911. Large parts were destroyed by fire twice and it was rebuilt every time according to new plans. Hence the literature on Wright speaks of Taliesin I (1911), II (1914) and III (1925).

For all these reasons it is difficult to speak of a view or vista on the landscape because we have a *site* but we lack an uncomplicated *sight*.³¹⁵ The horizon is postponed by all nature rising in the immediate surroundings. Yes, we have gardens and even the beloved hill became a “hill-garden.”³¹⁶ But a garden is not necessarily a landscape because it is the realm of a proximity of nature. The garden court with its pond and its sculptures is not so different from Palladio's *nymphaeum*, dug into the hill and explicitly projected as an outside room in continuity with the interior and enjoying earthly pleasures instead of the view.

When Wright speaks of vistas he often associates them with the ground and with ground levels. He sees them in a direct continuity with the house and he speaks of vista's “gained by marrying buildings with ground levels, or blending them with slopes and gardens.”³¹⁷

Again, I do not deny that one may have a view now and then, and Wright even mentions them in his praise of Taliesin. “Walls opened everywhere to views as the windows swung out above the tree tops of red, white and black oaks and wild cherry trees festooned with wild grapevines.”³¹⁸ But he does not specify the views and in the very act of mentioning them one is already torn down to the trees and the grapevine festooning them. “And in spring, the perfume of the blossoms came full through the windows, the birds singing there the while, from sunrise to sunset—all but the several white month of winter.”³¹⁹ The view has already escaped. The house becomes a large gathering, in which seasonal time comes to the fore constellating a ‘landness’ rather than a landscape, a consciousness roaming about in a state of delight, a pure mood or atmosphere. It is the ‘landness’ of Virgil's ‘Georgica.’ In his texts on Taliesin North, Wright is constantly describing a temporal constellation of the house: seasonal time, the weather, the time of the day, the time of growing trees and as we will see, the time of stone cropping out of the hill. All these temporalities result in a true *haecceity*,³²⁰ a ‘thisness’ capturing the house and its surroundings in a singular, individualized time: *the hour of Taliesin*. Just as Shakespeare speaks of “a midsummer night's dream.”

³¹⁵ In a reference to Alain Roger Gijs Wallis de Vries says: “A landscape is a site and a sight: it exists *in situ* and *in visu*.” Gijs Wallis de Vries, *Archescape, on the tracks of Piranesi*, Amsterdam: Thousand and one Publishers, 2014, p. 94.

³¹⁶ FLW, *AB*, p. 194.

³¹⁷ *Ibid.*, p. 364.

³¹⁸ *Ibid.*, p. 197.

³¹⁹ *Ibid.*, p. 198.

³²⁰ *Haecceity*: see glossary..

Wright problematizes the classical notion of landscape. This becomes all the more clear when we take into consideration his obstinate unwillingness to build *on top* of the hill of Taliesin: “Unthinkable to me, at least unbearable, that any house should be put on that beloved hill. I knew well that no house should ever be on a hill or on anything. It should be of the hill. Hill and house should live together each the happier for each other.”³²¹

While Classicist and Baroque architecture have the habit of building on the highest point of the mountain or on top of the hill in order to have an overview, to visually possess what is viewed and to be master of it, Wright consciously left the top unoccupied, placed the house ‘on the brow’ (Taliesin means “shining brow”³²²), and orientated it on the hill. [FIG.3.9] Let there be no mistake: Wright’s brow is somewhere beneath the top, leaving the crown to the hill, nestling itself on the slope. He consciously avoided a relation of ‘possession’: *possedere* means ‘sitting on’ as the power ‘to have and to hold.’³²³ Stronger, he inversed that relation. The house is “of the hill.”³²⁴ The hill is not occupied by the house, the hill invades the house as its mood, the house becomes the instrument, the sound box of the hill.



FIG. 3.9 Taliesin oriented on the hill and packed in trees at the valley side. [Photo: Google Earth]

³²¹ FLW; AB, p. 192

³²² FLW; AB, p. 191

³²³ *Possedere*. From proto Indo European Roots *poti* and *sed*. *Poti* (powerful, lord, in some languages: husband) results in Latin *posse*, to be able to, to have the capacity to, to ‘have’. *Sed*, (to sit and to ease, to pacify, to bring to rest) results in Latin *sedere*. To sit, to be seated. https://www.etymonline.com/word/*poti-

³²⁴ FLW; AB, p. 192

Let me try to formulate some provisional conclusions when it comes to Wright's idea's about landscape. The birth of a landscape culture in the Western World is often associated with the era of the Renaissance, notably with Petrarch. According to Ton Lemaire, the Dutch anthropologist who wrote a *Philosophy of the landscape*,³²⁵ Petrarch was one of the first to climb a mountain with the exclusive purpose to have a view from its top for merely aesthetic reasons. By writing his experience down in a letter to his father and in telling him of his views and the feelings they awakened, he was the first to send a 'postcard.' This made him the first tourist, and according to Lemaire,³²⁶ it made him the first modern European. Petrarch published his view in a literary form, and by doing so he staged it and made the world unfolding in his view to a landscape in the modern sense of the word. He founded a landscape culture.

Wright climbed the Taliesin hill too, and he 'published' the result by designing a house and by describing his act as a designer and builder in his autobiography. He did not want to sit on top of the hill, he tried not to do what Petrarch did. He did not look over his land, like Palladio's clients did. Instead of the distance and the vanishing point on the horizon he sought a proximity and continuity with nature, a being part of instead of a standing opposed to.

3.2.5 The house as an open camp

Before proceeding to hear how Wright describes his house as formed by climatic and geological phenomena, I will shortly introduce some historical and geographical facts. This is important because I want to prove that Wright's landscape is not merely a picture between all the other pictures on the wall as it was in Palladio's villa Barbaro. If "a landscape is a site and a sight," as Gijs Wallis de Vries says,³²⁷ it is not merely empirical. It also bears on a geological depth of the earth as a time of formation of the site and on an atmospheric resonance with nature nearby.

In order to understand both the geological and the atmospheric embeddedness, it is necessary to have a first impression of the site of Taliesin North. We find the buildings on the slope of a hill in the Jones Valley, which is part of the Wisconsin river valley. [FIG.3.10] The valley got its name from Wright's Welsh grandfather from mothers side, Richard Lloyd Jones, who settled in the valley in 1858.

³²⁵ Lemaire, Ton, *Filosofie van het landschap*, Baarn: Ambo, 1970, p. 12.

³²⁶ Lemaire, Ton, *Filosofie van het landschap*, Baarn: Ambo, 1970, p. 13.

³²⁷ Wallis de Vries, p. 94.

Wisconsin is known for its prairies but the South West region in which we find Taliesin is characterized by deep valleys and steep hills with forested ridges with deciduous trees and Conifers. [FIG.3.11] Climatically, in Spring Green, the summers are long, warm, and wet; the winters are freezing, snowy, and windy, with possible snowfall from early November to early April. In winter times the temperature may sink to below -22°C (9°F).³²⁸



FIG. 3.10 Taliesin in the Jones Valley with Wisconsin River [Courtesy of Topozone]



FIG. 3.11 Typical Driftless Area landscape. [Photo: Corey Coyle; CC BY 3.0]

³²⁸ <https://weatherspark.com/y/12203/Average-Weather-in-Spring-Green-Wisconsin-United-States-Year-Round>

When reading such a ‘weather report’ we immediately understand Wright’s description of the house in winter times. The house becomes a climatic constellation in which tectonic details serve to celebrate a meteorological existence:

“I wanted a home where icicles by invitation might beautify the eaves. So there were no gutters. And when the snow piled deep on the roofs and lay drifted in the courts, icicles came to hang staccato from the eaves. Prismatic crystal pendants sometimes six feet long, glittered between the landscape and the eyes inside. Taliesin in winter was a frosted palace roofed and walled with snow, walled with iridescent fringes, the plate-glass of the window shone bright and warm through it all as the light of the huge fireplaces lit them from the firesides within, and streams of wood-smoke from a dozen such places went straight up towards the stars.”³²⁹

In Wright’s vision nature wraps itself around the house to annihilate the distance that comes with the view. The snow is a blanket hugging the house and occasioning ‘*huge fireplaces*’ to keep the house warm. When looking outside, the icicles pull the curtain before the landscape as a view. In a final gesture, following the smoke of the fireplaces, we are sent up to the sky to be placed under the stars, we become the augur again, but this time the heavens are pulled down while the smoke goes up. All things come near, they approach and we are amidst and with them, “seeking fellowship with the surroundings.”³³⁰ He who speaks here is not the *dominus*, the one who dominates the surroundings or the grounds while he and his *domus* sit on top of it or look out on it, as in the Renaissance villa. “Seeking fellowship”: he who speaks here is the fellow, the comrade or ‘peer’ of the hill and its surroundings.

In Wright’s description the house *gathers* the weather, it does not abduct its elements as soon as possible, it communes with them and enjoys them. The desired fellowship is a form of oecumene. Let there be no mistake: it is the architectonic constellation that brings the house under the sky to tune it to its atmospheric elements:

“A house that could open up to the breezes of the summer, become like an open camp if need be. With spring came music on the roofs, for there were few roof spaces overhead, and the broad eaves so sheltered the windows that they were safely left open to the sweeping, soft airs of the rain.”³³¹

³²⁹ FLW, *AB*, p. 198.

³³⁰ *Ibid.*, p. 198.

³³¹ *Ibid.*

3.2.6 **Natus est. A house born from the hill**

The Jones Valley is to be found in the so called Driftless Area, an area not covered with ice during the last ice age, and thus lacking glacial deposits, so called drifts. The area was totally surrounded by ice during Wisconsin glaciation, but it was not glaciated itself. Enormous streams of meltwater, abducted during Pleistocene glaciation, eroded the Palaeozoic Plateau of Wisconsin, resulting in a relief of steep hills and deeply carved river valleys.³³² In this region little tectonic activity has disturbed the process of formation of the hard crust of the earth. For that reason the stratification of the yellow and grey Cambrian sandstone is still largely horizontal, as we can see in many canyon walls of the river Wisconsin, streaming at the foot of the Taliesin hill, a mass of Cambrian stone itself, at its top cropping out of its loess coverings. It is of these outcroppings that Wright says that “The look of it was what I wanted for such masses as would rise from the slopes.” And in an even stronger formulation: “they were “already suggesting building itself.”³³³

Taking the suggestion seriously, the architect-builder builds in continuity with nature: the sandstone is pulled up toward the sills of the windows: Cambrian earth rises. Rustication springs up and conquers the wall. The sand from the Wisconsin river is rubbed into the plasterwork of the parapets. Already we feel transported through geological time, the time of the forces that built the hill, the time of the Wisconsin river that crumbled the stone to grains of sand, all those forces that shaped the site and now go on building it to a new home. “The lines of the hills were the lines of the roofs. The slopes of the hills their slopes, the plastered surfaces of the light wood walls, set back into shade beneath broad eaves, were like the flat stretches of sand in the river below and the same in color, for that is where the material that covered them came from.”³³⁴

The plastered surfaces are the new shores of the river where the sand is deposited. The use of the verb ‘to be’ in Wright’s text is significant here when it comes to Wright’s intentions of staying close to the earth. The house is not *like* the hill. No metaphor. The creative spirits of the earth express themselves in the hills and in the house simultaneously. The architect goes down in the earth to trace the forces of formation, to find the traces of the genii of the materials. Time as a Palaeozoic ‘mason’ laying the layers of sand on the floor of the sea, the gravitational forces pressing them to sediments in the rock, the streams of molten ice eroding it to ridges.

³³² Wikipedia, *Driftless Area*. https://en.wikipedia.org/wiki/Driftless_Area#:~:text=Coordinates%3A43.5%C2%B0N%2091,glacial%20deposits%2C%20also%20termed%20drift.

³³³ FLW, *AB*, p. 194.

³³⁴ *Ibid.*, p. 195.

Finally “the old Norse stone mason Father Larson”³³⁵ —blasting and quarrying it from a neighbouring hill and all the local masons adding their signature to the masonry. Wright boasted to recognize their creative hand some twenty years afterwards.³³⁶ All the creative spirits. All implying different times contemplated in the planes invented by the architect.

Let’s hear how that house grew. “Stone was sent along the slopes into great walls. Stone stepped up like ledges on the hill and flung long arms in any direction that brought the house to the ground. The ground, my Grandfathers ground.”³³⁷ The stony hill is the centre, it is the centre of the story and it is the centre of the house. The house moves around it, it grows from the hill but in a swinging decentring movement. The benches and the retaining walls in the garden prolong themselves in the walls of the house while in the same movement they moor it to the hill.[FIG.3.12]



FIG. 3.12 Taliesin North. [Photo: Nomadseiffer]

The benches and the retaining walls in the garden prolong themselves in the walls of the house while in the same movement they moor the house to the hill.

³³⁵ Ibid., p. 194.

³³⁶ Ibid., p. 196.

³³⁷ Ibid., p. 194.

Beginning in the still visible outcropping ledges, the stone comes down in a series of steps, it steps down. It steps down in all the floors and stone staircases. And then it rises.

“The hill crown was thus saved and the buildings became a brow for the hill itself. The strata of fundamental stone work kept reaching around and on into the four courts, and made them. Then stone, stratified, went into the lower house walls and up from the ground itself into the broad chimneys. The native stone prepared the way for the lighter plastered construction of the upper wood walls. Taliesin was to be an abstract combination of stone and wood as they naturally met in the aspect of the hills around about.”³³⁸

In every new masonry layer the earthline-horizon climbs up. The house becomes a bas-relief built by the earth. Wright sees the stone moving itself. Through his eyes earth looks at itself. That is what is meant by the idea “that the rock came cropping out in strata to *suggest* building.”³³⁹ (my italics) Suggestion is not an objective deduction, neither a subjective finding. It is something subliminal, something born towards us without us seeking it, a whispering heard intuitively. The earth suggests building: it is pregnant with architecture. The architect is just the midwife.

3.2.7 The climbing horizon in the interior

The horizon-horizontal of Wright’s “earthline,” starting in the upper outcropping layers of sandstone at the top of the hill, comes down in all the treads of stone stairs in the courts, in all the masonry layers of the retaining walls. It then steps up again in all the multiplied architectural horizontals of the interior. The horizontal line stepping up repeats the process of sedimentation, in which every layer of sand or lime deposited in a Cambrian stratum meant a new horizon. Building is sedimenting. In his article on stone, Wright recommends the architect to build in strata, just like the earth.³⁴⁰

Now the earth rises in “broad chimneys.” But as we already saw in the previous chapter, in many of Wright’s interiors the chimney does not visibly go up. In the grand living room in Taliesin it is cut off by a firm wooden trim, making the hearth one thing among other things, taking away its privileged position as a pivot or anchor.

³³⁸ Ibid., p. 195.

³³⁹ Ibid., p. 192.

³⁴⁰ FLW, *CW1*, p. 274.

It becomes a stone 'panel' in the wainscot, a fragment of earth between other fragments. [FIG.3.13] The trim functions as a slightly heightened horizon. It seems to go round through the entire house in order to divide the interior into an upper and a lower realm. The lower realm is that of the floor that goes up in the sandstone wall and that makes the interior look like a cave or cellar dug out of the hill. The upper part is that of the "rooms going up into the roof, tentlike."³⁴¹ The roof folds in the ridge, but also comes down in the walls: it is finished in plaster with a tan-colour reminiscent of the sand-colour on the outside, which is slightly more grey. The interior roof-space with its sometimes surprising repetition of ridges makes the higher parts of the rooms look like attics. The upper windows often have the character of dormers even if we cannot look out because of their position near the ridge. The elevation becomes the weaving together of the realms of cellar and attic. It loses its independence as a third element between the roof and the floor.



FIG. 3.13 Taliesin North, living room. Chimney cut off by the trim. [Photo: © Yukio Futagawa]

341 FLW, AB, p. 197.



FIG. 3.14 Taliesin North, guest room. [Photo: © Yukio Futagawa]

All the materials—the wood of the wainscoting, the sandstone, the light yellow sienna plaster—change position below and above the trim.

If Wright speaks of a form of weaving—“Architecture is no less a weaving and a fabric than the trees”³⁴²—this is certainly so for the exterior where all the materials of the surroundings, the wood of the trees, the stone of the hill, and the sand of the shore, are woven into the fabric of the elevation. The weaving should however not be taken too literally: there is still a vigorous predominance of the horizontal in that warp and woof, on the inside and the outside. Specifically materialized verticals are avoided. The chimney is never visible as a strong vertical accent. In the interior the wooden horizontal of the trim repeats itself in the top cornice of the parapets, in shelves and table tops, or it goes up to become the sill of a clerestory window. All the materials—the wood of the wainscoting, the sandstone, the light yellow sienna plaster—change position below and above the trim. [FIG.3.14] Sometimes we find the heavy sandstone mass floating above a wooden panel, challenging the conventional tectonic image in which the heavy masses support the lighter constructions on top.

³⁴² FLW, *AB*, p. 192.

The heavy trim becomes the index of a general exchange between the realms of the earth and the sky weaving the human abode to a combination of a grotto and a tent. In the sandstone masses the earth rises, in the roof the house is folded into a lighting sky: “the house was set so sun came through the openings into every room sometime during the day.” The somewhat scattered windows in the high realm of the roof —clerestories and windows in gable ends—again function as a cosmic clock gathering the *templa* in the *templum* and giving the house its daily rhythm of the *tempi*.³⁴³

The wooden trim and all the other wooden rails are like the lines of a book. They are filled with the attributes of the household and with art—large fields with Japanese prints. But they also border on the sandstone masses. All these ‘materials’, including the views from the windows, do not stop changing roles in the play of the far and the near, both in space and in time. The stone sometimes functions as the token of something absolutely strange, a messenger from geological, prehuman times, like in the boulders above the fireplaces; but suddenly it may become familiar, a native spirit coming up in the walls and giving us the fascinating natural history of a place in the textures and the scars of its countenance. The same goes for the Japanese prints which function as windows on a far world incompatible to that of the settler or the pioneer. But a moment later the Genroku embroidery and the Moyomama screens become “messengers to Taliesin from other civilizations and thousands of years ago, spirits of peace and good will.”³⁴⁴

The vertical remains immanent, it is nothing more than the borderline between two adjacent rectangular surfaces. It is multiplied and loosely distributed along the horizontals. Its organizing action as an *axis mundi*—a vertical axis connecting sky and earth and so organizing a world—is suspended in this floating around of differences in which human attributes are of the same order as the rocks, the sienna plasterworks or the trees in the windows. They all imply spiritual stories, they are all culture and nature at the same time, the building of a terrestrial abode. The one does not become subordinated to the other in a role as background. Spatially, all surfaces are organized in contiguity, not in depth. They all have their own *temporal* depth.

³⁴³ As we saw in chapter 2, the four *templa* were the four directions of the sky referring to the four *tempi* of the day and gathered in the *templum*, the cut-out of the sky made by the augur in the rituals of inauguration of the Roman town. This cut out was ‘scanned’ by the surveyor in order to receive the auspices of the gods regarding the hour and the place of settlement. As I argued there we find a strong remembrance of these rituals in Wright’s architecture.

³⁴⁴ FLW, *AB*, p. 199.



FIG. 3.15 Pagoda-like small roofs piled up on top of the architect's quarters in Taliesin II. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

3.2.8 Climbing into the top: towering

In §2.3.3, when speaking of the Robie House, I introduced the idea of the watchtower. A partial storey on top covered with a roof. A towering moment or a climbing up of the house. I interpreted the tower-silhouette as a transfiguration of older defensive typologies such as that of the castle watchtower from which men were once spying the horizon on inimical manoeuvres. Past realities having lost their function transfigure to ornament. We see such watchtowers on more than one place in Taliesin North, to begin with the apartments of Wright's mother. But special ones are the pagoda-like piled up small roofs on top of the architect's quarters in Taliesin II. [FIG.3.15]

How should we interpret these 'watchtowers'? Do we finally have our view? In a perspectival depth or a panoramic circle? By now, it must have become clear that the view is nothing innocent, it is a looking out on or at the earth to have it as one's own. The glance of the conqueror. Could we interpret the towers in another way: consistent with the idea of the interior as a rising and falling horizon or earth-line and consistent with the idea of the watchtower as an armature-ornament? Suppose that going up means penetrating other layers of nature? That it means going up to the 'water-level' or to the surface of the earth in Wright's quasi subaquatic and quasi subterranean worlds?



FIG. 3.16 Katsushika Hokusai, The Minister Toru Daijin standing by a lake beneath a crescent moon, 1835.



FIG. 3.17 Katsushika Hokusai, Old View of the eight part bridge in Mikawa Province, c. 1834

A first indication of this meaning can be found in the overhanging eaves that do not disappear on these high places and cut off the sky as a dome. The soffit of the eave is a horizontal plane, a repetition of the surface of the earth, as Wright explained himself. "I had an idea that the planes parallel to the earth in buildings identify themselves with the ground, do most to make buildings belong to the ground."³⁴⁵ If the soffit is already an earth surface, we look down from the heightened earthline into that medium of the earth. It is the view we know from the Japanese woodblock prints of Hokusai and Hiroshige, in which the plane of the sky and the surface of the earth appear in contiguity but without perspectival depth.³⁴⁶ [FIG.3.16] [FIG.3.17] We find the horizon somewhere up in the picture or even off screen or sometimes simply dissolved in the mixture of clouds, rocks, woods and water. We find isles as floating patches of earth entering and leaving the frame. Often all that happens is piled up in a series of landscape elements. Bridges and ways cross through that medium in any

³⁴⁵ FLW, CW5, p. 79; AB, p. 164.

³⁴⁶ Katsushika Hokusai (1760-1849) and Ando Hiroshige (1797-1858) were Japanese Artist famous for their woodblock prints. Wright knew their work well, he delivered a short text on Hiroshige in 1906 and a long one on the Japanese print in general in 1912 and he mentions Hokusai on more than one occasion. He collected Japanese prints during his whole life. Cf. FLW, CW1, pp. 78-81; FLW, CW1, pp. 116-125.

direction. A mountain may rise up but we can see it float away before it reaches the upper edge of the frame. There is no perspective directing us in depth through the picture. If we look at such a woodblock print, our eye fleets over the surface of the world 'scanning' it.

For Wright the high position must have been the same. If we look at the already mentioned aerial perspective of Taliesin II, [FIG.3.18] earth becomes the great patchwork of patterns and textures, of bloom and branches, of ploughed soil and of water surfaces, of vineyards and sandstone flagstones. The house crosses the picture like a Hokusai bridge, relating all the different depth corresponding to the different events in the picture. We do not look at the horizon, we stay beneath the horizon. We hang in the top of Wright's tent. This view is complementary to the one on the balcony where the augur looked up, scanning the *templum* of the sky.

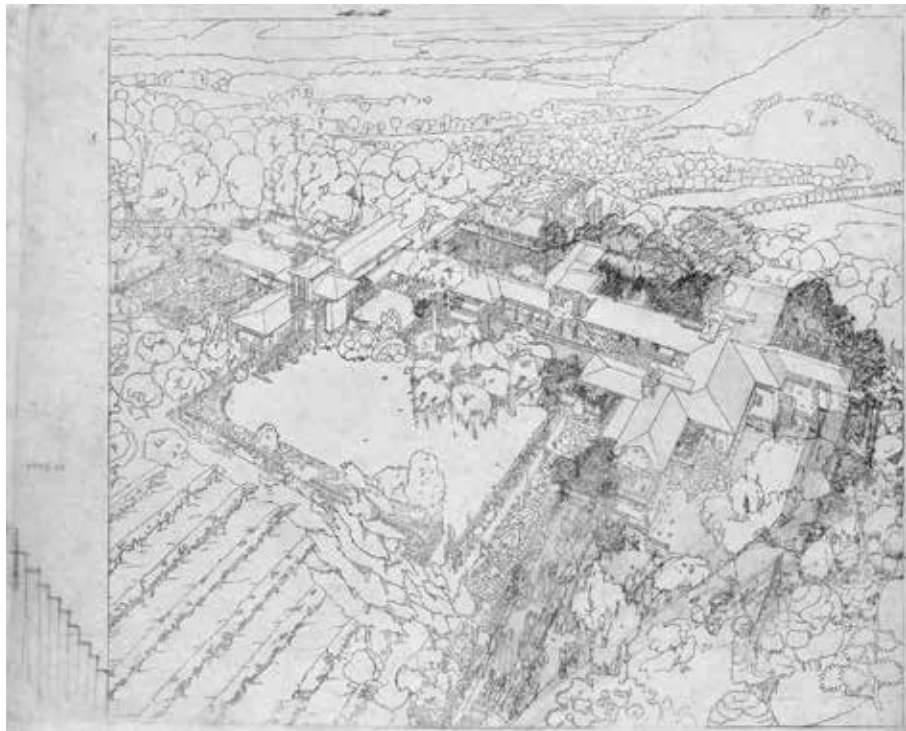


FIG. 3.18 Aerial perspective of Taliesin North II, 1914. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

The architect's quarters are to the right. We find the pagoda-like watchtowers on the long roof of those quarters. We can see how at the side of the valley, up in the picture, the house was packed in trees.

For the same reason Wright's roofs had to be articulated horizontally. Of course this was already the case for the wooden shingles Wright used in the Prairie-Houses and in Taliesin North. Their rows became horizontal lines, the same lines as those of the horizontal joints in the masonry. In the Clinton Walker House Wright deliberately used no vertical wood rolls in the copper roll cap roof system. The copper was horizontally articulated because the roof is touched by the horizon in the same way as all the other elements of the house. This horizontal articulation points to the fact that Wright couldn't see the sky as a dome overarching a world. He saw it as a series of layers, in the same way he saw the earth.

We must pause here a moment to summarize some of our findings on landscape, space, and the view and to see if we can come to a comprehensive and consistent interpretation of these notions from the point of view of our thesis regarding time in the work of Wright: to what kind of glance, to what kind of landscape and to what kind of space does our idea of time in architecture correspond? The Japanese print gave us a first hint. The space is shallow, there is just enough 'depth' to see that all things in the surroundings—far or near—are stitched together in a proximity that forces us to go from one part of the scene to a next, one element of the landscape to a next. Foreground and background are one and the same. In § 2.3.4 we met Heidegger's notion of the night as the *Näherin*, the 'nearster'/seamstress stitching together all the different stars as the different ages of the universe.³⁴⁷ If we go a path of Hokusai, we go into that proximity in which all things have come near, the shallow space in which all elements touch each other regardless their time of existence: geological mountain, cosmic moon, human on a horse, owl in the tree, cup on the picnic carpet. We stitch them together crossing Hokusai's bridge or going the winding floating road.

In fact we must consider all Wright's planes to be part of such a shallow space or shallow depth. The way we looked at the walls in Taliesin North in which stone 'panels' alternated with wood panels, stucco sienna planes, gilded surfaces and with Japanese prints was not different. I argued that all these surfaces were treated in a similar way, all of them becoming 'comparative' moments of a width while referring to a different time of origin, a different temporal depth. The eye goes from one plane to a next and gathers them together in a patchwork. If we stay in the interior of Taliesin North and look at the roof of the living room we see that the ridge is multiplied and that roof-space is again such a shallow space in which we move from ridge to ridge, crossing the folded plane of the ceiling: there is not one comprehensive ridge-fold.

³⁴⁷ Heidegger, *Feldweggespräche*, p. 157.

If we look at the carpet [FIG. 3.19] we see a multiplicity of geometrical figures: crosses with circles multiplying around their centre, squares, labyrinths. Time of the augur, time of math and time of myth. The cross with circles seem to indicate some subterranean event rippling the surface as if it was a seismographic registration. It is an unfolding figuration relating width to the depth of an origin. The square is the figure of pure width. The Greek figure of the labyrinth is a winding figure relating width to some event in the centre, a future event. A destiny. The carpet manifests itself as a deep surface, giving the width of the floor a multiplicity of figurations all pointing to an own depth.



FIG. 3.19 Living room in Taliesin North, rug with labyrinthic and rippling motifs. [Photo: © Yukio Futagawa]

In the planar view there is no ideal point of view. Following the patchwork of planes and figures, the eye may take all the points of view by fleeting or flying over the surface, feeling contrasting emotions in all the events registered, eventually coordinating them to an ensemble of voices. To avoid any confusion: when talking of such a slightly heightened position of the eye, we are not talking of an *overview*, a subject looking down on an objectified earth spreading out beneath her, nor a subject spying the horizon. It is not a distant gaze that is born here, contracting the different emotions and becoming master of them in a dominating prospect, as in Petrarch. When Petrarch climbed his mountain, during his way up he had all kinds of doubts on the meaning of that act, remembering critical passages in the bible. But when he reached the top, all religious doubts were resolved in a glorious feeling of a world lying down at his feet and ready to open up to human's actions and passions. Petrarch's experience implies a dialectal synthesis. Having overcome the slope and the doubt, he becomes the sublated *subject*, the dominus of the site and the situation, by ending on top. Literally and figurally.

In Wright's heightened position, the spectator becomes what Alfred North Whitehead calls the *superject* of the situation.³⁴⁸ Where the concept of a subject always implies a taking distance and an overcoming, the superject composes the multiple — sometimes contrasting—feelings it may have of the situation from which it rises to a deepened feeling without taking distance. We already met such a superject when speaking of Thoreau, lying on his frozen Walden pond, looking “in the quiet parlor of the fishes, pervaded by a softened light as through a window of ground glass.”³⁴⁹ For Thoreau, the human, rising from its natural past, may look back on nature and its creatures while knowing he is still one of them and he tears pleasure, solidarity and knowledge out of that experience. In fact Wright's text on the cornucopia of Taliesin itself is such a superject. We go from berries and currants to chestnut trees, from turnips, potatoes, carrots, and celery, to a herd of “gentle Holsteins and a monarch of a bull—a sleek gleaming decoration of the fields and meadows as they moved about grazing.”³⁵⁰ All the different aspects of a dreamed life at the farm of Taliesin compose the portrait of Wright's landscape as if it was an Arcimboldo face, consisting of multiple fruits. It is just an adding up without hierarchy and without a conclusion. The description tells the overflowing and overwhelming richness but in such a way that the multiplicity of feelings involved are coordinated to a little *Georgics*, a eulogy of life on the land.

Shallow, non-perspectival space, the width of multiplicities and the fleeting eye of the superject correspond to Wright's bas-relief of the earth. They inaugurate a multiplicity of times in a patchwork of planes. Prehuman, geological time in the Cambrian sandstone rising in the walls; historical time in the works of art as “messages from other cultures”; times of natural histories of materials in the grain of the woods having grown in the direct surroundings and in the sand rubbed in the parapets and taken from the shore of the river Wisconsin; mythical and mathematical time in the carpet; they are all stitched together to an environment and it are exactly the contrasting feelings, which lead to a deepened feeling of harmony in the situation.

³⁴⁸ Alfred North Whitehead (1861/1941) was an English mathematician and philosopher who became famous for his process-philosophy in which 'feeling' is the general way in which everything captures the situation from which it rises. Alfred North Whitehead, *Process and Reality*, London New York, The Free Press, 1978 [1929]. For the superject see: p. 166.

³⁴⁹ Thoreau, *Walden*, p. 304.

³⁵⁰ FLW, *AB*, pp. 193-194.

3.2.9 The immature vertical: the house as a bas-relief of the earth

Thinking of this shallow depth, we may now better understand what we earlier called the “immature vertical.” In Wright’s strongly horizontally articulated architecture, ‘classical’ proportions are lacking. Proportions are compressed and stretched, squatty in the vertical direction and filiform in the horizontal. The vertical is consistently shrunk. This was not because it had to refer to the posture of Wright, as is often said and on which he quipped himself, his not so tall body supposedly being the Vitruvius-man or the Modulor for his own architecture. It was because the vertical remained *immanent* and didn’t rise to that point of maturity, of fullness in which it could become a new measure of things. The vertical was not allowed to become the token of transcendence. If we look at the stone parts, Wright’s architecture must be seen as an enormous bas-relief of the earth. The building must indeed “grow out of the ground into the light,” but in practice it stays stuck in the ground, it cannot grow out fully. All the elements remain in a state in which they may still transform into another. In Taliesin you cannot say ‘chimney’ because it remains a heightened wall. You cannot say ‘parapet’ because it is a locally rising floor. A hearth is a rock turned on its side. They are all ‘risers’ while earth rises, they are all modifications of the same ‘outgrowing’ force. The sandstone is still embryonic matter, not yet fully differentiated to architectonic parts. “Finally it was not so easy to say where pavement and walls left off and ground began.”³⁵¹ The bas-relief of Taliesin North is a metamorphosis of the earth, a grand Mannerist *non-finito*.³⁵² Why is it that Wright so often did not finish his retaining walls, his parapets, and his chimneys, with a visible covering or a real cap? It is because they were on-going, out-growing earth, earth birthing and still seeking definite architectural forms. We stay in the belly of the earth. Just like in Buontalenti’s grotto, in which all the figures of the bas relief of the wall stay stuck in the spongy matter of the spume stone, forming just enough defining contour to recognize what they could become, but then falling back in their material but ectoplasm mass. [FIG.3.20-3.21]

³⁵¹ FLW, *AB*, p194. Another interesting example of such a floor becoming a wall and vice versa, is the Malcolm Willey House in which a specific brick masonry pattern is used for wall and floor.

³⁵² Michelangelo believed that the sculpture was already there in the block of marble. Sculptures were left unfinished because the block of marble stopped suggesting the lines and forms of a further elaboration, as we can see in ‘the slaves’ of Michelangelo. In Mannerist art, the unfinished character became an artistic category: the *non-finito*.



FIG. 3.20 Buontalenti, Grotto in the Boboli Gardens. [Photo: Sonofgroucho, CC BY-SA 2.0]



FIG. 3.21 Frank Lloyd Wright, sculpture worked into the sandstone wall, Taliesin North. [Photo: Stilfehler, CC BY-SA 4.0]

The lack of clear definitions of architectural elements also pertains to the roof coming down in the wall: “wall-roof.” Such double definitions are examples of Wright’s ideas on continuity and plasticity implying a possibility of elements taking over their mutual roles.³⁵³ Sometimes we even see it in the windows: looking at the south façade of the Boynton House we see a cascade of the same windows coming down. [FIG.3.22] Some provide the living room with a halo of light in the upper region. Some give out on the horizon while inviting that outside to come in. Some are simply the casement windows of the sleeping rooms on the second floor. But laid out in the same horizontal strips, they are poorly individualized. Typologically they have their place in the elevation. Which comes down to saying that typification is merely a question of positions and not also of idea and form.

How should we understand this lack of definition, or more positively, this suppleness to change roles? In his *Philosophy of Art* Schelling tells us that “nothing separate becomes so by limitation, but by the indwelling energy by which it affirms its own entirety, in opposition to the whole.”³⁵⁴ It is this energy that limits so the infinite can appear in a finite and measured form and shine as the thing that it is. In Wright’s architecture the contracting material forces, striving to stay one with the earth, are too powerful to allow spirit to close up matter in a definite architectural form, the concept cannot be completed. The roof stays stuck in the wall: “wall-roof.”

³⁵³ On plasticity and continuity: FLW, *AB*, pp.365-369.

³⁵⁴ F.W.J. Von Schelling, *Philosophy of art, An Oration on the True Relation between the Plastic Arts and Nature*, translated by A. Johnson, London: Chapman, 1845 [1807], p. 12.



FIG. 3.22 Boynton House, Rochester (NY), 1908. [Photo: Hans Padelt, Library of Congress]

The bas relief forms a shallow depth in which all the elements remain in a budding, premature state, in which they reflect each other. A finite appearance as this or that architectural element is 'suppressed.' The shallow depth is a hesitating, vacillating domain. If Wright would have been a real Goth, the flower would have come shooting out of the ground while fully differentiating itself in the stem, the leaves and the corolla, all closing their forms while their respective characters would shine in the light. In Wright's architecture the vertical energy is immediately broken in the horizontal, everything has to be said by that same line, by the same earthline climbing up. Just like in the woodblock print of Hokusai, we should speak of a floating world.³⁵⁵

But what about all the verticals in the sections of Taliesin? Yes, they are verticals, but they hardly ever become substantialized elements. The vertical always remains a corner. It defines the mobility, the fugitive character of both interior and exterior. This is why columns, piers and abutments are hardly part of Wright's vocabulary. They always seem out of place. They *stand* too much and seem to stand on their own. Definitely separated. At most they are allowed to form a screen: a horizontal rhythm. And it is true that they appear sometimes, like in the corner of the living room of Taliesin North or in the living room of Fallingwater. And Wright must have felt unlucky with them all. He sometimes put them in the shadow as we saw for the supporting piers of the wall-screen in the Robie House. Another time he stretched them a little to make them walls. He always stressed the horizontals as wrapping around the vertical body thus making it move on the spot. Finally, in their material

³⁵⁵ Rhiannon Paget. *Hokusai*. Köln: Taschen, 2018. pp.7-21.

appearance, he made the corners dashed lines by the protruding and receding movement of the layers of masonry. A vibrating vertical. The column may be part of the relief of the earth in which it remains one of the expressions variegating on the word 'rising.' However, in their appearance, columns must be defined as series of corners. Just like the floor becoming parapet becoming wall becoming chimney, the mass of the wall in the plan is modulated by a protean movement: going around the corner. Columns, piers, pilasters, dams, recesses, niches, nooks, chimneys, all the same movements. Ressault in some form. Or in Wright's words: "plasticity."³⁵⁶

Certainly, there are always flashes of recognition, referring to some architectural definition. For instance: of the pedestals stopping short of the soffit in the Darwin D. Martin House we could easily say they are unfinished—*non-finito*—columns. The concept of the column is there in the rising filiform masonry. In Wright's architecture we discern stylobates, walls, species of windows, eaves and roofs. We can name the classical elements. The architectural formation remains intact to some degree. Wright left the definitions vague, speculating on a common original architectural substance. If Wright says that the only method worth the architect's efforts is growth, his architecture remains in the period of growth in which the parts are not yet differentiated and separated definitely. Schelling's "indwelling energy" is partly consumed by the dwelling³⁵⁷ around in that zone of indiscernibility between nature and architecture with which we began our exposition on Taliesin North. For that reason we must name Wright's architecture a *young* architecture, just being born from the earth.

Architecture may approach nature and nature may approach architecture, but they are not the same. In Wright's architecture we also see a taking distance from and a crossing through nature. In Taliesin North the house seems to move around the hilltop and at many points it loses contact dancing on pier-legs. How do these seemingly paradoxical aspects relate to each other? Is it possible to describe the relation between architecture and nature in terms of a "seeking fellowship" and a "taking distance" at the same time? To answer these questions we must more explicitly take into account the role of technique, which remained a little bit on the background in the study of Taliesin North. We will visit Fallingwater now to closely monitor the exact role of the natural artefacts in and around the house and of the different materials defining the planes of the interior. I will show how a heightened tension between architecture and nature leads to a system of gradations *and* jumps, accounting for both continuity and separation.

³⁵⁶ FLW, AB, p. 167.

³⁵⁷ Dwelling as we saw in the previous chapter, from Dutch *dwalen*: wandering.

3.3 The house at Bear Run

“The Cheyenne people believe that everything is alive: not only men and animals but also water and earth and stone...and also the dead... This is the *way things are*. But the white men believe that everything is dead: stone, earth, animals and people, even their own people.”

Thomas Berger ³⁵⁸

3.3.1 Introduction

Before starting our analysis of Fallingwater, I will give a short description of Wright's client and of the site.³⁵⁹ Fallingwater was commissioned by Edgar. J Kaufmann, a rich entrepreneur running a store in the heart of Pittsburgh. He and his wife Lillianne wanted a weekend-home not too far from Pittsburgh. The site near Mill Run in Pennsylvania was already their property. We find the site in a valley in the Allegheny Mountains, a part of the Appalachian Mountain range. The valley is framed by Chestnut Ridge on the west side—on the lower slopes of which we find the house—and Laurel Hill on the east. The valley itself descends rapidly to join the Ohio pyle valley, where the Bear Run, a little mountain stream giving its name to the site, joins the river Youghiogheny.

The mass of these mountains was formed during the Cambrian period in a slow marine sedimentation process in which muds, sands and shells were compressed to shales, sandstones and limestones on the floor of what then—more than 400 million years ago—was still the Appalachian sea. In a process of multiple tectonic plate collision the Allegheny plateau and the Allegheny front and the other ridges of the Appalachian mountains were formed in parallel open folds. Erosion by water then started wearing away the softer rock strata, cutting ever deeper channels, in which parts of rock formations broke off and came down. These rocks form the cascade of yellow and grey sandstone we see in the glen of Fallingwater. [FIG.3.23-3.24]

³⁵⁸ Thomas Berger, *Little Big Man*. New York: Dial Press, 2005 [1964], p. 213-14.

³⁵⁹ An excellent description of the site and the commission is given by Donald Hoffmann. *Frank Lloyd Wright's Fallingwater, The house and its history*, New York: Dover, 1978, pp.3-15. I follow him here in my description of the site, unless mentioned otherwise.



FIG. 3.23 Bear Run and Cambrian sandstone masses. [Photo: from a postcard before 1912; Courtesy of The Western Pennsylvania Conservancy]



FIG. 3.24 Rock ledges around the house Fallingwater. [Photo: Carol M. Highsmith, Library of Congress]

3.3.2 Landscape as oecumene

Wright obtained the commission for Fallingwater in 1934. The collaboration between Kaufmann and Wright started with a controversy on the exact position of the house. In this controversy we recognize Wright's critical position when it comes to Western, European ideas about landscape and the corresponding view. During the first presentation of the plans, Kaufmann remarked that he had expected that Wright would have placed the house *near* the waterfall and not on it. He had hoped to *see* the Waterfall, to have it as his view, available from the house.³⁶⁰ Wright's answer— "E.J., I want you to live with the waterfall, not just to look at it, but for it to become an integral part of your lives"—is the same answer he gave himself when thinking on the site of Taliesin North: "to live *with* the hill." In both formulations we find an oecumenical idea of the inhabitation of the crust of the earth. This *oikoumène* goes beyond the human habitat to include all other nature.³⁶¹ To live with: Timothy Morton's "existence is always co-existence."³⁶² The 'living with' problematizes the view and the overview of the surroundings because it is in the view we see nature as posed in front of or opposed to us, as being there only for us and not also as for itself.

In all his eye-level horizontal windows Wright cuts off the view by his cantilevering roofs and by the parapets. The glance is interrupted in its going around the natural things outside and is so prevented from determining them in their contour and their sight. This means that a tree or any other 'object' in the landscape is often partly hidden. When seen, it comes from 'off screen'—the band window being the screen—and it is often presented to us as a partial object. It keeps a hidden life referring to its own world. We see the branches or the crown or we see the trunk or we might even see the way the tree takes root in the ground. But we cannot have these aspects simultaneously in a closed contour forming a face or a sight, the tree always partly escapes us. In Fallingwater, we see rhythms of trunks. If we want to 'identify' the tree we have to go onto the balcony, but if we do so we are drawn into the realm of the tree itself. We are seduced to annihilate the distance, to leave the house and 'ecstatically,' standing outside the house, we reside under the spell of the tree. As we will see, Fallingwater is indeed conceived as a 'machine' to meet the site *without the sight*.

³⁶⁰ Hoffmann, Frank Lloyd Wright's Fallingwater, p.15.

³⁶¹ Oecumene: in the Christian religion oecumene means the striving for unity and cooperation in the divided Christian Church. The word has a Greek origin: oikoumène, the whole of the inhabited world. Inhabited here means inhabited by humans, as distinguished from the uninhabited world. I will use the term here as a crossing of the Greek and Christian meaning: a human striving to inhabit the earth with all other organic and inorganic life on a basis of respect and equality, a striving to be a non-dominant part of the environment.

³⁶² Timothy Morton, *Dark Ecology, For a Logic of Future coexistence*. New York, Columbia University Press, 2016, p. 27.

3.3.3 Descent into the canyon: an architectural cascade

It was Donald Hoffmann who for the first time remarked that the house is not only conceived as balancing above a cascading stream, but as being a cascade itself.³⁶³ It is a series of steps descending a sloping site. If we look from the south, we see the house coming down from the mountainside towards the stream. We see the canopy of the guest-house as a first series of stairs and staying on the outside we see the house itself as a cascade of balconies stepping down to the water.³⁶⁴ This constellation is entirely informal. The going down is a descent finding a relaxed way down across the slope, just as the stream itself finds its way down crossing the boulders and the rocks.

The image of a descent inside the house is even more interesting: Wright conceived the interior as a series of canyons eroded by an imaginary stream. [FIG.3.25-3.26] For that reason he wanted the flagstones on the floors to be waxed, mimicking the bed of a stream. The double cushioned hassocks depict little rafts floating on the water. When the flagstone floors continue outside, the balconies become the basins of this second, architectural cascade, framed by the concrete parapets. Some of the stairs find their way down between the sandstone walls, which in their turn look like the eroded sides of a canyon with its endless layers, its texture remembering the fight of the stone against the water. The steps to the plunge and all the stairs in the north part of the house give us this impression of going up or down along the walls of a somewhat smoothened but still rough rocky formation. We are going down in the canyon as if the house had already been there for a long time, being the homestead of someone or something else, something that already left its temporary abode. The suspended character of some of the other stairs at the outside makes this image even more precise: steel rods bearing the stairs function as ropes, as the light ephemeral construction we often see when hiking steep routes along ravines. Treading these stairs, we become speleologists. Going down then means following the spurs of that something, a past force having opened the space as its abode. We feel that it is still present. Indeed, the house is conceived to meet that spirit.

³⁶³ Hoffmann, Donald, 1978 p. 59 "Throughout the house the steps and stairs would serve not only as passages but also as reflections of the cascading character of the site." According to Hoffmann the motif of the cascade is everywhere. We see it in the little staircase of the sleeping room on the west-side but also in the large canopy accompanying the guest from the guest-house to the main house. Cf. Donald Hoffmann, *Understanding Wright*, p. 88.

³⁶⁴ Levine calls the balconies "trays, shaped like broad shallow basins." *The architecture of Frank Lloyd Wright*, p. 241.



FIG. 3.25 Fallingwater, 'canyon staircase' leading to the plunge pool. [Photo: Apostolo]



FIG. 3.26 Fallingwater, staircase leading to the bridge to the guest apartments. [Courtesy of The Western Pennsylvania Conservancy]



FIG. 3.27 Fallingwater. Staircase from the living room to the Bear Run. [Photo: © Yukio Futagawa]

Finally, in the last flight of stairs from the living room down to the water itself, the heavy walls disappear and we stand freely with the stream. [FIG.3.27] But do we really *stand* there, above the level of the water on that somewhat broadened tread, suspended a little bit dreamlike between the house and the stream? Having left the solid ground under our feet, having given up the firm *stance*, we see the big bolsters that carry the house as the base part of a crane having hoisted us in place and still lifting us a little bit above the stream. It is the suspense of a true meeting, a meeting halfway. A bit disoriented because we are under the balcony, already in the 'cellar.' Hanging, we must surrender to the situation. This also pertains to the stream: partially framed by architecture, trespassing under a strange ceiling. There is no symmetry in that meeting, it is a bit furtive, the stream holding and flowing at the same time, soon out of sight.

3.3.4 Architecture between nature and culture?

But the stream is only one of the 'inhabitants.' The rock on which Kaufmann used to sun is at the centre of the house. We find it in front of the hearth. Wright first intended to have it trimmed flush with the floor. But when Kaufmann asked him to leave it as it was, cropping out of the floor, he immediately became enthusiastic. "Count one for you E.J."³⁶⁵ He must have been surprised, but the idea so strongly appealed to him that he later used it in the corridor to the guest house once more. There we find a rock perforating the plastered wall while at the same time a little moss garden passes the glass window. We have to see these 'scenes' as the staged act of blurring the border between nature outside and the cultured life of the inhabitants. Up until this point in his career, Wright had always adhered to the architectural apparatus as something transforming nature into culture and thus mediating between the human interior and the natural site. Even in Taliesin North the proximity to nature eventually did not lead to a final blurring of the border. Architectural elements appeared in a 'premature state' but they never fell back into raw nature. But here in Fallingwater it is for the first time Wright allows nature to enter in a pure form. The *templum* as the cut guaranteeing us a smooth existence on the floor is suspended in favour of the rock. The first sign of a Romantic ruin? The token of a true *oecumene* of man and nature? Something symbolical?

Before hastening to conclusions, however, we should come to terms with that transformation of nature to culture that is implied in the idea of the interior. We will do so by making a long detour in which we will consider the role of the different

³⁶⁵ Hoffmann, *Frank Lloyd Wright's Fallingwater*, p. 56.

materials in the interior to see how architecture already disposes of a full apparatus to tell us about that transformation of nature to culture. So we can better understand what drove Wright to leave the rock intact.

Vilem Flusser, the Czech-Brazil technique philosopher, tells us the story of the bare wall. The bare wall is the naked wall. It is nature. *Natus*.³⁶⁶ Born nakedly. It has to be covered. It challenges the human because we associate nakedness with chaos. It has to be tamed, that is part of the Christian tradition. The wall has to be man-made, repeating the act of god.³⁶⁷ Human left the cave, to use Wright's words, when the caveman married the nomad to settle on the surface of the earth.³⁶⁸ Carpets were hung on the naked walls and laid on the floors. The walls were cladded. Since that mythical moment a culture of the interior developed and it became necessary to distinguish between the wall (*Mauer/murus*) as the protective and structural kernel, and the cladding as the ornamental dress of the house (*Wand/Gewand*). It was Semper who elaborated these distinctions, insisting on the textile origins of architecture, be it those of the Caribbean hut, be them those of the nomad's tent.³⁶⁹ Architecture is cladding (*Bekleidung*). The bare wall, that "decadent descendant" of the cave wall, must be covered.³⁷⁰ Nature must be hidden and a surface is shaped to evoke or mirror our own spirits.

When it comes to the material finishing of our buildings, in some way matter must become the foil of our dreams. In the history of cladding materials, we come across a same dichotomy of culture and nature as in the idea of the interior (as opposed to the exterior) itself. We have materials that deliver an empty and refined interior, available to be freely occupied by our thoughts, our ideas and our idols. Plaster has always been that ideal material, the quasi neutral background of our lives and the sheet on which to project our images. Or we can always hang our paintings on it as the window on an ideal landscape. As a material, plaster, just like concrete or plastic, completely offers itself to human's will, it is soft matter to be poured into the mold of our ideas. It promises us complete absolutism in freeing us of material resistance and thus it offers us a world in which we have things completely our way. For that reason, Baudrillard calls them "mental substances."³⁷¹

³⁶⁶ Nature comes from Latin *natura*, which comes from *natus*: past participle of *nasci*: to be born.

³⁶⁷ Flusser, Vilem, *Bare Walls*. In: *The shape of things, a philosophy of design*. London: Reaktion books Ltd, 2007 [1993], p. 72.

³⁶⁸ FLW, *LC*, p. 23.

³⁶⁹ Semper, Gottfried: *Style in the Technical and tectonic arts; or Practical Aesthetics*. Translation by Harry Francis Mallgrave and Michael Robinson, Los Angeles, CA: Getty publications, 2004 [1863], p. 248.

³⁷⁰ Flusser, *Bare Walls*. p. 43. "Historically our walls are late and decadent forms of cave walls."

³⁷¹ Baudrillard, Jean, *L'Ange de Stuc*. In: *L'Echange symbolique et la mort*, Paris: Gallimard, 1976, p. 81.

Rustication has always been something at the other side of the spectrum, almost obscuring reflection. We feel the life of the stone in the surface. Nature approaches. We are fascinated by the textures, man made no less than nature born. We might feel the millions of years of the formation of the stone, the slow sedimentation of the shells of billions of crustaceans crushed under gravitation to form limestone.³⁷² In the protrusions we imagine the resistance, the rock holding on to itself, persisting. Texture testifies of an inner force and spirit of matter that might be even nearer to our own life than the foil of plaster which will always remain purely cerebral stuff.

It is no coincidence that I use these two types of materials in my generic observations on the culture of the interior. In Fallingwater Wright uses them both, smooth 'soft' concrete and stucco on the one hand and rough sandstone rustication on the other. In fact, in Fallingwater, space must quite literally be defined here as the difference (literally 'the setting apart'³⁷³) between these two: everywhere we move between the concrete or plastered ceilings and the sandstone floor in a desperately low, shallow space. The human inhabitant quite literally finds his play space in this difference between the more natural and the more cerebral materials.

If we focus for a moment on the rustication we see it clearly remains man-made without obscuring its past life of natural stone. The mason collaborates with nature in drawing us 'underground.' According to Wright, the rustication was "a rough but sophisticated abstraction of the native sedimentary beds."³⁷⁴ It is the stone hewn out of the quarry and chiselled for its place in the masonry that gives us the idea of a room carved out of the earth. The mason acts like the stream, as if he was eroding a series of soft limestone layers in a geological Karst formation; or even better, he acts like the geologist. In the interior humans and their attributes become fossils themselves. We find ourselves cut out of Cambrian layers. The great red kettle in Fallingwater is such a fossil, a human attribute still partly stuck in its encasing in the sandstone wall. [FIG.3.28] With the steel arm hinging in the wall, we sweep that fossil out and in the same act place ourselves back in that geological time. Fallingwater 'begins' in this differing or carrying over from a geological to a human story. When sweeping the kettle into the fire, the hearth becomes the social centre and a human story starts.

³⁷² Cohen, Jeffrey Jerome, *Stone, an ecology of the inhuman*, Minneapolis/London: University of Minnesota Press, 2015, p. 20.

³⁷³ Difference comes from the Latin *dis* 'apart, away from' + *ferre* 'to bear, to carry.' <https://www.etymonline.com/search?q=difference>

³⁷⁴ Hoffmann, *Frank Lloyd Wright's Fallingwater*, p 26.



FIG. 3.28 Fallingwater. Living room with rock in front of the hearth and the spherical kettle in its encasing. [Photo: Jack E Boucher]

But the spherical kettle is not only a social pivot. It also functions as the hinge between the sandstone floors and walls as a first series of more terrestrial materials and a second series of more artificial ones. The steel of the Cherokee red kettle itself continues in the window frames, the steel shelves and the frame of the built-in lights, the artificial skylight we met in the second chapter as the electronic *templum*. The surfaces of the stucco and concrete belong to this artificial series. With their ethereal, smooth, and reflecting surfaces, all these parts refer to a technical sky, to what we earlier called the celestial city, the city of transport, electricity and communication. Levine is right in calling the yellow concrete masses “airborne.”³⁷⁵ They hang in the glen as if they were hovering space-ships. The yellow bolsters bearing the floor of the living room look like landing gear. The airborne city has come down to find its terrestrial counterpart: the ladder-like windows occurring in the windows on the glass corner of the kitchen and the bedrooms depict the ladders connecting both ‘cities,’ the celestial and the terrestrial one. [FIG. 3.29-3.30]

³⁷⁵ Levine, *The architecture of Frank Lloyd Wright*, p. 250.



FIG. 3.29 Fallingwater. Windows like modern Jacob's ladders connecting the "airborne" and the terrestrial city. [Photo: © Yukio Futagawa]



FIG. 3.30 Fallingwater. Windows like Jacobs ladders connecting the "airborne" and the terrestrial city. [Photo: Cambridge 2000 Gallery]

3.3.5 Matter and spirit

Let's have a look how both materials, plaster (or concrete) and sandstone, are used in the interior. Just as in Taliesin North we see the ceiling coming down in the plastered wall and the sandstone floor rising in the elevation. In the area where they meet they alternate. It is this zone where we find the steel shelves moving along the wall crossing freely all the material surfaces they find on their way. Sometimes the shelves 'plough' through the plasterwork, sometimes they bridge the glass of a window, then they go around the corner to submerge in the sandstone while at another spot emerging again. The paraphernalia of the human inhabitants placed on the shelves assume a different aspect every time they change background: they seem to be at home as available utensils when clearly outlined against the white plaster; they become opaque objects in the backlight of the window, speculating on a being there 'for themselves.' And when set in front of the rough rustication we become aware of their relative youth, alluding to our being the latest guests in the gathering near the stream. [FIG.3.31]



FIG. 3.31 Fallingwater. Shelves crossing different material surfaces. [Photo: Anny C. Wynn]

In order to better understand the respective roles of the materials in their differing series we should pay some extra attention to the role of glass. Even if in Fallingwater the concrete and sandstone surfaces continue on both sides of the windows, for Wright glass was not the medium of transparency it was for the Modern Movement. The glass is put in the walls without mediating styles and on the corners it is mitred. The panes of glass suggest cutting through the stone, then through air, making space and matter of the same order.

Glass was something special for Wright. When he foresaw buildings completely in glass and steel, glass opaque, glass transparent and glass coloured, he thought of them as huge crystals or precious stones capturing and refracting the daylight while giving it back at night.³⁷⁶ But glass was also something ultimately ephemeral, “a thin sheet of air in air to keep air out or to keep air in.”³⁷⁷ This amazing formula makes glass air with a great density, while at the same time making space something never empty but a very diffused form of glass. An ether transporting light.

³⁷⁶ FLW, *In the cause of architecture VI: the meaning of materials-glass*. CW1, p.292.

³⁷⁷ *Ibid.*, p.291.

In Fallingwater the repeated horizontal rail refers to the layeredness of a universe full of matter, “diffusing, refracting, and reflecting the light.”³⁷⁸ The light here is not a sun casting clear shadows. That was “the brushwork of the architect when he modelled his architectural forms.”³⁷⁹ Glass as dense air, and air as dissolved glass make Fallingwater a prism. “The prism has always fascinated man. The machine gives him his opportunity in glass.”³⁸⁰

When the inhabitants move through the house, they move through this prism. The mind itself becomes the medium filling the shallow space between the ceiling and the floor. Every material surface crossed by the human eye, reflects, refracts, or transports the light in its own way, it tells its own story. The stucco and concrete surfaces operate as man’s mirrors, concrete according to Wright being the plastic material par excellence,³⁸¹ ready to be ‘kneaded’ by man according to his wishes. As we saw such materials reflect an almost pure interior state. The sandstone far more absorbs the light, light penetrates a geological past. If light is an early form of spirit, as Schelling asserted,³⁸² spirit reflects itself in the different material states, with different grades of sympathy, recognition and opacity.

Wright’s essays on ‘the meaning of materials’ in the series *In the cause of architecture*,³⁸³ written for the Architectural record in 1928, all testify of matter as spiritual stuff. They describe materials in their natural origins, but they also see them as gifts to a technical imagination. For Wright and Schelling matter and spirit are intimately bound up. Wright is more than explicit about this entanglement of matter and spirit: “To regard architecture as a triumph of spirit over matter was to assume a false and fatal division of the house against itself. A greater triumph will be man’s when he triumphs through the nature of matter over the superstition that separates him from its spirit.”³⁸⁴ *Its spirit: matter’s spirit. Matter is already spirit, it is alive. If today ‘new materialist’ philosophers often say that matter has agency, that it is “Vibrant Matter,”*³⁸⁵ we can already find sparkles of such a thought in Schelling and Wright.

³⁷⁸ Ibid., p.292.

³⁷⁹ Ibid., p.296.

³⁸⁰ Ibid., p.292.

³⁸¹ FLW, *In the cause of architecture VI: the meaning of materials-concrete*. CW1, p.301.

³⁸² FJW Schelling, F.W.J., *Von der Weltseele*, 1798, Altenmünster: Jazzybeeeverlag Jürgen Beck, 2018 (Kobo e-book, no pagination)

³⁸³ FLW, CW1, pp. 269-307.

³⁸⁴ Donald Hoffmann, *Understanding Wright*, p. 1.

³⁸⁵ Jane Bennet, *Vibrant Matter, a Political Ecology of Things*, Durham (NC), Duke University Press, 2010.

Matter and spirit: we recognize here Schelling's duel of forces: gravity and light, contraction and expansion. If light is an early form of spirit, matter in its turn is not only *Schwere* (gravity) but also an early form of *Schwermut* (melancholy). An affect. It appeals to mood, it enflames human's mind because humans and materials are made out of the same spiritual matter. That is why wood, for Wright, may be "sympathetic to man, the most humanly intimate of all materials,"³⁸⁶ "a brother to the man"³⁸⁷ and why "in the stony bonework of the earth (...) there sleep forms and styles for all the ages for all of man."³⁸⁸

And to conclude our detour on architecture between nature and culture: all architectural materials have to be seen as grades of matter and spirit. We can see them on a scale between the processed and the unprocessed, the more cultural and the more natural, they will never fall of that scale to become opposed as pure spirit and pure gravity, as pure artefact and pure nature, the cave wall. In fact, it was Wright himself who always pointed to nature's supreme technical skills (e.g. the cantilevering branch), and pleaded heavily that modern technique should always remain tuned "in the nature of materials," that "the beautiful properties of wood may be released by the machine to the hand of the architect."³⁸⁹

3.3.6 Time crystals or how we should see the rock

After this interpretation of the different materials in Fallingwater, we must go back to the boulder in front of the hearth. Why did Wright leave it unchanged? If it wouldn't have pleased him, he probably wouldn't have granted Kaufmann the pleasure of leaving it intact. As we saw in the previous paragraphs, for an architect it remains strange matter, something sticking in the architectural flesh of the house like a splitter of pure nature, 'fallen of the nature-culture scale.' It is a more than bare wall. A flash of the inhuman while referring to far beyond imaginable timespans.

We must make a step further because although seemingly inhuman, the rock opens up to a series of stories: fallen down in the erosion of the Allegheny plateau, it tells us a geological story; in its relatedness with the flagstones of the floor and the rustication of the walls, it tells us about the material origins of the building.

³⁸⁶ FLW, *CW1*, p. 277.

³⁸⁷ *Ibid.*, p. 280

³⁸⁸ *Ibid.*, p. 275.

³⁸⁹ *Ibid.*, p. 283

In its relatedness to all other natural beings on the site it is part of a natural history. The rock is what Deleuze in his second book on film has called a crystal image, a short circuit of the actual and the virtual. A crystal image, according to Deleuze, is an image that has the potency to crystallize an entire environment into the setting of a dream, a past, an unknown future, an already past future, shortly a different time. It is a time-machine. In the crystal image more than one story may crystallize and we circulate between them while in the different times broached different aspects become elucidated or obscured.³⁹⁰

The rock may transport us to a paradisiacal time in which human lived with the rocks, the stream, and the trees. Look at the trees that were spared too: the ones piercing the west balcony and that other one the beam of the trellis so elegantly swings around. [FIG.3.32] To let it be. Gestures of politeness, inaugurating a coexistence of human and nature. A eutopian time (a good time). Ackerman is right in saying that Fallingwater is “an evocation of communion with the stone and water.”³⁹¹ Humans may commune with these beings because they share the same spiritual roots in nature. The house is a medium to remember that bond, to settle a renewed natural community.³⁹²



FIG. 3.32 Fallingwater.
“Tree spared by house.”
[Photo: Daderot, CC0 1.0]

³⁹⁰ Deleuze, *Cinéma 2, l'Image Temps*, Paris : Les Editions de Minuit, 1985, pp. 92-128.

³⁹¹ Ackerman, *The villa, Form and Ideology of Country Houses*, p. 282.

³⁹² In the words of Wright in a 1952 television interview with Hugh Downs for the National Broadcasting Company.: “He (Kaufman) loved to sit where the house was built and liked to listen to the waterfall. So that was a prime motive in the design. I think you can hear the waterfall when you look at the design. At least it is there and he lives intimately with the thing he loves.” Cf. Hoffmann, *Frank Lloyds Wright's Fallingwater*. p. 18.

We cannot deny, however, that the advent of man has changed the past. The old rock and the old stream have died a little bit. Certainly that is part of the melancholy of the place. For that reason it would be better to call them relics. The rock is spared but buried at the same time. We can touch it, we can sit on it, and this tactile status is the condition to forget it so we can remember it in the flesh. It will become a habit in our habitat. Is it not the same for the stream? We never have it as our view, except for the one from the balcony, the one we already identified as the view of the superject, looking down into another parlour of the fishes.³⁹³ However, we can hear it everywhere. We can go down and feel the refreshing cold, the breath of the stream, its anima. In the plunge-pool we can even plunge our feet in it, con-tact that anima. The house is a medium to connect to the past, in which 'other natural beings' already built the place so we could settle in our turn. The stream is the acoustic relic, saved in the house. A shrine for the falling waters, a shrine for the Bear Run.

The status of the rock however seems to differ from that of the stream. Kaufman junior—using a figure of speech—somewhere tells us that “Wright was taking the ledges (from the lower side of the rock, FS) to add them on top”³⁹⁴ in and on the walls. Looking at the rock we must conclude that the transformation was not finished. Even if the proportions of finished and unfinished differ from Michelangelo's sculptures, we must again speak of a *non-finito*. The rock seems to remind us that nothing on earth is there merely for us. The rock resists the human and persists 'for itself.' By doing so it draws the actual house into that older habitat of the stream. Everything changes: the house is the guest, the temporal one. The opaque presence of the rock is clarified as we change perspective, as soon as the human becomes only one of the perspectives, a late one, developed by the past. The clarity of the scission between nature and culture is suspended. The rock sheds a different light on all the materials in the house that now crystalize into an in-between-state: it is around the rock that the sandstone wall hesitates between that interior and exterior state, between human onlay and canyon-wall, between carpet and cave. The rock makes the flagstones hesitate between the bed of the stream and a floor-covering, it makes the flagstones slices of its body (unlike the rest of the flagstones the rock was not sealed and waxed). Indeed if we would look through the hatch giving access to the stream, we would see them together. The canyon through which we descended topples over into that horizontal shaft of the living room, in a centrifugal movement

³⁹³ Not as a view: in volume 4 of the *Selected Houses* series Bruce Brooks Pfeiffer writes: “All the natural beauties and wonders are there at Fallingwater, yet they are not exposed ostentatiously or simply viewed comfortably from behind a picture window.” *Frank Lloyd Wright Selected Houses 4, Fallingwater*, Edited by Yukio Futagawa, text by Bruce Brooks Pfeiffer, Tokyo: A.D.A. Edita Tokyo Co, Ltd., 1990, p. 10

³⁹⁴ *Ibid.*, p. 9.

projecting us into a landscape in which the human might have been held in reserve for ages and ages. The rock is a catalyst drawing the house into that Palaeozoic time.

But this past time of a natural history may easily darken to the time that man is no more. The time that culture has been taken back by nature. A dystopian time. The rock pierces the house, it breaches the original *temenos*. The stream eats its foundations. The trees perforate its balconies. The house seems to anticipate its decay. It becomes the Romantic ruin, a recurring motive in Wright's work. For that reason the sandstone walls were not covered with a cap, man's perfecting building device already belonging to a worn away past.

These are all stories hidden in the rock as a time crystal. If a house is a magic lantern to evoke our spirits, a whole procession might come along. Human settles with his ancestors when settling around the hearth. The roman Lares, Penates, and Genii were deified ancestors. But who were the first ancestor-settlers here in Fallingwater? Were it the wandering natives, Delaware, Shawnee, and Iroquois tribes?³⁹⁵ Were it the European settlers who chased the natives and crossed the stream, and named it Bear Run? Were it the bears? Were it the trees looking down on the bears? Was it the running water that refreshed the trees and the bears? Or the rock that settled after having wandered through an era of tectonic and erosive catastrophes; and if so, were it not those grains of sand that in Cambrian times settled on the bottom of the Appalachian Sea? Emigrating, immigrating *sedimentum*-settlers?³⁹⁶ The rock reminds us of all these ancestors to be adopted. For Wright it had to remain intact as the double of the hearth, the phantom of *all* the settlers settling.

If the hearth and the chimney tell us human stories, the stone tells us inhuman stories, the stories in which the human springs from the inhuman, in which the human becomes the posterity of that stone anteriority. In his book *Stone, an ecology of the inhuman*, Jeffrey Jerome Cohen explains that stone has this remarkable capacity to generate stories.³⁹⁷ The sheer fact that it comes from a world written in other, inhuman, or far-beyond-human timespans, triggers human phantasy that conveys stone as the imaginary record of things immemorial. Stone gives us the image of a concentrated form of time. It is hardness, pure inaccessibility, the very agency of concealment. But as part of "the stony bonework of the earth," it also contains "forms and styles for all the ages for all of men." It opens up to styles and stories. The rock closes and the rock opens up, it conceals and it reveals.

³⁹⁵ Hoffmann, *Frank Lloyd Wright's Fallingwater*, p. 6.

³⁹⁶ 'Sediment' has the same etymological root as 'settling': the Latin *sedere* 'to settle, to sit.'
<https://www.etymonline.com/word/sedimentation>

³⁹⁷ Cohen, *Stone*, p. 4.

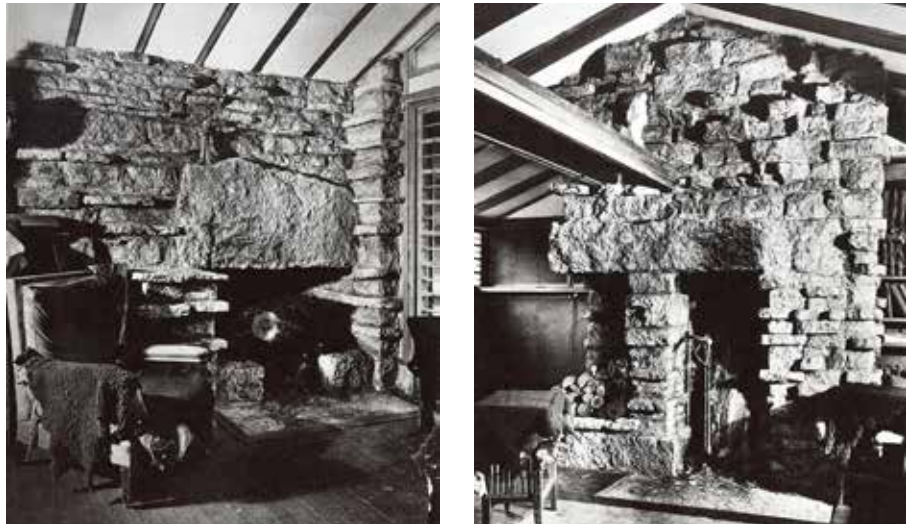


FIG. 3.33 Taliesin North III, Chimneys crude and rough. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

The chimney and its mouth—the hearth—belong together with the boulder. In Wright’s architecture, fireplaces and rocks are always intimately bound up. In old photographs of Taliesin North we see that fireplaces and chimneys are crude and rough. [FIG.3.33]

The rustication reminds us of the work of Henri Hobson Richardson (1838-1868), who used unprocessed stones and piled them up in the walls of Ames Gate Lodge (Easton, MA, 1881), bare walls indeed. [FIG.3.34] These walls look like the bed of a river itself, put on its side, a first action painting. In Taliesin North we find enormous stones used as lintels. The whole constellation with stones loosely gathered in and around the mouth of the hearth, reminds us of the campfires of the cowboys or wanderers warming their bodies when telling stories in cold starry nights.



FIG. 3.34 Henri Hobson Richardson, Ames Gate Lodge, Easton (MA), 1881. [Photo: Daderot, CC BY-SA 3.0]

3.3.7 Shallow space

All these deliberations on time have their consequences for space. After our descent into the earth it has become difficult to talk of three-dimensional space in Wright's architecture. Despite some formal resemblances, his work entails something completely different from the work of 'De Stijl' with its celebration of Cartesian space. The vertical is clearly not a neutral dimension for Wright. "Contrary to popular believe, the third dimension is not *thickness*, but *depth*. The third dimension is used in organic architecture to indicate depth."³⁹⁸ If we conceive of organic architecture as "growing out of the ground into the light" it becomes clear that this depth is a temporal depth. And that immediately makes the other two dimensions something different too, despite the parallels with the idea of extension. The vertical implies time, a temporal depth unfolding to a shallow space, the space we met in the bas-relief of Taliesin North. It is temporal depth implied in and growing out of the surface. The surface of the Earth, the ground, and the surface of architectural planes.

In Fallingwater we can see this shallow space everywhere, at every scale, in all surfaces. In the first place we met it in the grain of the stone, the textural appearance of the rock, remembering forces of coherence fighting erosion. In the second place we saw it in the operation of the mason, first chopping the stone and then doubling the relief in the protruding and receding layers of the masonry, In the third place we saw it in the architectural motif of the ressault, surfaces stepping back and forward, making recesses and pilasters and even piers when coming off the wall. The horizontal mobility of the joints and the layers, folding the surface around the corners, give the depth of the wall the character of a tectonic formation, architectural tectonics sometimes approaching a natural shifting of geological plates, as in certain rooms in the house where large horizontal pieces of stone step out of the wall. [FIG.3.35] We saw the shallow depth in the differing between the sandstone floor and the ceiling. In these stages or grades of depth we must not forget the last one: the house itself coming off from the wall of the mountain. The whole north-side of the house with its density of walls reads as a sort of continuation of the wall of the mountain. Architecture steps forward from nature, but in distancing the house remains anchored to it: the trellis at the north side seems to function as a sort of hyphen. Nature-architecture.

³⁹⁸ FLW, CW5, p. 62.



FIG. 3.35 Fallingwater, Master Bedroom. [Photo: © Yukio Futagawa]

And of course there is the floor itself stepping down or stepping up in the risers and treads of the stairs, or even jumping up in lintels and stone shelves, where they are kept in the same sandstone mass. In fact the floor is nothing else than an extensive tread in the system of the stairs or vice versa: the treads of the stairs are small cascading floors. This stepping out of each other pertains to a gradual defining of architectural elements. A non-essentialist Mannerist architectural system. We already saw it in Taliesin. Just as in the case of the walls, we must not forget however that even if the floor is part of that bas-relief of the earth, it nevertheless jumps up from the bed of the stream in the three yellow bolsters supporting the living room. It is again a hyphen. Wright wanted these supports to 'tiptoe' on the water surface.³⁹⁹ Although the actual result was not exactly what Wright designed—the stone foundation and the concrete bolsters interlock too much to be really tiptoeing—the idea of a lightly touching of the ground or of a 'lift off' is still clear. We may interpret these bolsters as landing gear for the airborne masses. The masses of the bolsters show a fillet when meeting the ceiling, the underside of the floor of the living room.⁴⁰⁰ It is just a detail, an ornamental move, but it affirms that it is in the taking distance or differing that the space of the house *unfolds*. It is important to think of that step as a grade *and* as a lift-off at once. The house comes loose from the natural foundation, a scission in which architecture loses nature without separating definitely. Architecture remembers nature in the flesh. Every sandstone floor becomes a flashback of the bed of the river that eventually transforms into the bed of a man. All steps, from the grain of the stone to the stepping out of the crust or the slope, they are all grades of nature and grades of architecture at the same time. A non-essentialist system begins in grading, in 'spanning' or 'tensing' what we might have thought to be an opposition. Wright's whole life was dedicated to the idea that if humans build, nature builds, and that if humans build, they still builds nature. Building their habitat they repeat the habits of nature.

³⁹⁹ Hoffmann, *Frank Lloyd Wright's Fallingwater*, p. 29.

⁴⁰⁰ *Ibid.*, p.30.

3.3.8 On the balcony

If we think that this shallow depth only pertains to the sandstone surfaces, we are mistaken: even the horizontal window rails protrude to become light fixtures and in a next step they broaden into steel shelves. A metamorphosis.

Could we see a similar first jump in the ceiling making it to a bas relief of the earth? Not just like that. The light-yellow coloured elements seem to have a somewhat different status. If we look at the ceiling that comes down in the plastered walls we could define it as a recessed surface that further retreats in the coffer leading to the large light fixture in front of the fireplace. But this gradually coming down or stepping up of the soft yellow ceilings is reversed in the terraces whose smooth bottom side is folded into the concrete parapets. We end up on the terrace. And suddenly all the recesses in the ceilings appear to find their measure in the fathomless ceiling of the sky, receding forever into the depth of the pre-ceding, re-ceding origin of cosmic time. In the section the parapets become the pointing fingers of the augur—a new hyphen—indicating that somewhat paradoxical direction in which space is time and time is space, shortly that mythical eternal year zero as the first spatialisation of the universe, the Big Bang. As we saw Levine calls the lighter tinted volumes “airborne.”⁴⁰¹ They come from the sky. In Wright’s definition of buildings as “children of the earth and the sun too,” they come from the sun. Hence Wright’s idea to paint them in a gold-colour. We should acknowledge the importance of the balconies which, far more than the sitting periphery, form the real counterpoints of the hearth as the terrestrial centre of the house.

If we had to draw a phenomenological diagram of Fallingwater, [FIG.3.36-3.37] we could point at the hearth as the centre and then draw all the circles around it up to the balcony to indicate the gathering centripetal force of the fire in which we consume family time. But we should be aware that moving over this radius, somewhere earthly and social gravity topple over to cosmic and individual gravity. On the balcony we stand alone. Looking up we confront the immemorial origin of time as the possibility of our own birth. Something was decided there about the universe, about the stars, the sun, about life and thus ultimately about me. My earthly birth repeats a cosmic decision. That repetition is the reversal in the diagram in which the *axis mundi* of the fireplace and the chimney is displaced to the terrace and becomes the pendulum rod of that immemorial clock ticking.

⁴⁰¹ Neil Levine, *The Architecture of Frank Lloyd Wright*, p. 250.

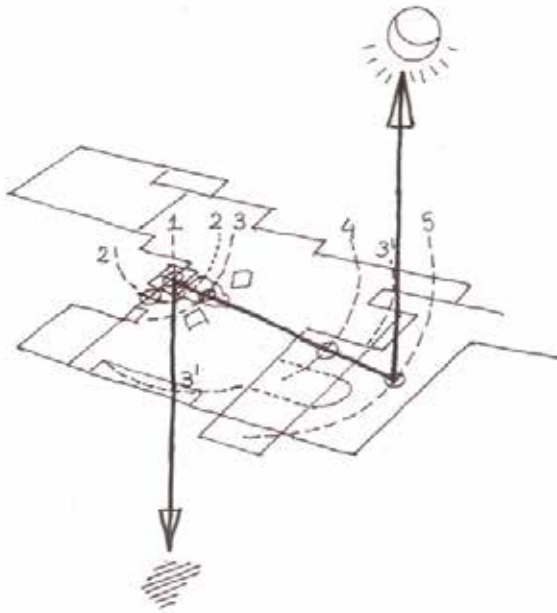


FIG. 3.36 Phenomenological diagram of Fallingwater. [Drawing: Frans Sturkenboom]

Organization of the interior with different rings.
Displacement of the axis mundi.

- 1 Fireplace
- 2 Kettle ring. Red kettle sweeping from its encasing in the wall to the fireplace.
- 3 Storytelling ring. Settee, rock, hassocks ('little rafts') and electronic templum (light fixtures built in in the ceiling).
- 3' Informal ring of benches at window and in niche.
- 4 Hatch with staircase and skylight and trellis.
- 5 Balcony.

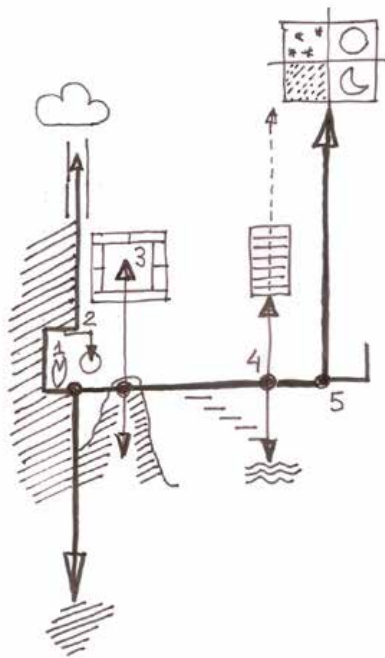


FIG. 3.37 Phenomenological diagram of Fallingwater. [Drawing: Frans Sturkenboom]

Organization of the interior with different rings and corresponding axes mundi. Section. The displacement of the axis mundi from the fireplace as umbilicus mundi to the celestial templum seems to cause a whole range of minor axes mundi.

- 1 Fireplace
- 2 Kettle ring. Red kettle sweeping from its encasing in the wall to the fireplace.
- 3 Storytelling ring. Settee, rock, hassocks ('little rafts') and electronic templum (light fixtures built in in the ceiling).
- 3' Informal ring of benches at window and in niche.
- 4 Hatch with staircase and skylight and trellis.
- 5 Balcony and celestial templum.

3.4 Conclusion

Fallingwater is a story on time. The house manifests itself as a shallow space in which the stratified building of the earth and its atmosphere is compressed. Descending through the house means descending through geological time, the time of formation of the earth. This conception of temporality differs from the one described by Neil Levine in his writings on Fallingwater.⁴⁰² In his interpretation of *The Temporal Dimension of Fallingwater*, Levine associates time with Bergsonian *durée* (duration) and interprets this *durée* as change. The house represents a “cyclical order of natural change.”⁴⁰³ And: “the shifting and overlapping images involve general conditions of physical and atmospheric change over time.” Eventually these cycles find their essence as the expression of cycles of “death and rebirth.”⁴⁰⁴

In my interpretation, which in its turn may be put in Bergson’s terms, time is adding up. Man is an extra layer in nature contracting a natural past. This is exactly the reason we may *sympathize* with nature. We are made of the same stuff. We can feel into it, we can learn from it. This addition implies a change and even a transformation, but it is not the change of Levine’s chemical process as a cycle or circulation of compounds and energy, not even a seasonal change in which things might return to a same state. The change of *durée* is irrevocable. It is time adding up, it is memory. It is of the same order as the time of “creative evolution,” to use one of Bergson’s other concepts.⁴⁰⁵

Some crucial differences follow: where Levine constantly stresses the senses (“visual, tactile, aural, olfactory”; “view, sound, smell, moisture”; “all the senses,” “multisensory,” “kinesthetic”⁴⁰⁶) I think the resonance with nature is an interior one. The descent into the house is a descent into our own past in as much as we are part of the building of nature, of nature building, part of a creative evolution which eventually leads to the human. We descend into the canyon of time up to the stone. “To plumb the depth of nature is to sound the depth of one’s own nature,” says Gord Barentsen referring to Schelling’s philosophy.⁴⁰⁷

⁴⁰² Ibid., pp. 216–253.

⁴⁰³ Ibid., p. 250.

⁴⁰⁴ Ibid., p. 251.

⁴⁰⁵ Henri Bergson, *L’Évolution Créatrice*, Paris: P.U.F., 1941.

⁴⁰⁶ Levine, *The architecture of Frank Lloyd Wright*, pp. 248–249.

⁴⁰⁷ Gord Barentsen, *Schelling’s dark nature and the prospects for ‘ecological civilisation.’* In: *Cosmos and History: The Journal of Natural and Social Philosophy*, vol. 15, no. 1, 2019, p.96.

A last difference may follow, crucial again: Levine talks much in terms of imagery, of groups of images (stone/water, tree/leaf, cloud/mist). He is thus forced to see the house as a “representation of nature.”⁴⁰⁸ I think we should stay closer to nature, closer to the imagination feeling its way into nature, finding the lines of force as the lines of formation, finding the creative space, the freedom nature took to develop from the stone to the human and beyond. The layered Earth “suggests building,” we heard Wright saying. The stony bonework suggests styles for all the ages up to the human and beyond. The imagination must take up these suggestions. If humans build in continuity with nature this doesn’t say they cannot make a creative leap. Humans do so by short-circuiting the images of time, by inventing time crystals.⁴⁰⁹

In Taliesin North Wright complemented his formal system of the earthline climbing up in architectural horizontals with the idea that the earth as a material, geological building, built up in eons of time, should rise up in the building too. With that earth rising in the walls and all the surfaces of the house, the human eye sinks into the sandstone crust back into time, the time of formation of the earth. Building the house in continuity with that natural past implies a geological operation, taking layers from “the stony bonework of the earth” and adding layers on top. Hence we defined Taliesin North as a bas relief of the earth with a corresponding shallow space. Such a conception of architecture as building in dialogue with the earth means a severe critique on the western idea of landscape as a distanced perspectival or panoramic view on the land, the land becoming a pacified earth merely there for humans. Instead we found an affinity with the landscape of the Japanese woodblock print, in which all elements were stitched together in a same proximity, the eye ‘scanning’ them to find unusual connections between their respective times of existence.

⁴⁰⁸ Levine, *The architecture of Frank Lloyd Wright*, p. 246.

⁴⁰⁹ About the role of the imagination in the creative process, cf. Joshua Ramey, *The Hermetic Deleuze, Philosophy and spiritual ordeal*, Durham and London: Duke University Press, 2012, p. 107-110.

4 Architecture as adventure

“There is no such thing as true style not indigenous.”

Frank Lloyd Wright

4.1 Abstract

In this chapter I will further refine the notion of an architectural geology, of which we sketched the contours when visiting Taliesin North and Fallingwater, and I will relate it to that of an architectural geography. In the previous chapter, I described Wright's houses as grottos representing a descent into the time of formation of the landscape as a built earth. Passing along the walls of Fallingwater and Taliesin North we feel geological ages rising into our lives. The grotto is made out of local materials, cut out of a local natural and human history.

A posteriori, we can look at Wright's work, his oeuvre, as a geographic expedition, at every spot—in every new building—analysing the local data and synthesizing them in a new design. [§§ 4.2.1-4.2.2] In this chapter we will look at the different aspects of this expedition. Firstly at the character of the data [§ 4.2.1]; secondly at the reasons for this search for the local [§§ 4.3.1-4.3.3]; thirdly at the tectonic character of his buildings, indicating a wandering over the surface of the earth and a local probing of its depth. [§§ 4.4.2-4.4.3]

Having established Wright's ideas about a local, or as he himself would say, a 'native' architecture, I will then proceed by focusing on his use of foreign, exogenous or 'far' motifs, which seem to serve him as a contrapuntal line in his search of the native. [§§ 4.5.1-4.5.3] Apart from such 'far' or foreign motifs, I will also look at more generic motivations such as the use of non-place-bound, more synthetic materials and the search for another form of light, a 'non-local' light, achieved by the use of translucent materials. [§ 4.5.4]

In going into the names Wright invented for his houses, I will summarize my findings on the different aspects of time involved in the geographic expedition. [§ 4.5.5] Finally, returning to the relief of the earth and its architectural dramatization, *posture* and *silhouette* will appear as the architectural categories in which Wright's geographic expedition finds its summit. [§ 4.6]

4.2 Architecture as geography

4.2.1 The local data

During his whole life Wright looked for clues in the environment to use them for the buildings to be erected. Sometimes they were found in the patterns of fabrics of local native people, sometimes in the vegetation of the immediate surroundings. We already saw the abstracted prairie-flowers in the glass doors of the Robie House. There was always the weather to be reckoned with and certainly not only in the sense of a favourable orientation towards the sun. Icicles were welcomed at the eaves of Taliesin North by leaving off the gutters purposely. Winds were sometimes blocked but often invited as air conditioning and became lucky acoustic companions in Taliesin West.⁴¹⁰ For the building masses Wright often used materials found on the spot. He used local stone wherever he got the chance. In Taliesin North the sand of the shore of the Wisconsin river, streaming at the foot of the hill, was rubbed into the plaster of the parapets. Even in the concrete textile blocks he experimented with mixing granite from the site into the cement, but the stone crumbled. In the Arizona desert, boulders and rocks were moved from the floor of the desert and piled up in the formwork of the concrete thus becoming "desert-concrete." All these ways of dealing with the specificity of the site give Wright's buildings a strong local signature.

Roughly spoken we can distinguish four categories in these 'local' ingredients of the design: lithic, biological, meteorological and historical. The first one pertains to matter from Wright's "stony bonework of the Earth," "the frame on which Earth

⁴¹⁰ Frank Lloyd Wright, *Selected Houses 3*, Edited and photographed by Yukio Futagawa, text Bruce Brooks Pfeiffer, Tokyo, 1989: Adata Publishers, p. 14.

is modelled" (...) "the skeleton with its ribs of stone."⁴¹¹ Earth, for Wright, builds in strata and inspires the architect to build his walls "in like strata."⁴¹² From these few clauses it becomes clear that Wright was interested in stone for its structuring quality. But as we saw in the last chapter, he was also fascinated by the aesthetic textures woven by the forces of erosion and persistence. Finally Wright bids the architect "to take the microscope and see the principle that builds in nature—geometry—at work in stone": "read the grammar of the earth in a particle of stone!"⁴¹³

In thinking of the biological ingredients—Wright speaks of organic life—we must primarily think of vegetative life. Wright is again interested in both structure and ornament and he sees both closely related. "Ornament is to architecture what efflorescence of a tree or plant is to its structure, *of* the thing, not *on* it. (...) It is the character of structure revealed and enhanced."⁴¹⁴ When thinking of vegetation, the ornamental leaded glass patterns are famous, we can think of the prairie-flowers in the Robie, the Sumac for the Dana House or the Wisteria and the tree-of-life motif for the Darwin D. Martin House.⁴¹⁵ It is known that Eugene Masselink, Wright's secretary and a fellow in the fellowship, often made drawings abstracting patterns from nature. Drawings of patterns of the staghorn cactus and the barrel cactus and of lichen on rock have been found in the archives.⁴¹⁶ In this abstracting labour the architect may again learn geometry as the intelligent principle organizing nature.

In the biological category we are inclined to think of animals too, but examples are scarce and somewhat coincidental. It is true that Wright used to think of the habits of animals to be studied when learning from the site. The snake rolling up of the David Wright House is an example. In the Arch Oboler House Wright uses the image of an eagle's nest. What seems to fascinate Wright is the transformation of habit to habitat. The spiral of the snail (his image for the Guggenheim) and the "pollywog type" characterizing a series of Usonian homes,⁴¹⁷ must be mentioned here too, but they are not bound to place—they are formal, typological references.

⁴¹¹ FLW, *CW1*, p. 275.

⁴¹² *Ibid.*, p. 274.

⁴¹³ *Ibid.*, p. 275.

⁴¹⁴ FLW, *CW5*, p. 62.

⁴¹⁵ Darwin D. Martin House, Buffalo, NY, 1905.

⁴¹⁶ Frank Lloyd Wright, *Unpacking the archive*, p. 37.

⁴¹⁷ The Pollywog was used to characterize those types where we find the living room as head or body of the house and the sleeping rooms as a usually more slender tail, sometimes kinking a little bit in the middle between the two parts.

When it comes to the weather, Wright expressed his ambitions in the notion of a house as an “open camp.”⁴¹⁸ This notion meant that wherever possible the weather should be made a real experience. This could simply be a practical question of ventilation, such as the ‘valves’ in Taliesin West, taking in the laminar cool flows of morning wind from the desert floor; it could be a question of shelter, the overhanging eaves both keeping off the sun and the rain, while the windows might remain open. It could be a sensual question, rain, wind or storm as acoustic companions. A house should be able to capture the weather, it should breathe the atmosphere.

Atmosphere, however, is also the layer in which light, a cosmic datum, breaks to become a terrestrial phenomenon. As such it has a special meaning for Wright. Atmosphere is the element in which organic architecture “grows out of the ground into the light.” With Heidegger, we may characterize it as the element of the *Lichtung* (the clearing in the wood), as revelation in a reciprocity with earth as the principle of hiding or concealment. The *Lichtung* is the open place of existence as a standing out toward and a standing forth into the world.⁴¹⁹

The last category is that of human history, the spurs that native people left on the spot or in the surroundings. In the first place we must think here of types of habitations such as adobe or Pueblo Houses, settler huts, wigwams and tepees which were used as examples for new buildings; in the second place of geometrical patterns in native fabrics becoming examples of architectural ornament. In this category, however, references are often weak or ambiguous.

4.2.2 Scientific and transcendental geology

We must consider the four categories we distinguish in Wright’s work as different strata pertaining to different eras in the formation of the crust of the earth, as temporal layers of the landscape. To understand this stratification we should again listen to Friedrich von Schelling. In *Die Weltalter* (‘The ages of the world’) he shows us how the landscape and everything that surrounds us must be seen as the product of a ‘deep time.’

⁴¹⁸ FLW, *AB*, p. 198.

⁴¹⁹ Heidegger, *Beiträge*, p.356-357.

“The oldest formations of the earth bear such a foreign aspect that we are hardly in a position to form a concept of their time of origin or of the forces that were then at work. Everything that surrounds us refers back to an incredibly deep past. The earth itself and its mass of images must be ascribed an indeterminable greater age than the species of plants and animals, and these in turn greater than the race of men. We see a series of times in which one follows another and the following always covers over the foregoing; nothing original ever shows itself, a mass of strata laid upon the other; the labour of centuries must be stripped away, in order to finally reach the ground.”⁴²⁰

In his search for the last ground, the “mass of strata” Schelling speaks about differs from a strictly chronological building-up of the landscape. The mass of strata implies a natural history in which the human appears in this “series of times” as the youngest product.⁴²¹ In Schelling’s thought this leads to another notion of geology which we will explain first because we need it in order to understand the temporal aspects in Wright’s work.

When we think of geology, we first and foremost think of it as a science. The scientific geologist tries to reconstruct a history of the formation of the planet earth. The building scheme of this scientific geology is thought in layers but these refer to eons, era’s, periods and epochs, shortly stretches of time, from the Hadean Eon to the Holocene Epoch. [FIG.4.1] Scientific geology peaked in the first half of the 19th century in Alexander von Humboldt’s *Geognostical essay on the superposition of Rocks of both Hemispheres* (1823) and in Charles Lyell’s *Principles of Geology* (1830–33).

⁴²⁰ Iain Hamilton Grant, *Philosophies of nature after Schelling*, London/New York: Continuum Books, 2008 (2006), p. 204.

⁴²¹ In Schelling’s time (1775–1854) Darwin’s evolution theory (1859) was not yet written. Schelling does speak of a process of potentiation in nature eventually leading to “the sweet and blessed figure of man.”

	Eon	Era	Period	Epoch	
Younger ↑	Phanerozoic	Cenozoic	Quaternary	Holocene	← Today
				Pleistocene	← 11.8 Ka
			Neogene	Pliocene	
				Miocene	
			Paleogene	Oligocene	
				Eocene	
		Paleocene	← 66 Ma		
		Mesozoic	Cretaceous	-	
			Jurassic	-	
			Triassic	-	
		Paleozoic	Permian	-	← 252 Ma
				-	
			Carboniferous	Pennsylvanian	-
				Mississippian	-
			Devonian	-	
Silurian	-				
Ordovician	-				
Cambrian	-				
Older ↓	Proterozoic	-	-	← 541 Ma	
	Archean	-	-	← 2.5 Ga	
	Hadean	-	-	← 4.0 Ga	
					← 4.54 Ga

FIG. 4.1 Scheme of temporal layers in geology. [Image: Jonathan R. Hendricks. CC BY-SA 4.0]

At the beginning of the 19th century, thus still before the heydays of scientific geology, Schelling used the layered model of scientific geology for what has been called a “transcendental geology.”⁴²² He characterized the development of nature in general as a *Stufenfolge* (a sequence of steps) of different layers or epochs beginning in the lithic, then via the vegetative and the animal issuing in the human. These steps imply both continuity and leaps and may be thought in terms of powers. Every step means a potentiation. For Schelling human consciousness is the highest power, but it is built upon and still comprehends the lower powers. In the human, nature itself comes to an intuitive and reflective summit. Natural history is a geology of human’s mind. We cannot speak here entirely of a metaphoric use of the notion of geology because the formative forces at work in nature in its formation of the earth are the same organizing forces which are at work in the stepwise construction of consciousness. For that reason for Schelling the relation between scientific geology and his own “transcendental geology” is simple: the former pertains to the lower powers (the formation of the earth) while the latter pertains to the entire *Stufenfolge* in which nature’s unfolding in time finally results in the human. “Transcendental geology” incorporates scientific geology as its base. It is a geology of all of human’s powers: intellectual, intuitive, affective powers and last but not least, of freedom, a freedom which may already be traced in the creative powers active in the lowest forms of life, and thus also in the limit-case of the lithic. “Transcendental geology” is a *Naturlehre unseres Geistes* (a natural history of our mind/spirit).⁴²³

⁴²² Grant, p. 199.

⁴²³ Ibid., p. 129.

After this philosophical digression, finally we are fully equipped to understand that somewhat mysterious sentence we so often crossed in the previous chapter. When Wright says: “for in the stony bonework of the earth,(...) there sleep forms and styles for all the ages for all of man” we should put that statement side by side with this one of Schelling: “Matter is the general seed of the universe, in which is concealed everything that evolves in later developments.”⁴²⁴ In Schelling’s geology of the human mind we must come to see pure matter as the creative ground of the *Stufenfolge* leading to the human mind. In Wright’s geology of architecture we must see the stony bonework of the earth as the very ground of all natural styles leading to human style. Stone, for Wright, functions as a metaphor of pure matter, but as such it is always already spirit, containing the seeds for all natural styles that will eventually dress man.

Apart from the names of Schelling, Von Humboldt, and Lyell, we must mention that of Charles Darwin, who used Lyell’s *Principles of Geology* to shape his ideas about evolution, an incredibly slow and gradual development of the natural species.⁴²⁵ These four names may give us an image how time, the time of natural development or natural history, involving the human as one of its strata or powers, became a prime concern of the 19th century, the century in which Wright grew up to become an architect—his formative years. For Lyell all terrestrial surface phenomena were the product of gradual biological, meteorological and volcanic developments. The depth of the earth kept a record of such developments, not merely in the characters of stone strata, but also in its existence as a graveyard for other life, found in fossils, specimens of extinct life sketching a lost pre-history of organic life. We may see here a first relation between geology and geography, between the depth and the surface of the earth. For von Humboldt, geography was a form of ‘comparative’ geology in Schelling’s broad sense of the word. In all the phenomena he studied on different places he tried to trace the organizing—in that sense organic—forces unfolding to a multi-coloured but unified world.⁴²⁶ In fact the crust of the earth and all life upon it was seen as a myriad faceted prism in which the developing light of a natural history breaks into a phenomenal world. Von Humboldt’s geography was a spiritual geography. In this sense Lemaire even calls von Humboldt’s science “a pragmatic clarification of a mystic experience of infinity.”⁴²⁷

⁴²⁴ Ibid., p. 26.

⁴²⁵ Andrea Wulf, *The invention of Nature, the Adventures of Alexander von Humboldt, the Lost Hero of Science*, London: John Murray Publishers, 2015, p. 179.

⁴²⁶ A same notion of the surface of the earth may be found in Ruskin’s poetic conception of the ‘zoned iris of the earth’. John Ruskin, *Stones of Venice*, New York (Hill and Wang) 1960, Da Capo 1985, [1853], p. 163.

⁴²⁷ Ton Lemaire, *Filosofie van het landschap*, p. 149.

4.2.3 Designing as a remixing of the strata

Let us go back to the different layers which we found in Wright's architecture in analysing the four categories of local data. The strata pertain to different times of formation of the landscape as a built earth and as such they testify of a real and a spiritual geology. When Wright uses local data—structures, patterns, textures, types—from all the different layers or eras—lithic, vegetative, animalic, meteorological—, he does so to find traces of a spiritual-material history leading to the human. He chains human's habitat to nature's habits. Architecture must recapitulate nature, must become inhabited by nature as a creative force. It has to become empowered by that natural history in order to embody the powers of time. At the same time Wright unchains this history to a free use, he potentiates it for architecture. In this sense every building comprehends a history of the landscape, landscape being the phenomenal surface of a spiritual geological depth of time.

Designing then means making a cross section through time. The design 'explains' the landscape as a built, stratified earth. To explain: to unfold, to lay out. Not in the sense of a paleontological scheme. Wright is interested in nature's creative, organizing principles. For the architect, the knowledge of self-organizing nature may result in new structuring techniques, new materials, new ornaments. The local data are interpreted. The human samples and remixes all the strata, creating a new living whole. If I speak of Wright's geological design procedures, I mean this drilling into time, the time of the formation of the crust of the earth, from the human to the lithic. Architecture tells a story in which the landscape data are transformed, loading the design with voices from nature's past and present. These voices may sometimes become patent, as we saw in the case of the icicles in Taliesin North, but they will often remain latent, as discussed in the case of the molluscs having become the ingredients of limestone. But subliminally we are aware of them. When we pass a wall in Taliesin North or West, we feel the presence of an immemorial past, our own pre-human past.

4.3 The geographic expedition and its objectives

4.3.1 The scientific expedition

If we make an overview of all the houses designed by Wright and if we place them on their respective sites, we would certainly get the impression of a fleet of vehicles moving over the surface of the earth, crossing through nature. The nicknames are telling: “*der Dämfer*” of the Robie House, “the Locomotive” of the Pauson House, “the swarm of butterflies” of the Ocotilla camp with their “wings like sails.”⁴²⁸ Referring to Ocotilla, Wright also spoke of “some kind of desert fleet.”⁴²⁹ Even the arches of the Marin County Civic Centre seem to move through the landscape like a Roman aqueduct. In general Wright’s streamlining of buildings—the repeated imprint of the horizontal, the use of the figure of “the prow”—suggests speed. The building is ‘on its way to,’ it belongs to the horizon. When looking at the bird’s eye perspectives, we indeed see buildings as if they had just arrived, pausing for a moment on some *terra incognita*, ‘looking around’ and organizing some ‘corral,’ piling up a chimney or some other vertical, camping around it, to then leave after having switched direction. The buildings always manifest themselves as coming from the horizon or moving toward it, in the meanwhile meeting some natural event to be accounted for: the marshes of south Carolina (Auldbrass, the Leigh Stevens House, Yemassee, SC, 1939), the last ridge of the Santa Monica Mountains (Arch Oboler House, Malibu, CA, 1940). Such events are studied as styles of the American earth: they give the explorer-architect typical colours and a local light, local textures of materials, patterns in the vegetation.⁴³⁰ These styles thus become the possible examples for “a truly American architecture.” If the samples of a local American nature have been taken and laid out in a building, the expedition moves on to a next adventure, a next probing operation.

In stressing the mobile or even vehicular appearance of a building, Wright was certainly a child of his time: the metaphor of the vehicle signed the era of the Modern Movement. Le Corbusier’s references to cruise-ships and Sedlmayr’s

⁴²⁸ FLW, AB, p 335.

⁴²⁹ Ibid.

⁴³⁰ I will come back on this topic of natural styles as examples for architectural style in the next chapter.

characterization of the Villa Savoye as 'a space-ship on stilts' are famous. We should not forget, however, that Wright opposed the Modern Movement in many ways and especially in its avatar of the International Style, according to Wright "a universal style offensive and undemocratic."⁴³¹ What disturbed Wright most was the idea of buildings that could 'land' anywhere, of a style without *topos* and *demos*, without geographical circumstances giving direction to the design, the white box denying all adhesion to a site.⁴³² It is here that Wright's architecture, with its buildings "growing out of the ground," deviates definitely from modern architecture. The Modern Movement was the first to take some consequences when it comes to globalisation, introducing the idea of a global architecture.

It was not globalism, however, that interested Wright. His first mission was to find a "truly American style," appropriate to its time. This is the mission of his fleet, radically opposed to that of the Modern Movement. A mission he still advocated in many lectures given abroad in the thirties and forties.⁴³³

The idea of buildings moving over the surface of the earth, and the idea of buildings "growing out of the ground into the light" leads to the central paradox of the tectonics of Wright's architecture: heavy ground-bound masses that have to be articulated as being in movement, we will come back on it.

The idea of a geographical expedition may be recognized in many other aspects of Wright's work. We already spoke of Wright's notion of an open camp. Indeed, camping is a good word to describe the mood involved in the houses. "Open camp" reflects the idea of experience, the senses opening up to a local nature. If we look at the Ocotilla Camp or Taliesin West, it is tempting to imagine Alexander Von Humboldt, the great 19th century explorer, setting up a camp somewhere in South America, observing all the characteristics of the site, studying the habits of animals, taking soil-samples, digging for precious stones, measuring heights, temperatures and atmospheric pressures; but also describing the art of local people; making the inventory of the specifics to reconstruct nature as the spiritual whole we are part of. Moving on to the next spot, to find new specifics. Comparing. In order to distil the logic, the living whole or the earth as a system.

⁴³¹ FLW, 1977 (1942), p 328. "As though any universal 'style' were not more than ever offensive, now and of course, undemocratic."

⁴³² FLW, *CW5*, p 48 "Thus surfaced (all ornament was scraped off, FS) the box was invariably painted white to emphasize the fact that it didn't intent being a becoming feature of the ground upon it was put."

⁴³³ The lectures given in London for the Royal institute of British Architects are exemplary. FLW, *CW3*, pp. 299-334.

My metaphor of a scientific expedition is based on certain parallels between Wright's quest for a truly American style and the great scientific expeditions of the 19th century, such as those of von Humboldt, Lyell and Darwin. They all travelled the surface of the earth and searched for the formative—thus temporal—principles leading to the geographically different styles in which nature manifests itself. As we saw, geography does not only bear on all the variegated products we meet on the surface, “the zoned iris of the earth”⁴³⁴ as Ruskin called it. These products—*natura naturata* (nature born)—are produced by productive nature—*natura naturans*—as bearing or birthing nature. Geography implies a geology, a time of formation. Just like von Humboldt, Wright supposed that it would be possible to find the organizing forces, *natura naturans* as the spirit of a place. If “an organic building grows out of the ground into the light...” ground means a local temporal depth appearing in a certain geographical width, an environment or a landscape. The organic is the time in which nature has grown together and is still growing together to form a locus, a specific ‘patterned’ manifestation, a style of the earth. The very notion of a ‘native’ architecture means that a design must be born—*natus*—from such a local history. The landscape as the ground is the geographical screen on which the geological depth is projected. It is this ground that must rise up in a building.

Wright's buildings are land-scaped. We must think here of the original meaning of the word land-scape, coming from the Dutch word *landskap*, a conjunction of the words *land* (land) and *skap* (from *scheppen*: shovelling, digging, spading). It pertains to the digging up of soil from the ground (e.g. to make a ditch) and shovelling it onto a heap or a dyke. *Landskap*: the editing of the surface of the earth. Consequently, for a long time the meaning of landscape was bound up with the idea of a relief of the ground, a configuration of the terrain.⁴³⁵ Indeed, Wright's buildings, using local materials, are often configurations of the terrain or bas reliefs of the ground. The ground becomes exhibited.

The idea of a geographic expedition becomes clear when looking at Wright's drawings, especially the bird's-eye perspectives. Take the rendering of the design of the Arizona Crater Resort at Meteor Crater (1948). [FIG.4.2] We see the Arizona desert floor slowly rising to become the rim of the crater. An elongated building of which we see the roof, appears to be climbing the rim to arrive at its edge. Where the ground suddenly falls away, it abruptly changes direction to follow the contour of the natural relic, to ‘ride’ the rim. It then suddenly breaks off again and moves away in the direction it came from. In this movement of coming back on itself, the building encloses a garden that partially continues at the outside of the courtyard thus formed.

⁴³⁴ Ruskin, John, *The Stones of Venice*, Edited by J.G. Links, New York: Da Capo Press, 1985 [1960], p. 163.

⁴³⁵ For all these aspects, cf. : Augustin Berque, *Les Raisons du Paysage*, Paris: Hazan, 1995, ch. 4.



FIG. 4.2 Drawing of the Arizona Crater Resort, Meteor Crater (AZ), 1948. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

Looking at the endless series of casements windows and at the stone stylobate, which follows the contours of the roof as if it was the bearing chassis, we could use the metaphor of a train. The changes in direction, however, are quite abrupt. At the ends of the 'carriages' following the rim of the crater, we find the stylobate rising up in two chimneys. It is as if they function as a sort of pivotal points for the change in direction of the train. When crossing the rim, the stylobate specifies its stance by hanging over the edge and mirroring the slope of the crater. The gradient of the stylobate finds its climax in a tower rising up dangerously above the steeply falling slope, to end its oblique movement in the widening gesture of a lookout platform. The movement up, in its turn, is mirrored by a movement down the slope of a so called 'inclinator' (an inclined elevator) bringing visitors to the starting point of a path down the crater bowl.

A quick scan of the material constellation gives us some general information. The roof seems to be articulated horizontally, the pencil lines follow the roof ridge and the eave. The cladding could be the typical rows of wooden shingles or a metal roof as we met it in the Clinton Walker House. The striping transverses all the other hatched surfaces indicating the ground. The stylobate is completely different. The pattern of lines indicating the stone texture of the masonry seems to be a refined sample of the crater-wall. This pattern continues in the tower. It looks as if

earth—in and as architecture—rises up out of itself to look back in itself, in its own past, in the gaping eye of this cosmic accident, to wonder how it ever came to life and how it survived in the hurling battle of cosmic forces. Earth celebrates itself. The tower is a real ecstasy, a standing outward and presenting oneself. The flora of the garden, spilling out of the court of the resort, gives intensity to the feast. Some foggy stripes—made with a stroke of the eraser on the colour-pencil background—seem to indicate some early vapor pulling away: it is the sublime moment of disclosure, the ‘through the looking glass’ of this cosmic impact.

The composition of the drawing is perfect. We see the horizon high up in the drawing as a straight line parallel to the edge of the sheet. It comes down in a slowly densifying rhythm to indicate the floor of the desert. The direction of the hatch is changed every now and then to mark some sloping surfaces. The parallel lines of the roofs converge to the vanishing point at the horizon according to the laws of perspective. That is where they originated and where they will return, every building for Wright being “a companion to the horizon.”⁴³⁶ Above the horizon we find the meandering line of a mountain ridge, a melodious serpentine line, curling up and repeating itself in the curving and cracking lines of the crater bowl and then refining itself in the masonry pattern of the stylobate rising up in the tower. Architecture and earth find each other in a contrapuntal organisation. A geographical operation: materials, textures, patterns and ‘gestures’ (the way the slope folds to a rim) are taken from the site and translated to a building. The graphs of architecture visualize the graphs of the earth. The crater is exhibited, it is dramatized, it comes to ‘shine’ in the crater resort. The building in its turn becomes a *specimen* of the site, it exemplifies the event having taken place, the time of formation of the landscape.

⁴³⁶ FLW, CW3, p. 287.

4.3.2 Architecture graphing earth

Wright's architecture takes on the character of a geographical expedition. In order to know the building of the American earth, at each stop—in each new building—a new sample has to be taken. The expedition samples the American earth. In all this we should keep in mind that Wright was searching for styles, an aesthetic operation. He was looking for patterns and textures, but also for organic types such as the shell, the tree and the spiral—all may become 'lessons' for the design. Wright researched the styles of the American earth as the possible foundation for an American aesthetics. In this sense we may compare Wright's drawings with those of the great scientific explorers of the 19th century. Darwin, Haeckel, von Humboldt, Bonpland, they all drew their 'specimens,' found in nature, in beautiful drawings and '*Naturgemälde*' (paintings of nature) in which art and science converged. Wright's drawings form a report of an architectural journey through American nature. Geography literally means graphing earth: in the case of Wright it are the lines of architecture describing and transfiguring the graphs of the earth.

We will now study two examples to closely monitor the different 'movements' of Wright's buildings. These movements may be subdivided into three categories. The first ones are those who pertain to an arriving, mooring to and leaving the site. The second pertain to the periphery. They indicate a way of reacting to and acting in the surroundings. A third type refers to the vertical probing of earth and sky. The building rises out of the site to drill up, take in, pile up, and to lay out the samples found on the spot: lithic, vegetative, animalic, meteorological specimens. [FIG.4.3] The house is both the instrument and the specimen box of the explorer. The three movements together sketch the image of an expedition on the move and of a camp monitoring and making the inventory of the site.

An especially gratifying example to elucidate the movements or gestures in Wright's architecture can be found in the Sol Friedman House. [FIG. 4.4-4.13] Spatial movements of arriving, changing orientation and leaving the site are found in tracks and directions. [FIG.4.5] Material movements of organizing the camp and taking refuge are found in masses and lines: horizontals and rhythms of verticals in the facades [FIG.4.7-4.8] and contours in the plan [FIG.4.4] which become walls 'moving around and about' [FIG.4.6.g]; verticals in the sections show a 'mooring to' the site and a displacement of the axis mundi [FIG.4.9-4.10]; silhouettes are found in perspectives [FIG.4.11-4.13].

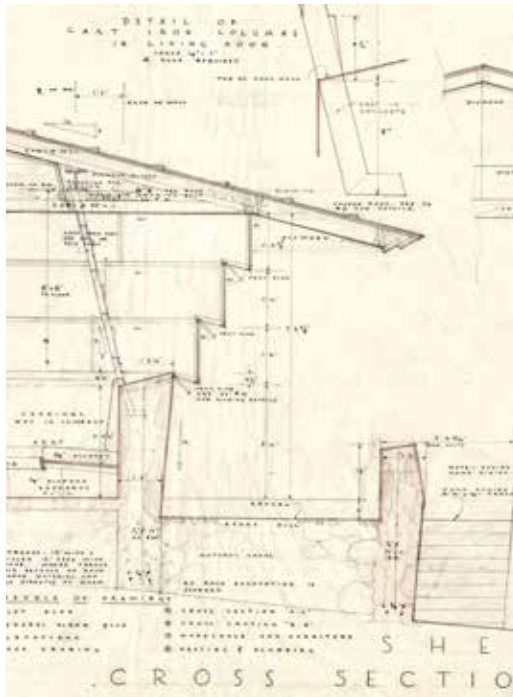


FIG. 4.3 Clinton Walker House, Carmel (CA), 1951. [Drawing: courtesy of FLLWFA (MOMA / AA&FALCU) | Photo right: DRN, source: Wright chat/Frank Lloyd Wright Building Conservancy]]

An example of explicitly taking an air 'sample' may be found in the Clinton Walker House. In the horizontal parts of the sash we find 'valves'. They are meant to sniff the pacific air and the smell of seaweed thrown on the beach. The house may also exemplify the notion of the 'open camp.'

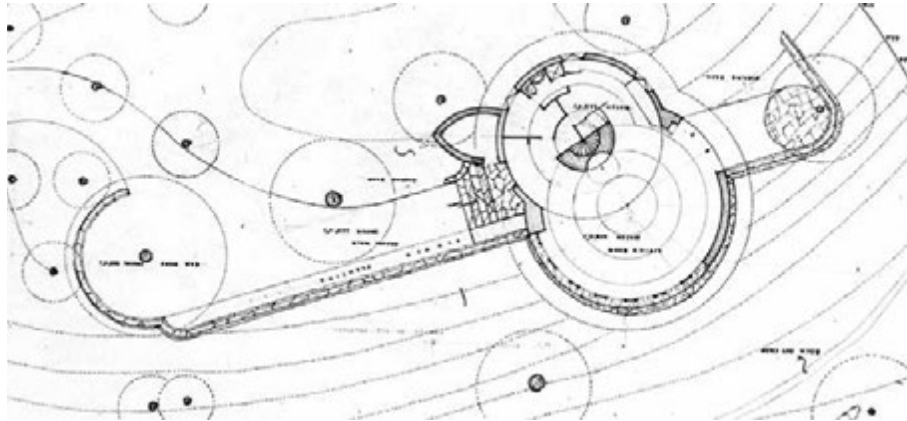


FIG. 4.4 Sol Friedman House, Pleasantville (NY), 1948. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

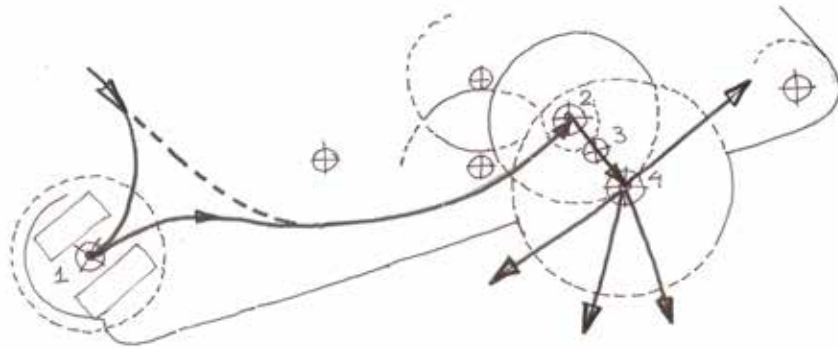


FIG. 4.5 Movements in the plan [Drawing: Frans Sturkenboom]

Crosses and circles represent a multiplication of the 'umbilicus mundi' and the corresponding axis mundi. In fact, when looking at a site-plan of Wright he draws all the trees and other natural specificities. Trees may be seen as axes mundi too. They operate in the same way as the mushroom column with carport(1), the staircase(2) in the centre of the second circle, the fireplace with hearth and chimney(3) and the virtual axis mundi in the centre of the second circle(4). The displacement of the axis mundi and its multiplication to plural axes mundi is typical for Wright's work from 1930 onward. The movement in the plan is instigated by a first displacement from 2 to 3



FIG. 4.6 The shifting of the two circles is clearly visible in the contours of the House. [Photo: Stilfehler; CC BY-SA 4.0]

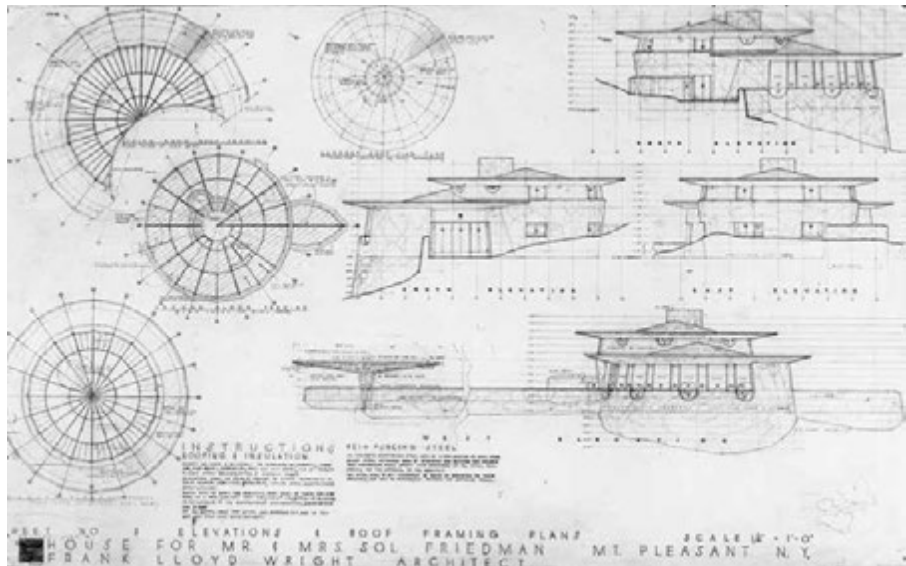


FIG. 4.7 Sol Friedman House, elevation and roof framing plans. [Drawing: courtesy of FLLWFA (MOMA / AA&FALCU)]

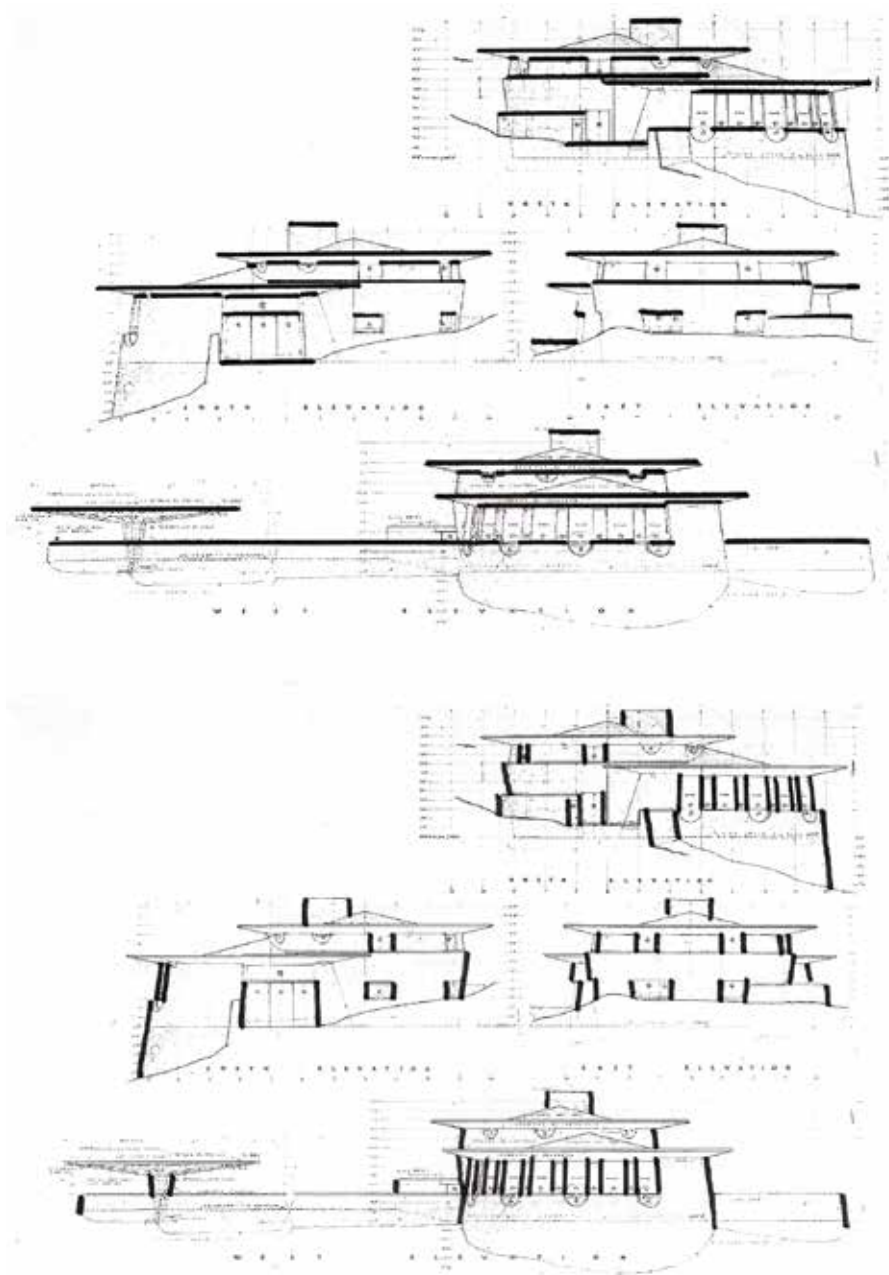


FIG. 4.8 Rhythms of horizontals and verticals in the facades. [Drawing: Frans Sturkenboom, background drawing: courtesy of FLLWFA (MOMA / AA&FALCU)]

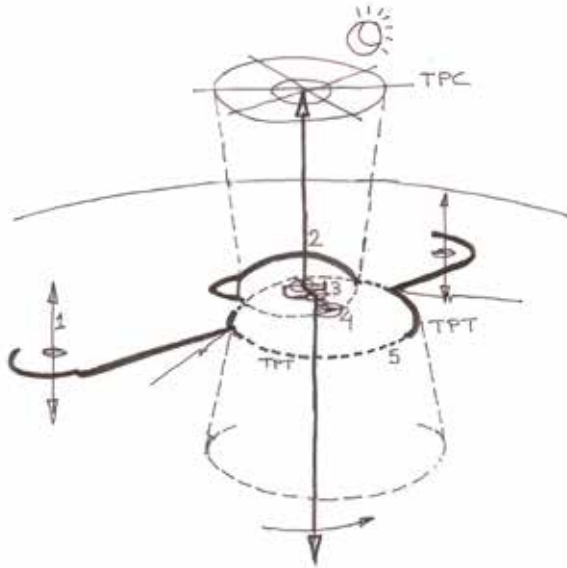


FIG. 4.9 Sol Friedman House. Organizing movements in the plan. [Drawing: Frans Sturkenboom]

Displacement of the axis mundi. The first mass, corresponding to the axis mundi of the celestial templum (TPC), widens towards the sky. The second mass, widens when going downward. It appears to correspond to the templum in terra.

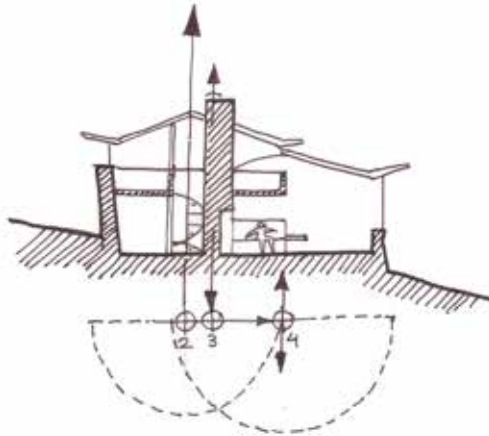


FIG. 4.10 Sol Friedman House. Organizing axes in the section. [Drawing: Frans Sturkenboom]

The centre as the umbilicus mundi moves from the staircase in the centre of the first circle to the centre of the living room (4) via the fireplace. The settee at the fireplace seems to be the index of such a displacement, just like in Fallingwater.



FIG. 4.11 Sol Friedman House: walls 'moving around and about' on the site. [Photo: Stilfehler; CC BY-SA 4.0]



FIG. 4.12 Sol Friedman House: silhouettes in the perspectives 1. [Courtesy of FLLWFA (MOMA / AA&FALCU)]



FIG. 4.13 Sol Friedman House: silhouettes in the perspectives 2. [Editing drawing: Frans Sturkenboom]



FIG. 4.14 Drawing of the Fir Tree (Arnold Friedman House), Pecos (NM), 1948. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

Let us take another birds-eye perspective, to reconstruct some of these movements in their geological and geographical existence. I will use the rendering of the Arnold Friedman House—named *The Fir Tree*—in Pecos, new Mexico (1948). [FIG.4.14] We see the picture of a fragment of a mountain range, inclining to the valley made by the little river Pecos, which we do not see, but which finds itself at the lowest point of the valley, hidden in a green bend of trees. In the upper right corner we see a little piece of blue sky, bordered at the lower side by a slow curve indicating the crest of a mountain ridge of de Sangre de Cristo Mountains, the most southern ridge of the Rocky Mountains. It is covered with fir-trees. A horizontal brown band interrupts the forest: a steep which indicates something like a mesa or a rapid fall of the mountain slope. We look into Wright's "stony bonework of the earth." Somewhat beneath the middle, we see an entrance lane entering the drawing from the left, crossing the forest to bump into a low wing—the carport of the house—in the centre of the drawing. What seems to be a wing is in fact in the plan [FIG.4.15] one side of a rhomboid of which the sides are materialized as the body of a low and long, one-storey building with a hipped roof. This hipped roof comes down in the drawing after having started somewhere behind the main body of the house and having bent off a first time in the short axis of the rhomboid.

In the lower left corner it sharply kinks in a 60 degrees angle (the sharp angle of the rhomboid) to come back on its movement, parallel to the first side, the side of the carport. The house seems to be 'moving around and about,' tasting the *pleroma*,⁴³⁷ the abundance in which *natura naturans* manifests itself on the site. The expedition assesses possible views, the proximity of trees, boulders or stone cropping out, all we may come across when sauntering on the site. By coming back on itself it forms a corral or a court, in this case enveloping a fir tree. When the hipped roof meets the giant chimney, which finds itself in the short symmetry-axis of the rhomboid, it again changes direction to move into the open area of the valley. At the same time—ridge board meeting valley rafter—, the gentle slope of the hip steeply rises to describe the contour of a fir tree. The profile of the fir, embodied in the steep part of the roof, sharply bents out in the gentle slope of a cantilevering roof slowly extending into the valley.

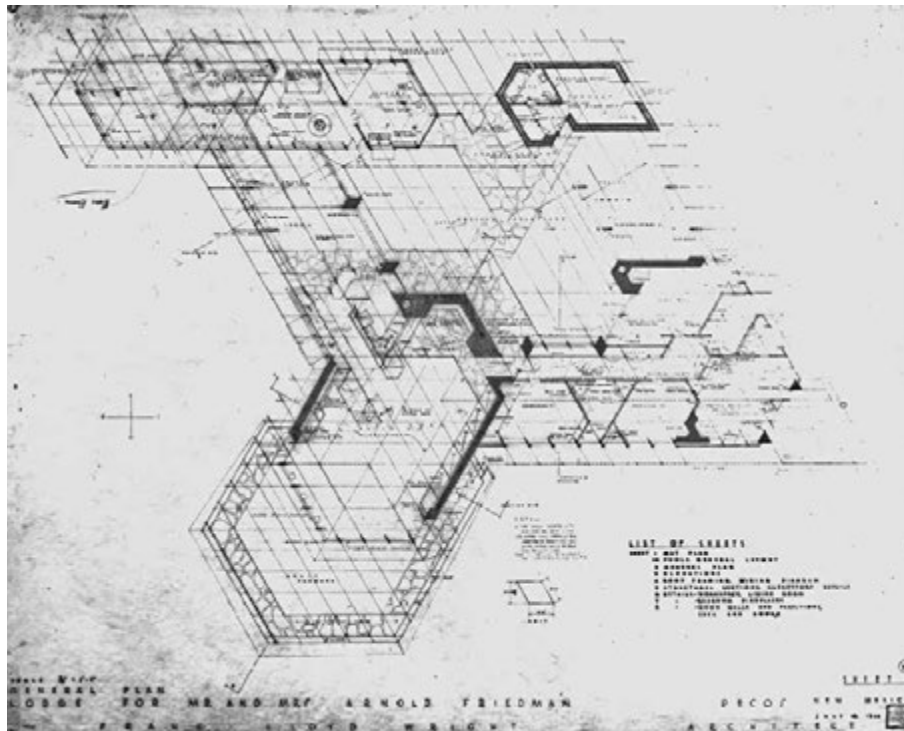


FIG. 4.15 Arnold Friedman House, plan. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

⁴³⁷ *Pleroma* is a term from gnostic theology and is used to indicate the presence of the divine in certain terrestrial and celestial phenomena.

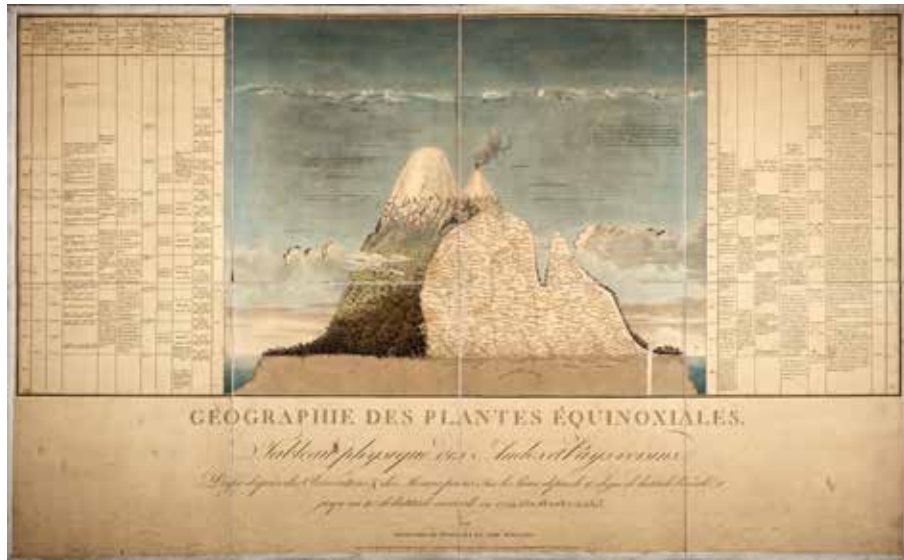


FIG. 4.16 Alexander Von Humboldt: Naturgemälde, depicting vegetation zones on the Volcanos Chimborazo en Antisana, 1807.

Again, the drawing is fascinating: as so often in Wright's perspectival renderings, the frame does not exactly follow the contour of the drawing sheet itself. The described landscape of the ridge-slope only fills the left two thirds of its width, while at the bottom the actual house pushes out to the right to tend towards the edge of the sheet. The upper right vertical frame line cuts off the layers of the landscape to end up at the top of the chimney. If von Humboldt would have painted the site in a *Naturgemälde*, he would have written down all his comments on the structure of the mountain and its vegetation in the blank margin of the drawing.⁴³⁸ [FIG.4.16] Here, however, we see this information kaleidoscopically reflected in the house as if it was a monad actively mirroring its own environment as part of a bigger world. We see rocks, probably taken from the floor of the valley or the bed of the Pecos river, piled up in the mass of the different chimneys, the stylobate and some parapets. We see the firs sawn to rough timber in some of the other parapets and in the shingles of the roof, the styles of the windows and the doors of the living room. The little blue patch of sky is reflected in the glass of the windows, remember glass: "thin sheets of air."⁴³⁹

⁴³⁸ Von Humboldt used the term *Naturgemälde* (painting of nature) for his large drawings of the mountains of South America. In the margins we find data concerning height, atmospheric conditions, vegetation, lithic origins, etc. See: Andrea Wulf, *The Invention of Nature, The adventures of Alexander von Humboldt, The last Hero of Science*, London: John Murray Publishers, 2016. p.250-251.

⁴³⁹ The exact formulation: "Thin sheets of air in air to keep air out or to keep it in." FLW, *CW1*, p 297.



FIG. 4.17 Arnold Friedman House, interior.
[Photo: Trevor Tondro]

The house is a perfect specimen of the site. Not only in its materials, but also in the silhouette of the fir, accelerating towards its apex and gradually extending towards a virtual horizon. If we enter the building, which we cannot do in this drawing, we would see how light wooden beams interweave in a rhomboid pattern to form a space-structure that struts and braces the trusses of the high roof, as if we were witnessing young firs cooperating in holding against the storm. [FIG.4.17]

It is as if the silhouette of the house doubles the profile of the section of the valley, steeply rising to the crest but when going down—falling—kinking and gently sloping to the river in green pastures. The steep parts of the roof are busy climbing their own private climbing wall in the chimney, or doing an *abseilung* down the steep, to then glide down to join the lines of the pasture to loaf around in a relaxed circumference.

The architecture of the house personifies the mountains and its firs. *The Fir Tree*. One fir is isolated in the courtyard as its original inhabitant, like the rock in Fallingwater. The scientific expedition meets nature where it contracts a character: the specimen is not something dead, it is an individual positively manifesting the forces of life, it testifies of spirit.⁴⁴⁰

⁴⁴⁰ A good example of such a character may be found in the way Wright describes the movements of certain of his buildings following the example of a tree. "In buildings we are building there, the movement has grown up as the trunk of the tree sends out branches and foliage." *CW3*, p. 307. The definition of 'character' is taken from Schelling's *Philosophy of Art*. p. 12: "As this energy of singleness, and thus also of individuality, presents itself as the living character."

The contraction around the vertical, the drawing of a specimen of the site, already implies a new horizon. Because the expedition only meets a specimen, something special, no general conclusions may be drawn. The scientific expedition, researching American nature as the possible base for a new American architecture, has to move on. The other wing leaves the house to return to the road.

4.3.3 Organic architecture

I must interrupt my analysis of the geographic expedition here in order to elaborate somewhat further the notion of the organic in its relation to the notion of ground and consequently the notion of the 'native' as what is born from the ground.

The organic is a complex notion, fully developing in the 19th century, a notion in which both a sense of dynamics and a sense of integrity must be distinguished. Let us take one of Wright's most elaborate definitions as a starting point: "It is in the nature of any organic building to grow from within on its site; come out of the ground an organism into the light—the ground itself always held as a component part of the building itself. We have then primarily the new ideal of building as organic. A building dignified as a tree in the midst of nature."⁴⁴¹

In this 'definition' the aspects of "coming out of the ground into the light," the 'growing from within' and the part/whole relation seem to be decisive for the concept of the organic. The organic is a question of integrity, says Wright somewhere else: "As originally used in architecture, organic means part-to-whole-as whole-is-to-part. So entity as integral is what is really meant by the word organic. INTRINSIC."⁴⁴² The parts must grow into a whole and this can only happen when there is already a reflection of the whole on the parts: the whole is intrinsic, it "grows from within." The whole is both cause and effect as Kant would say.

In the second place we should determine the etymology of the word organic. The Greek word *ergon* means work. It is the kernel we also find in the word en-ergy (Greek: *energeia*): what puts to work. Organic is what works, what builds, what organizes, what results in reality, in *Wirklichkeit*. In Schelling's organicist philosophy, it are the forces of contraction and expansion as the inner forces of formation. Organicity means a drive forward to develop what is hidden in the ground, meeting

⁴⁴¹ FLW, AB, p. 363.

⁴⁴² FLW, Ibid., p. 61.

an inhibiting force in that ground itself. These forces go by different names—gravity and light; ground and spirit—according to the ‘power,’ the phase or the layer they organize. As we saw, light was an early form of spirit.

The forces of contraction and expansion are the organic forces: earth contracting towards a unity, growing to an organic ‘one,’ and reciprocally, spirit—the expanding force—tearing open new worlds, tending towards a ‘multiple’, developing the ground, adding something new, thus on its way towards a new whole. The organic whole remains an open whole, on its way to a next. It does not close. Time is essential in the growing aspect. We can now discern two essential aspects of time. For Schelling, we humans have a presentiment that one organism lies hidden deep in time and encompasses even the smallest of things. That organism comprises the forces that stop and regulate time. The organon is of the order of time, it is both the eternal past, a past that began to be a past on the very moment that the essence (*Wesen*) or organon, which Schelling himself compares with Spinoza’s *natura naturans* or God, decided to leave itself in order to know itself by exteriorizing in creation, in *natura naturata*. *Natura naturata* is the product of a decision, it is the time of a natural history or of the development of the ground hidden in the eternal past. For that reason we heard Schelling saying that one should peel off all the temporal layers of the time of formation of the landscape, the time of the natural past, to come to the ground, to the eternal past. Wright had a clear intuition of both times when he said: “I believe in God, only I spell it nature.”⁴⁴³ Nature here is creative nature or *natura naturans*. When Wright said “Nature is the body of God” he in fact touches on *natura naturata*.

The Romantic era projects the nucleus of creative, organic forces in the belly of the earth. Either in the heart of, either somewhere outside the territory. “The earth is the intense point at the deepest level of the territory or is projected outside it like a focal point, where all the forces draw together in a close embrace.”⁴⁴⁴ The embrace implies a tension, an eternal imbalance between native and foreign. This imbalance manifests itself in the restlessness that drives the Romantic artist, always returning to the road, in search of that very heart of creative earth, in search of the ground, but always only capturing reflections of it, finding it in a fragment.⁴⁴⁵

⁴⁴³ Brendan Gill: *Many Masks, a life of Frank Lloyd Wright*, New York: Ballantine Books, 1988, p. 22.

⁴⁴⁴ In a comment on Romantic art, Deleuze and Guattari write : ‘*La terre est ce point intense au plus profond du territoire, ou bien projeté hors de lui comme point focal, et ou se rassemblent toutes les forces en un corps-à-corps.*’ *Mille Plateaux*, p. 418.

⁴⁴⁵ Cf: Veire, Frank de, *Als in een donkere Spiegel, De kunst in de modern filosofie*, Nijmegen: SUN 2007 [2002], p. 91

Wright's geographical expedition is on its way to establish the American earth as a past to unite in, to find a foundation for "a truly American architecture." Growing out of that past, growing out of an American earth, is the first condition to become organic. The 'native' and even the 'national' often return in spoken and written motivations of Wright's work.⁴⁴⁶ Wright is not the only Romanticist succumbing to this seduction, neither is he the only American artist to be haunted by the contraction on the 'natal.'⁴⁴⁷ After the first wave of settlers and their great land-claiming operations in the 18th and 19th century followed a second wave, this time of geographers, geologists, and biologists, inventorying and analysing the American continent. (Re-)searching an American nature. This movement was paralleled and followed by a cultural one that tried to establish an American Art. Whitman's *Leaves of Grass* is a journey through 19th century American life, in every scene describing a specimen of 'the American way.' Thoreau's *Walden* is a wandering around and about, a sauntering on the territory as a meeting with all the new species—animals, trees, landscapes, peoples—evoking the question: how to be united to them in a 'united natures' of America?⁴⁴⁸ What strikes in these examples is the disparate character of all the scenes described while they remain gathered in the desire to make them part of an organic whole in a bond with American nature. The cultural expedition is looking for an organic unity as the base for an American identity, that identity becoming the base for an American art, no longer dependent on Europe.⁴⁴⁹ There is hope that the fragmented character of a people with scattered origins—immigrants coming from all over the world—and the somewhat coincidental character of all their common endeavours, could find a new unity in American nature. Gilles Deleuze has often stressed that American literature remained obsessed with the idea of a possible underground connection between all the singular figures of the American landscape. He quotes Whitman: "The object of American literature is to establish relations between the most diverse aspects of the United States geography—the Missisipi, the Rockies, the prairies—as well as its history, struggles, loves, and evolutions." Then he goes on himself: "Relations in ever greater numbers and of increasing quality.

⁴⁴⁶ *Usonia, Usonia South and New England*, FLW, CW4, pp. 89-92

⁴⁴⁷ For Romantic art and the contraction on the 'natal,' see: Deleuze and Guattari, *Mille Plateaux*, pp. 418-420.

⁴⁴⁸ Thoreau, *Walden, or life in the woods*. Boston: Ticknor and Fields, 1854. Wright acknowledges his affinity with these American writers in: '*Books that have meant most to me.*' CW5, p. 63. He comes back on these affinities –Emerson, Thoreau, Melville, William James, John Dewey, Mark Twain, Whitman etc. in 'A testament', paragraph: 'Influences and inferences.' FLW, CW5, p. 211.

⁴⁴⁹ Lewis Mumford writes : "The experience of the pioneer left no trace in culture. There was nobody to take note of it, nobody to write it down, nobody to make art of it. Art was irrelevant for the pioneer. "The full experience of the pioneer was only later, in the work of the transcendentalists, reflected upon. Henry David Thoreau was perhaps the only man who paused to give a report of the full experience." Mumford, Lewis, *The Golden day, A Study in American Experience and Culture*, New York, Horace Liveright Publisher, 1926, p. 114.

This is, as it were, the motor that drives both Nature and History.”⁴⁵⁰ At the background of this drive we may signal the hope for organicity. In the growing relations we find the will towards an organic whole while in the interrelated landscapes the contours of a personified America appear.

Just like his literary compatriots, Wright was searching for the American earth to come to an organic bond. “Organic architecture” means two things. Firstly it means integrity with nature, finding the organic heartbeat, the pulse of place as the contraction of a natural and human history, “growing out of the ground,” the American ground, *into the light*, a local light, thus organically growing into a whole with American nature.⁴⁵¹ Secondly it means “Holding that ground as integral part of itself”: structuring architecture as the American earth structures its landscapes, manifesting its natural rhythms, taking its natural colours, becoming an exemplary ‘species’ itself of that earth, a specimen of America as a building.

The notion of ground is a double one in Wright: firstly it refers to the depth of the earth, to that ‘organic’ nucleus of forces building a world. *Terra*. It accounts for the vertical as a movement into and out of that temporal depth of a past. Secondly ground refers to the site as surroundings, to ‘the grounds’ as a landowner would say: to a certain extension.⁴⁵² Ground means both terra and territory.⁴⁵³ We must be aware that the territory already implies a limiting principle or a contraction of the boundless extending force related to the *surface* of the earth. It contracts on the native, the ‘own’, or the ‘proper,’ hidden in the depth. It implies the horizon as a negative sign.

To avoid one-sidedness, we should stress here immediately that Wright says that the building “holds the ground as a part.” That part is not yet the whole. When the ground grows into the light it opens towards the horizon as a positive sign, towards a beyond the horizon as a possible new whole, it moves into the foreign, the far as the strange. That world, a new America, is a utopian lure, a future to be heading for. America is on the way to... Usonia. Usonia was Wright’s name for a better, *united* America. He says he took the name from Samuel Butler, who supposedly used it in his novel *Erewhon* as a new title for the United States of America.⁴⁵⁴

⁴⁵⁰ Gilles Deleuze, *Critique et Clinique*, Paris : Les Editions de Minuit, 1993. English translation: *Essays critical and clinical*, translated by Daniel W. Smith and Michael E. Greco, London/New York: Verso, 1998, p 59

⁴⁵¹ Again and again Wright stresses the ‘native’ and the ‘indigenous’ as the most important aspects of the idea of the organic, *CW3*, pp. 300-309; *CW5*, p. 222 “A building as an organism. It must incorporate the nature of the site.”

⁴⁵² In that sense Christian Norberg-Schulz argues that the landscape functions as an extended ground to the man-made places. *Genius Loci*, p. 48.

⁴⁵³ Deleuze and Guattari, *Mille Plateaux*, pp. 417-418.

⁴⁵⁴ FLW, *CW5*, p. 199. Up until now, nobody has been able to verify this reference.

To put it still otherwise: when the building grows out of the ground, the ground itself already manifests itself as divided because it embodies the organic itself as the battle of forces of contraction and expansion. We find the dividedness of the ground in the double character of Wright's buildings: the heavy lithic earthbound masses as the contraction on a local or native earth and the lighter wooden or canvas volumes—or more in general the horizontal articulation—as the expansion towards a new whole, a new horizon. The vertical and the horizontal.

Wright was aware of the problems inherent in the ideal of a “truly American” style. If the American society was something that had grown out of all the countries of the world, its latent ‘organic material’ being that of the globe, how could it ever achieve organic unity? “As everyone knows, we live in economic, aesthetic and moral chaos for the reason that American life has achieved no organic form.”⁴⁵⁵ And he often insisted that ‘we cannot have an organic architecture unless we achieve an organic society.’⁴⁵⁶

All the same he was aware that an organic society is nothing that exists. The organic is something virtual that has to be actualized time and again, it are the organizing forces wanting to become a work. “Architecture is always here and now.”⁴⁵⁷ And that also immediately implies that an organic whole will always paradoxically remain a fragment, a specimen which nonetheless may testify of the hope of an organic whole. The organic does not find its reason in some arbitrary border drawn around the 52 states, nor in some instituted state enforced from above. The organic comes from within, it is the American way. Every new work is a “variation on America.”⁴⁵⁸

Wright knew as no other that organic architecture was not only an American affair. In his writings he does not stop saying that what is true for the United States, should also be true for the rest of the world. Every country should find its own earth, its own nature, as the true guiding principle for its own organic architecture. And he often—somewhat sarcastically—added that a large part of Europe had already missed that exit in going with the Modern Movement. To than add that the other part—Germany and Holland—, although of good will, had missed it too by orientating themselves on Wright, and thus going astray in another ‘non-native’ direction.⁴⁵⁹

⁴⁵⁵ Wright quoted by Hoffmann. Donald Hoffmann, *Frank Lloyd Wright's Fallingwater*, p. 14.

⁴⁵⁶ FLW, *CW3*, p 305.

⁴⁵⁷ FLW, *CW5*, p. 158.

⁴⁵⁸ ‘*Variations on America*’ is the title of Charles Yves’ composition, in which he varies on the national anthem, *The star spangled banner*.

⁴⁵⁹ FLW, *CW3*, 302-319.

4.4 Dressing up with American nature

4.4.1 On adoption and grafting

Let us reformulate the question of an American identity in a more generic way: how can the settler—being the migrant—ever become a native? Wright answers this question in his geographic-geological expedition: by looking at all those who set up a camp earlier, by studying the habits of other life-forms on the spot, by becoming creative in *grafting* oneself onto the site. To give oneself a new history. This is exactly what we saw Thoreau do in one of the scenes in *Walden*. He creeps onto the ice of his Walden Pond and lays down: “looking down into the quiet parlor of the fishes (...) as into a window of ground glass.” He feels reassured by “the cool and even temperament of its inhabitants.”⁴⁶⁰ He connects to earlier life. The surface of the earth has a temporal depth, a natural past to be inaugurated. The settler adopts new ancestors.

Indeed, this is what Wright did. Learning from vegetation how it came to flourish in the local circumstances, looking at the snake rolling up in the desert, looking how the rock resisted erosion, shortly: studying formation, resistance, persistence and death. Learning the weld between “the stony bonework of the earth” and all life settling itself upon it. The *Biogea* weld.⁴⁶¹ How can the settler settle? By *adopting* a strange earth, by making her the chosen mother. By taking over its habits having already condensed in so many habitats of so many species including the human. To finally win the moment in which the settler becomes ‘inhabited’ by that earth. To find a graceful, aesthetic way of living with it.⁴⁶²

This is why the salvage of the rock in *Fallingwater* was so important: can one live with it, without killing it, can one have the rock as an adopted parent? Surely the protruding rock disturbs walking patterns in the plan. One has to change one’s own habits to allow that earth to be there as the very foundation of a new life. The question is: can one take the habit of the rock, walk around it, stumble upon it, sit on it; may it become the settler’s personal melancholy? May the rock inhabit a human

⁴⁶⁰ Thoreau, *Walden*, p. 304.

⁴⁶¹ See introduction, §0.5.2

⁴⁶² On the reciprocity of getting habits and ‘being inhabited by’ as the condition for grace, see Lars Spuybroek, *Grace and Gravity*, p 21–25 Spuybroek points to the etymological relation between ‘enable’ and ‘inhabit.’

life? But the rock also gives birth to the floor and the walls. Will it become one's habit in the double sense of the word: a daily pattern and a cloak. Let me adopt a strange word here myself, the Dutch word *habijt*, to name more explicitly that second meaning of habit (clothing/dress) to distinguish it from the first (custom/way/manner), but at the same time to preserve the connection. *Habijt* also means something solemn, a dressing up to the—often religious—occasion. If that same rock with its textures is rewoven to the texture and layering of the masonry, we are 'habited' (dressed/clad) by the rock while the wall is inhabited by the spirit or genius of the rock.

The habit of nature weaving a surface texture with the forces of erosion and persistence, with river and rock, is transfigured to a masonry technique. We find a form of Semper's "mystery of transfiguration" at the heart of Wright's architecture.⁴⁶³

I must pause here a moment to elucidate my use of the Semperian notions of transfiguration and *Stoffwechsel*. *Stoffwechsel*, for Semper,⁴⁶⁴ pertains to the idea that a material technique such as weaving (referring to a supposed textile origin of architecture) may inform another technique such as stone carving. Semper refers to the German language as the archive of this transformation arguing that many architectural notions find their origin in working with textiles. *Wand* (wall) refers to *Gewand* (garment), *Decke* (cover/ceiling) refers to *Bedecken* (to cover, to coat), *Bekleidung* (cladding) refers to clothing or dressing, *Zaun* (hedge/fence) refers to *Saum* (hem/fillet) etc.⁴⁶⁵ These textile origins serve Semper to found his description of architecture as an ornamental system.

Semper mentions "the mystery of transfiguration" in an explicit reference to these textile origins, textile art for Semper being the mother of all arts.⁴⁶⁶ This is not the place to go into the question why he speaks of a "mystery," but he tells us that we can easily find an 'outward reason' (*äussere Veranlassung*) for the textile-to-stone transfigurations (and thus for the beginning of the history of architecture as a monumental art) in "the wish to commemorate and immortalize some religious or solemn act, an event in world history, or an act of the state." He states that the festival apparatus (*der Festapparat*) used for celebrating such acts—usually a temporary structure hung with tapestries and dressed with festoons and garlands—becomes the *motive* (*das Motiv*) for the *permanent* monument. Part of the scaffold holding up the textile parts, the woven tapestries themselves, as well as the other ornaments such as festoons, transfigure into a stone version because in that way they may

⁴⁶³ Semper, *Style in the Tectonic Arts*, p. 248.

⁴⁶⁴ *Ibid.*, p. 250.

⁴⁶⁵ *Ibid.*, p. 248.

⁴⁶⁶ *Ibid.*, p. 254.

become the object of a repeated memorization. And he gives a series of examples, among them stone Lycian tombs which strongly remind us of Lycian funeral pyres “artfully assembled in wood and hung with rich carpets” with a bier on the top.⁴⁶⁷

If we use the concept of transfiguration for Wright’s transformations it is because Wright and Semper converge in both the aspects of monumentalization and of *Stoffwechsel*. In the second chapter, I suggested certain figures of Wright’s architecture as transfigurations of the settler rituals pertaining to the *templum*. For Semper the act to be commemorated always bears on a human history.⁴⁶⁸ For Wright this human history is, as we saw, always part of a larger natural history. Humans settling repeat nature settling, as we saw in the third chapter. The sediment-settler, the “stony bonework” contains styles for all the ages for all the coming settlers. The neo-lithic repeats a lithic origin. A true mystery of transfiguration. And one may indeed consider this a “religious or solemn act,” to use Semper’s words. Architecture reconnects to its own natural origins, it celebrates *natura naturans*, creative nature—the first settler to ‘arrive’ in immemorial times and to wander away again in all the stages and styles of *natura naturata*. “I believe in God, only I spell it nature.”⁴⁶⁹

We may see now how transfiguration is part of what we called the adoption of an earth by the settler becoming a native. The wall of the river in its matters and textures may transfigure to the wall of the house and thus become the habit-*habijt* of the inhabitants. As a second skin it grows back into their life. The desert floor may become a desert-concrete wall, a human wall, like in Taliesin West and so many other desert houses. A wall as the picture of one’s own adopted ancestors. [FIG.4.18] A form of the absolutely inhuman becomes a motif of the human habitat.

But apart from these motifs pertaining to the local, in the second place, we find more general, ‘farther,’ or global motifs of transfiguration. We may think here of Wright’s example of the tree and its cantilevering branches being transfigured to the technique of the cantilevering floor. The local has to be orchestrated. Forms of *Stoffwechsel* we also meet in Gaudi, using organic motifs becoming motivations for his constructions. Natural habits inhabiting architecture.⁴⁷⁰

⁴⁶⁷ Ibid., p. 249.

⁴⁶⁸ As we heard him saying it is “an event in world history, or an act of state.” Semper, Ibid., p. 249.

⁴⁶⁹ Brendan Gill: *Many Masks, a life of Frank Lloyd Wright*, New York: Ballantine Books, 1988, p. 22.

⁴⁷⁰ Again I use the reciprocal concepts developed by Spuybroek in *Grace and Gravity*: pp. 21-25. In ‘*The architecture of continuity*’ he already speaks of *Stoffwechsel* as a process in which certain material techniques *inhabit* other material techniques. Spuybroek, *The architecture of continuity*, Rotterdam: V2_Publishing, 2008, pp. 227-243.



FIG. 4.18 Taliesin West, Scottsdale (AZ), 1937: desert concrete. [Photo: Steven C. Price; CC BY-SA 4.0]

Is that organic: 'grafting onto?' Is there a better definition? The organic, for Schelling, pertains to a nucleus of creative forces, still present in every natural product.⁴⁷¹ Every organism remains creative. The top of one plant may grow onto the stem of another plant. The settler must grow into nature so that nature may grow into the settler. The organic always works two ways. It is where 'growing out of' and 'growing into' loop with each other.

⁴⁷¹ Iain Hamilton Grant, *Philosophies of nature after Schelling*, pp. 202/203.

4.4.2 Wright's four elements

We mentioned the distinction between the heavy masses and the tent as one of the basic traits of Wright's tectonics. We see here that the "mystery of transfiguration" or the *Stoffwechsel* is not the only Semperian idea we meet in Wright. When looking at his houses, we can always easily recognize Semper's *four elements*. The first element is that of the hearth, and we may add its chimney, the fireplace as the social centre and indeed the *moral* element (Semper's words ⁴⁷²).

The second element is the heavy stereotomic mass, the groundwork or what Semper often called the mound and sometimes the terrace. It is Wright's stylobate, the evening and elevating element of a sloping terrain, sometimes ending up in his famous 'prows', like the prow in Taliesin West, or that of The Hagan estate in Chalk Hill. [FIG.4.19] In the later works they are as often as possible lithic samples of the site and if not, at least stone or concrete block masonry masses.



FIG. 4.19 Hagan Estate, Chalk Hill, (PA), 1953; stylobate/prow. [Photo: Jeff Kubina, CC BY-SA 2.0]

As a third element we have the roof and its framework and eventually its posts, the lighter constructions. It is Semper's roof, the object of carpentry techniques. And finally we have the textile cladding. Indeed, in Taliesin West and Ocotilla Camp canvas was literally used as the cladding material, in contrast to other materials establishing a frame or a base. But even in the Prairie Houses we see a clear distinction between the lighter volumes and the heavy masses. The former may be seen in the roof, the windows and sometimes even the wooden posts; the latter in "stylobates drawn up to the casements windows," the hearth and the floor.

⁴⁷² Semper, *The Four elements of Architecture*, p. 102.

The Usonian homes too, can easily be seen as light wooden tents draped around the stone mass of the hearth and its chimney, and set up on the stereotomic groundwork of the concrete floor with its so called watertable.

It is true that in the elevation the distinction between the elements seems to be more complicated, when in Wright's work masonry becomes ornamental textile; when *Mauer* becomes *Wand/Gewand*, a principle of construction and cladding, like in the famous textile blocks.⁴⁷³ But it is Semper himself who always clearly separates possible constructional or protective functions of the wall from the ornamental covering even if they are merely paintings of carpets. It is no big step then to see the sandstone or desert concrete wall as a canvas or *Gewand* (a garment), when the floor of the desert finds itself raised almost as a mosaic or brocade, becoming a texture-textile 'woven' of materials of the earth.

A second complication may be found in a certain fluidity between diverse elements: in Wright's work the mound as the heightened ground finds a continuity in the hearth and the chimney, a heavy stereotomic mass itself, which in its turn spreads out in the wall to become a protective principle. It is true that even Semper accounts for such material joining, such as the one between the mound and the hearth, as long as there remains a clear separation between the hearth as a 'moral' element, and the wall, the roof and the mound being the "defenders of the flame" against the hostile elements in nature.⁴⁷⁴

And as we saw in Taliesin North and Fallingwater, there is often a roof "coming down in the wall" in a same sort of continuity. We can refer to Semper here too, in whose theory floor-mosaics may become dressings, also covering a wall; carpets move from floor to wall becoming space-dividing elements and are remembered when their patterns are painted on the wall. His whole theory is about transformations, certain motifs and patterns being transported through different arts and different elements and thus through different material techniques of architecture, as we saw in the concepts of *Stoffwechsel* and transfiguration.⁴⁷⁵

⁴⁷³ As we saw, Semper finds the German word *Gewand* (a textile dress) as the etymological origin of the word *Wand* (the visible side of the wall, a space dividing element) which in its turn may cover the *Mauer* (the wall as the constructive kernel). Semper, *Style in the Tectonic Arts*, p. 248.

⁴⁷⁴ On the hearth and the mound joining, Semper, *The Four Elements of Architecture*, p. 102, footnote. For 'the defenders of the hearth's flame': *ibid.*

⁴⁷⁵ Semper, *Style in the Tectonic Arts*, intr. Mallgrave, p. 21.

We do not know if Wright ever read Semper who seems to have been en-vogue in late 19th century German speaking architectural circles in Chicago.⁴⁷⁶ The least we can say is that their thoughts converge in many respects. But what counts here is the meaning the elements take in the metaphor of the geographic expedition. For Wright the heavy masses of the stereotomic groundwork are geological samples of the ground. They refer to the temporal depth of a terrestrial history. The lighter volumes refer to mobility, to the idea of the camp, to a geographical width to be researched. And yes, in their architectural unity, in their organicity, they both refer to an unfolding of the local ground, to all the varieties and variations of the American territory. If for Semper all the differences in style refer to a *human* history of style, for Wright they primarily refer to the geographically different styles of the *earth*.

4.4.3 On Drilling towers and fountain heads

In some of Wright's houses the paradoxical tectonics of heavy masses and lighter volumes ends up in the silhouette of the drilling tower. It is the chimney as the sample of the earth rising into the sky, and the scaffolding of the roof, covered with shingles, or sometimes metal, draped down in a diagonal. We find such constructions in the Smith House in Piedmont Pines [FIG.4.20] being the reincarnation of one of the Lake Tahoe cabins, but also in the Davis House in Woodside. In fact, the Fir House was not so much different. Their silhouettes vaguely remember the old wooden oil drilling installations, such as the famous Drake tower. [FIG. 4.21] Off course, many have referred to these steep silhouettes as being those of the tepee. It is not necessary to argue here, the tepee could well be one of the types, one of the habits-habitations-habitats to be found as a truly American motif for a log cabin to graft upon. But a very interesting aspect gets lost in this reference: the fact that what is won from the earth is immediately piled up in a vertical structure as if it was a geyser or the oil of a well, spilling the richness of a natural history. In this imagery the tent-like roof acquires the quality of a workshop, a structure in which the scientific expedition finds its workplace: researching the fountain of matter, which rises up from the depth of a terrestrial history.

⁴⁷⁶ Kenneth Frampton, *Frank Lloyd wright and the text-Tile tectonic*. In: *Studies in tectonic culture. The poetics of construction in Nineteenth and Twentieth Century Architecture*. Ed. By John Cava, Cambridge (MA) London: MIT press, 1995, p. 93.



FIG. 4.20 Smith House, Piedmont Pines (CA), 1939 [Courtesy of FLLWFA (MOMA / AA&FALCU)]



FIG. 4.21 Wooden oil drilling tower: Drake tower. [Courtesy of Drake Well Museum]

I admit, the drilling tower as an image for Wright's geographical operation is an awkward image. But Wright is more than eager to mine the natural affluence of the American Earth. "And in the sense of earth—deep buried treasure there—without end. Mineral matter and metal stores folded away in the veins of gleaming quartz, gold and silver, lead and copper, and tawny iron ore—to yield themselves up to roaring furnaces and flow to the hands of the architect—all to become pawns in the play of the human mind."⁴⁷⁷ For Wright earth is a great well of materials to be laid out in the light, to vibrate in the light. "The gleam of mineral colors and flashing facets of crystals." It is the fountain of matter that results from the 'drilling operation.' It pertains to all the layers up to the mineral age, contracted in the intensity of a vertical, fathoming a history that should lead to the organizing principles, even before organic life. Architecture lays it all out in its own rhythms and with its own counterpoints. The fountain: the sections of high buildings in combination with their mole's eye perspectives give us a convincing image. In the centre of the section we see the drilling head—the famous tap-root-foundation—drilling deep into the earth, and the constructive shaft as the jet of black matter thrown up in the sky.

⁴⁷⁷ FLW, *CW1*, p. 269-270.



FIG. 4.22 Golden Beacon, Apartment Tower for Charles Gleason, Chicago (IL), 1956. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

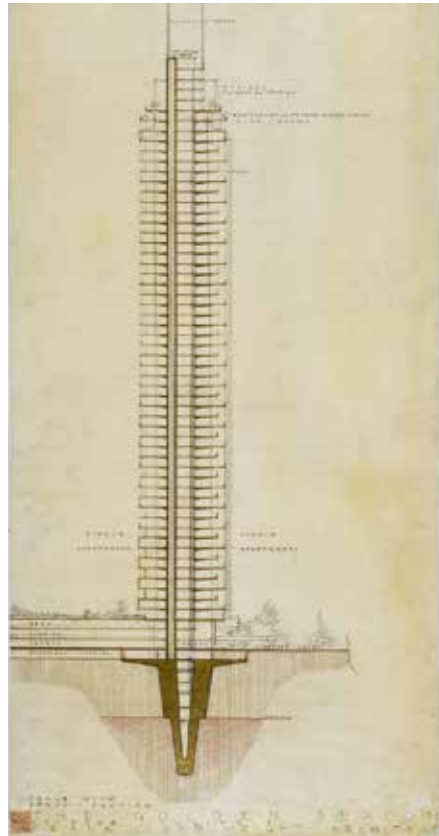


FIG. 4.23 Golden beacon, tap root foundation.

At every level the vertical breaks to extends in horizontal floors to then drip down in the coloured mineral facades while interweaving with the light. "Building surfaces become opalescent, iridescent copper-bound glass."⁴⁷⁸ The jet of copper and glass of the Price Tower; the gold anodized aluminium of the metal panels and vertical louvers of the Golden Beacon in Chicago. [FIG. 4.22-4.23] The Illinois Mile High Skyscraper. Matter is forcefully thrown up to then calmly stream down in long verticals, or picked up by the horizon to cascade down in geometric patterns.

⁴⁷⁸ FLW, *AB*, p. 281. This sentence is on the Life Insurance Company Building.



FIG. 4.24 Ralf and Wellington Cudney House, San Marcos in the Desert, Chandler (AZ), 1928. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

The crystal splash of the Dallas Lacey Hotel; the vertically articulated textile block masonry of the Cudney House in San Marcos on the Desert, mirroring the launching rocket force of the Saguaros as a multiplied fountain head growing out of the desert floor. [FIG. 4.24] In all these projects, materials are celebrated as a pure gift. What is celebrated and commemorated is *natura naturans* organizing matter to materials able to pattern and be patterned by the light, “light diffused, light refracted, light reflected, light for its own sake, shadows aside. The prism has always delighted and fascinated man.”⁴⁷⁹

⁴⁷⁹ FLW, *CW1*, p. 292.

4.5 The far and the near

4.5.1 Indigenous and exogenous

I have given a rough sketch of Wright's architecture as a geographic expedition sampling the American earth. The two examples of the Fir House and the Arizona Crater Resort gave us the idea of an expedition zooming in on the local, or as Wright used to say, "the native" or "the indigenous." But as we said in the introduction to this chapter, not every motif can be clarified in that way. We see many 'exogenous', and many generic motifs. The time has come now to evaluate their place in Wright's architecture, and I will do so by elaborating the concepts of the far and the near, both in time and in space.

Let's begin with an aspect I have hardly touched upon until now: the 'exotic' motif. At the edge of a Californian, or larger, a North-American earth, somewhere beyond the mountains or beyond the plains, a Meso-American silhouette or a fragment of a Columbian frieze, haunts the horizon. There may be good reasons to use them in the *appropriation* of an American earth: for Wright they were part of a strategy to further oppose an American to a European history, tracing underground rhizomes in the south-west, to better cut off those to the east.⁴⁸⁰ Earlier, we mentioned his effort to further 'natalize' such exogenous ornamental motifs by mixing local sand or gravel to the compound of the concrete used to produce the textile blocks of such quasi Meso-American buildings.

There is, however, an even deeper reason for Wright 'to become a Meso-American.' It is a typological one. Californian projects, such as the Storer and the Ennis House, strongly echo the taluds and tableros types of Meso-American temples. For Wright they embody the way up to the light, the temple as an altar for the sun. Such a typology captures an elementary mood, a '*Grundstimmung*': that of humans being "prostrate to the sun" as Wright called it. In this case the 'far' as the 'strange' resonates with the 'near,' the near being Wright's idea's about buildings as "children of the earth and the sun too."

⁴⁸⁰ As we saw in the first chapter, according to Wright the north east states were still too much obsessed with the old continent. FLW, *CW4*, p. 88-92.

4.5.2 Genius loci or Genii loci

We must be aware that this ‘borrowing’ of a style is a real habit of Wright. In Auldbrass—the Leigh Stevens House—with its slightly inclining wooden walls and its slowly rising roof, the wigwam appears to have been an inspiration. [FIG. 4.25] [FIG.4.26]

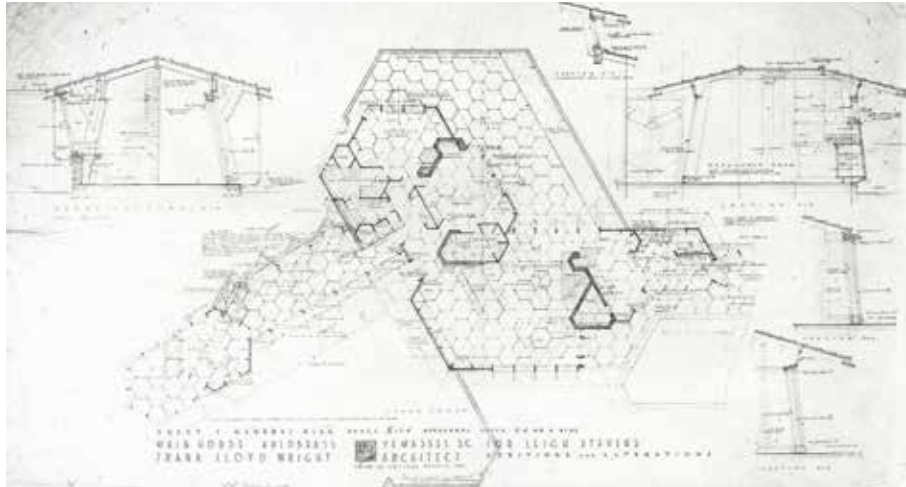


FIG. 4.25 Leigh Stevens House, Yemassee, South Carolina, 1939, section and plan. [Courtesy of FLLWFA (MOMA / AA&FALCU)]



FIG. 4.26 Kaw bark wigwam. [Photo: Ruth Mohler Collection]

The materials the natives used for their wigwams reincarnate in a cypress skin, indeed a local material: cypresses abound in the South Carolina region and surround the house. The cypress wood anchors the wigwam motif to the place. The native Americans of the south were tribes which migrated regularly, sometimes on a seasonal base. We can see the patterns of Cherokee, Yamassee, and Seminole fabrics in some of the ornamental geometric motifs found in the house.



FIG. 4.27 Seminole fabrics.



FIG. 4.28 Yamassee fabric.



FIG. 4.29 Leigh Stevens House, Yemassee (SC), 1939, clerestory panel.

The rhomboid pattern, the zigzag, the triangle and the oblique stripe are quite generic motifs in these native fabrics. Looking at the cut-out pattern of the clerestory windows, they could easily be a part of a Yamassee or Seminole fabric in which straight coloured stripes and patterned bands alternate. [FIG.4.27-4.28] And off-course they are 'informal' versions, with new rhythms, tuned to the structure of the building. [FIG.4.29] Illuminating the interior, they appear as a sort of afterimage emerging from memory, almost like a folk-tune popping up in the music of Gustave Mahler. One of the most beautiful elements are the copper ornaments suspended from the eave. [FIG.4.30] Again their geometric pattern seems to have a native origin. The way they are hung from the eave resonates strongly with the grey mosses hanging from the North American Cypresses.⁴⁸¹ The forking pattern of the wooden struts and their braces supporting the roof echo the branching of the trees. The copper ornaments seem to be a miniaturized version of the struts, now suspended. Even the copper roof seems taken from the natural foliage 'roof' of the site, almost as if it was the palmetto roof of a Seminole hut. But in its ornamental out-growing on top of the ridge, the roof seems to pick up a pagoda silhouette. [FIG.4.31] An eastern motif appropriated. A flashback from the Eastern origins of civilization? Or are they just little firs, as in the native fabrics? Even the patterns of the mullions in the window could be perceived according to a double logic: looking out the windows, the diagonals, centred around the vertical parts of the door, resonate with the diagonals of the branches of the trees; looking in we could have a screen with a geometric Seminole motif. Inspirations from nearby and further away.

⁴⁸¹ *Tillandsia Usneoides* resp. *Taxodium Distichum*.



FIG. 4.30 Leigh Stevens House, Yemassee (SC), 1939; downspout ornament.[Photo left: © Yukio Futagawa. Photo right:unknown].



FIG. 4.31 Leigh Stevens House. [Photo: Anthony Peres]

The copper patina, a bluish green, resonates with all the grades of green-blue of the site, a perfect counterpoint for the Cherokee-red of the floors, a colour found in every Wright-Usonian home. But the blue patina also gives the roof something artificial, withdrawing it from its vegetative surroundings. In its material origin, copper—as scientists tell us today—comes from exploded supernovas, picked up by earth on its formative journey through the universe. A trajectory far away in space and time, a cosmic genius interfering in a terrestrial gathering. The blue patina however is not natural, we need salt and ammonia to allow for such an oxidizing effect. We find the genius of the alchemist refining his metal, showing its celestial origins.

Retrospectively, looking back from the beginning of the 21st century, when looking at Wright's use of local data, it is tempting to refer to Christian Norberg-Schulz's elaboration of the concept of the *genius loci*.⁴⁸² For Norberg-Schulz such a genius supposes a unity grounded in place as a "total phenomenon."⁴⁸³ Such a conception might indeed account for a 'native' architecture born from the ground. But as we see in Wright's case, we always also find *genii* from loci far away in both place and time. Japanese, Maya, sometimes Inuit spirits. And we should account for the different spirits of materials too. I do not say that the concept of *genius loci* wouldn't be able to account for such a multiplicity. Norberg-Schulz already speaks of place in terms of atmosphere and environment⁴⁸⁴ and he eloquently describes the "indefinite multitude of different places" and "the host of natural forces"⁴⁸⁵ preventing a unified perception of the Nordic landscape. Like in the case of the organic, environment and atmosphere refer to a vague, perforated border and must allow for immigrating and emigrating motifs.

Many *genii* appear in Wright's buildings. And if all these disparate *genii* are held together in a building, it is by the genius of geometry, the oldest of them all, the genius building nature, according to Wright.⁴⁸⁶ For all these reasons it would be better to speak of the plural *genii loci*, the togetherness of their appearing and their meeting in "the man made place"⁴⁸⁷ always implying the disparate in space and time. The near implies the far, the *genii* protecting the place may find surprising affinities with other *genii* of other loci. The human place implies the non-human place having taken place and reappearing in the human place. It is exactly this multiplicity of

⁴⁸² Cf. §0.4.2.

⁴⁸³ Norberg-Schulz, *Genius loci*, p.8

⁴⁸⁴ *Ibid.*, p.6, p.8.

⁴⁸⁵ *Ibid.*, p.42

⁴⁸⁶ In his essay on the Japanese print. FLW, *CW1*, p. 117-118.

⁴⁸⁷ The expression is of Norberg Schulz, *Genius loci*, p.50-78.

voices and corresponding timelines, that avoids the native of toppling over to the 'national.' It shows that the organic is both a gathering *and* a migrating force, a force opening up the local to a beyond the territory, a 'beyond the horizon.'

Motifs taken from certain native fabrics or natural patterns imprinted or cut-out off other materials, must be seen as forms of Semper's *Stoffwechsel*, just like Vitruvius' famous triglyphs, emigrating from the wooden and immigrating in the stone temple. Such motifs may refer to an *adoption*, but also to a *treason* of 'the native'. The settler does not only have to adopt a strange earth, but has to learn to see all that appears at the border of the territory, at the shore of the horizon. Both the 'far' and the 'near' are woven into the dress.

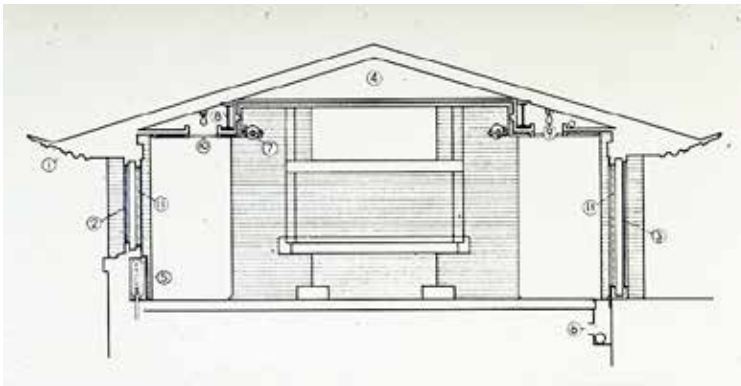


FIG. 4.32 Robie House, section with the curved, pagoda-like eaves. [Drawing: Mary Reyner Banham for the Historic American Buildings Survey]

Recently there has been some critique on Wright because he seems to have been quite careless in the use of indigenous motifs, often confusing styles of different tribes.⁴⁸⁸ This critique would be understandable from the viewpoint of an architecture fettered to place or region, but it becomes irrelevant when we admit we cannot assess all the motifs as native or 'proper to a place': every place has a horizon and thus a 'beyond the horizon.' Places imply a whereto and a from, they gather 'ways' as much as they imply a *hic et nunc*. For that reason all kind of 'extraterritorial,' migrant motifs may pop up in Wright's architecture. Already in the section of the Robie House we find the dream of an Eastern roof, the slightly curving soffit being that of the pagoda. [FIG.4.32] The far is woven into the near. Metaphorically we could see the indigenous as the vertical warp, the horizon and its foreign motifs as the horizontal weft. The important thing is they are all gathered together by geometry as an eternal intelligence, far deeper in time or further away in space than any local, regional, national or global border, indeed a cosmic intelligence.

⁴⁸⁸ Elizabeth S. Hawley, 'Playing Indian' at the Nakoma Country Club.' In: FLW, *Unpacking the Archives*, pp 78-95.

4.5.3 Settler motifs

Wright often said that the typology of the settler homes was radical in the true sense of the word: of the root.⁴⁸⁹ In looking at old photographs and paintings, in reading American literature, the settler hut is defined by three events: the first being that of the hearth, often constructed by gathering stones from the field and piling them up as a fireplace and its chimney; the second that of the wooden-cabin (sometimes a log-cabin), made with wood chopped and sawn in a nearby environment. The third is the bench before the house, later to become the porch or the veranda. In this somewhat simplified settler typology [FIG.4.33] we see functional motivations such as the need of the quick set-up, and the warmth in bitter winter conditions. We hear the stories told around the hearth, the stories about the home and the new country, but we also hear the guitar song on the veranda—providence ahead—“may you always see the lights surrounding you.”⁴⁹⁰ We see these three motives returning in all Wright’s homes, of which particularly the first Usonian homes approach the sobriety of original settler huts. A stone hearth with a chimney, a ‘log-cabin,’ the porch or veranda transformed to the large overhanging eave pointing to the horizon. Together they embody an American “*Grundstimmung*,” a fundamental mood incarnated in a dwelling typology.



FIG. 4.33 European settlers in North America: making a home of the wilderness. [Image left: undated print, 1870s: Library of Congress]. Photo to the right: the so called "John Oliver Cabin." [Photo: Jarek Tuszynski, CC-BY-3.0 & GDFL]

⁴⁸⁹ FLW, AB, p. 370.

⁴⁹⁰ According to Bob Dylan's famous song 'Forever young'. On: 'Planet waves'.

In its effort to root on a strange continent, 19th century American culture comes to see the settler typology as a past to be adopted. Thoreau settles in his self-built hut at Walden pond. However short the root of the human settler may be, it is there. The 'mining' principle does not only mean digging for local or native materials, but also for cultural origins. Still in 1959 Wright could say: "The thing we need most in our nation today is a culture of our own."⁴⁹¹ Going this way, ethnographic and so called prehistoric sources must be mined too.⁴⁹² A people of settlers has to be married to the native earth, to be dressed by the surroundings. The story of Wright dressing up himself and his visiting friend Erich Mendelsohn in a native habit-habijt to go for a stroll in the surroundings of Taliesin North, shows how serious Wright took that task. Rooting by travesty. Mining and ethnography, the local material and the native motif, converge because they both pertain to the appropriation of a past. It is the wonder of grafting: to plant oneself in a strange earth and its history and to organically grow out of it with a new past.

Grafting is always an ambiguous, hazardous operation. Intoxication by the old or suffocation by the new 'own' often end up in pure kitsch. Wright tells us about it in his story on the Millard House, where he explicitly mobilized "modern building industry" (the concrete block) and "American opportunity" against the "Midwest dressing up in the Spanish Mission style."⁴⁹³

4.5.4 Drilling into the cosmic heart

In order to prevent the kitsch of origins, as much as the kitsch of the exotic, the architect must be armed with modern technique and the power of abstraction. Already in 1901, practically at the beginning of his career, Wright pleads for an art fully embracing the possibilities of machine technique.⁴⁹⁴ Eleven years later he writes his essay on the Japanese print speaking of geometry as the expression of "that precious something in ourselves we instinctively call Life" and he defines geometry as "the grammar of form"⁴⁹⁵ able to achieve "organic integrity."⁴⁹⁶ Technique opens architecture to a universal future, mathematics opens up place, the local motif, to a universal grammar.

⁴⁹¹ FLW, *CW5*, p. 347.

⁴⁹² Lemaire, *Filosofie van het landschap*, pp 157-159.

⁴⁹³ F.L.W., *AB*, p.264.

⁴⁹⁴ *The Art and Craft of the Machine*, in: FLW, *CW1*, pp. 58-72.

⁴⁹⁵ FLW, *The Japanese Print*, in: FLW, *CW1*, p. 117

⁴⁹⁶ FLW, *Ibid.*, p. 122

The foreign and the native are spelled out in the universals of geometry, a language without nation. The machine transforms materials to a next level able to cover a range of architectural necessities, from structure to ornamental dress. Local motifs may easily be expressed by all kind of non-local-materials: “steel and iron, plastic cement, and terra cotta.” Just like geometry modern technique is a “simplifier.”⁴⁹⁷ When the native motif is abstracted from its local craft and poured into the mould of a synthetic material and when the exogenous motif is poured in cement mixed with local earth (as Wright tried to do in the textile blocks) such motifs become riddles, a *Quasi*. Indeed like the marches, the calls and the folk-tunes in Mahler’s music. All the cut-outs in the panels of the clerestories are quasi-native motifs spelled out in the universals of geometry. Just as the patterns in the Californian textile blocks are quasi Meso-American motifs. We do not even know if they refer to the past or to some future. Film-director Ridley Scott has perfectly felt the indeterminate character of these ‘expropriated’ motifs using them in his film *Blade Runner*. In this film, partly filmed in Wright’s Ennis House, these motifs become the decor-decorum of a synthetic people, so called ‘androids’ or ‘replicants,’ an American people to come.⁴⁹⁸

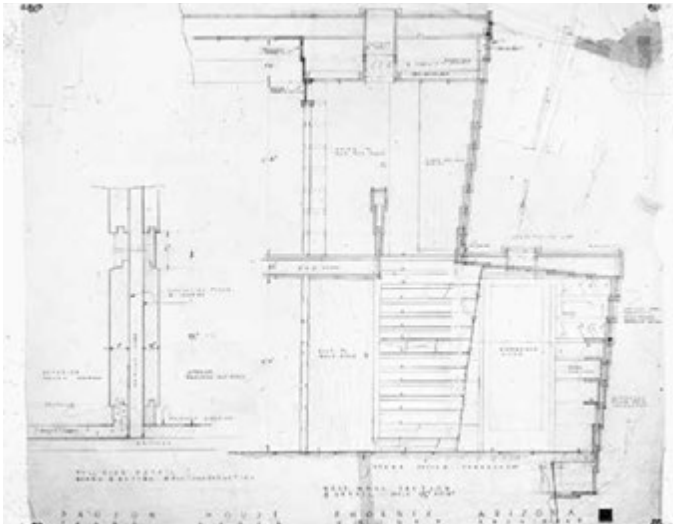


FIG. 4.34 Pauson House, Phoenix, AZ, 1942, section. [Courtesy of FLLWFA (MOMA / AA&FALCU)]



FIG. 4.35 Pauson House: overlapping board technique. [Photo: unknown]

⁴⁹⁷ *The Art and Craft of the Machine*, in: FLW, CW1, p. 65

⁴⁹⁸ Ridley Scott, *Blade Runner*, Warner Brothers, 1982.

We find another example of Wright's material strategies taking a native motif to a future destination in his transformation of the old wooden cabin. He transformed the wooden frame with overlapping boards technique, to a technique in which boards overlap but 'step outwardly' in every new board. [FIG.4.34-4.35] In this way he 'dynamized' the tectonic character of this technique. From a simple vertical element, the façade now contracts towards a centre while at the same time it extends towards the horizon. While honouring place in the centring dynamics, in the extending movement it embodies an 'on the way to.' The horizontal boards do not only refer to the horizon as referring to 'my own,' they also capture the idea of a 'beyond the horizon,' the far as the unknown.⁴⁹⁹

Wright was both a master of geometry and a master of materials. To abstract a pattern from a landscape, a tree, or a flower, with a few lines Wright was able to grasp a signature. He said one could learn it from the Japanese.⁵⁰⁰ When it comes to materials he constantly experimented with new compounds and new techniques. Reinforced concrete was perfect because it was able to constructively capture the forces of extension and contraction, present in both the vault and the cantilever: it enabled him to design new 'universal caves' and 'tree-buildings.' In the dendriform columns of the SC Johnson Administration Building in Racine, he introduced new ways of reinforcing concrete by a peripheral steel network which he had learned from the musculature of the Saguaro cactus.⁵⁰¹ At the same time concrete could 'bind' natural 'events' such as the desert floor boulders, monuments of a long geological battle. Where he succeeded in adding local gravel to the cement of his textile blocks—as in the case of the Pappas House (St.Louis, MO, 1964)—he had a medium to capture the idea of a house growing out of the local ground.

In Wright's material experiments another substance must be mentioned. Light. Light is another cosmic event to be captured. In his early years Wright was often happy to catch the light in its earthly appearances, the celestial *templum* giving a locally determined atmospheric range to be captured by window glass. Sometimes earthly colours were added in the leaded glass. In later works the light becomes more abstract, abstracted from the atmospheric conditions. Translucent filters introduce new forms of light, a light shining from matter. The first filters to be found are the 'electric templa', which we met in the second chapter, the coloured built in light fixtures in the Prairie Houses. The Pyrex tubes are a next convincing example: a subaquatic, subterranean, 'materialized' light.

⁴⁹⁹ Cf. §2.4.2.

⁵⁰⁰ *The Japanese Print, an interpretation*. FLW, CW1, pp. 116-125.

⁵⁰¹ Lipman, Jonathan, *FLW and the Johnson Wax Buildings*. New York: Rizzoli, 1986, p. 56.

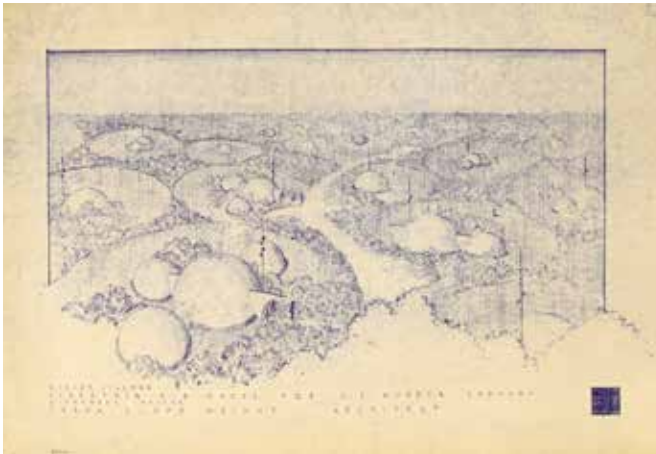


FIG. 4.36 Fiberthin Village, late 1950-ties, rendering. [Courtesy of FLLWFA (MOMA / AA&FALCU)]



FIG. 4.37 Fiberthin Airhouses at a Kentucky university. Photo originally appeared in November 11, 1957 issue of Life magazine.

In the desert he found canvas as the ideal surface to vaporize the inhuman light of the desert sun thus making it part of human lives. Already his definition of glass as dense air testifies of a will to think of materials in terms of a molecular matter-light substance.⁵⁰² Late in life he designed the Fiberthin Village, a system of vinyl-covered nylon inflatable houses. [FIG.4.36] Inhabitants become dark silhouettes in a lighting cupola-tent. [FIG.4.37] Let us not forget the Beth Shalom Synagogue—“the mountain of light”—with its corrugated fiberglass and sanded white glass ceilings. In Wright’s work we find a definite inclination to the synthetic.

New techniques for a new machine-age. At the end of their chapter *On the Refrain* in *Mille Plateaux*, Gilles Deleuze and Felix Guattari introduce “*the cosmic artisan*.”⁵⁰³ It is their name for the 20th century artist, who is no longer haunted by his relation with the earth, as the Romantic artist was, but who works on his materials on a molecular level in order to make them capable to capture the forces of the cosmos. The cosmic artisan is no longer interested in the synthesis of form and matter, no, he wants ‘to make visible’ the organizing forces in the cosmos. Time, light, gravity.

⁵⁰² FLW, *CW I*, p. 297.

⁵⁰³ Deleuze and Guattari, *Mille Plateaux*, pp. 424-427.

Though we must consider Wright to be a Romantic artist in many respects, it is exactly in this inclination to the synthetic that he fully moves into the 20th century. By working on the substance of light, by experimenting with the binding capacities of cement, by introducing new ways of reinforcing concrete, more in general by touching on the potentials of materials rather than on their known properties (which would be the domain of the old fashioned craftsman), he tried to escape an all too narrow bond between the territory and its materials.⁵⁰⁴ For that reason “in the nature of materials” can easily be misunderstood, as if that nature was a fixed state, a contraction of properties. But for Wright nature was creative on the level of matter itself. The best way to honour it was to challenge it.⁵⁰⁵ If we hear Wright’s famous slogan “in the nature of materials,” we must immediately place it besides that other slogan according to which “the machine is accepted by organic architecture as a tool to a greater freedom: new power to *manipulate* new materials by new strategy (italics mine, FS).”⁵⁰⁶ Hence his notions of plasticity and continuity,⁵⁰⁷ indicating architectural elements “flowing into one another.”⁵⁰⁸ Such elements need ‘ectoplasm’ materials, “growing and flowing into form instead of...built... out of cut and joined pieces.”⁵⁰⁹ “Aesthetic and structure become completely one.”⁵¹⁰ In such a philosophy materials must be ‘upgraded.’ Their correlative and integrative possibilities should be extended: a moving frontier. Stretching the possibilities of materials means working on the level of cosmic creativity. “The creative facilities of the human race are intimately linked to the relationship of man to the cosmos.”⁵¹¹

⁵⁰⁴ The list of experiments is long. Robert C. Twombly gives a sketch of ‘first uses and architectural innovations.’ Twombly, *Frank Lloyd Wright, an Interpretive biography*, p. 297.

⁵⁰⁵ Twombly somewhere remarks that for a long time Wright adhered to an architecture honouring nature. But at some point he began to see the architect emulating it. We can read this change in the pages on continuity and plasticity in the autobiography, pp. 366-369.

⁵⁰⁶ FLW, *CW5*, 197.

⁵⁰⁷ FLW, *AB*, pp. 365-369.

⁵⁰⁸ Twombly, *FLW, An interpretive Biography*, p.231

⁵⁰⁹ *Ibid.*. For Wright this multivalent materials were a way to avoid ‘composition,’ according to Wright the great evil of Renaissance architecture. As it comes to mono-material buildings we may think of The Guggenheim Museum and The Kalita Humphrey’s theatre. Factually the Californian textile blocks already point in such a direction, but ceilings and roofs were still made of wood. In the Usonian automatic they change to concrete elements so the whole house —off course without all the built-in furniture—may be made out of one material: concrete. The same may be said for the ‘All steel houses’ of 1938. Wright mentions Unity Temple as the first concrete monomaterial building.

⁵¹⁰ FLW, *CW5*, 80 “But were the full import of continuity to be grasped, aesthetic and structure become completely one, it would continue to revolutionize the use and want of our machine age architecture.”

⁵¹¹ Frank Lloyd Wright in a speech to a student public. Twombly, *FLW, An Interpretive Biography*, p. 224.

Thus we come to the heart of the question. Drilling unto the heart of the territory eventually means drilling into the formative principles of the earth which are no longer terrestrial but cosmic. The architect finds a *terra incognita*, a cosmic past implying 'the first substances.' On the way down all kinds of extraordinary objects will be found: shells, crystals and precious stones, all marks of a matter inhabited by "light as an early form of spirit," directed by geometry as an eternal architectural intelligence. The "cosmic artisan" is the one who will drill into the heart of matter to find unknown possibilities. He is an alchemist, ready to refine his substances in order to capture the cosmic forces. Matter, light, time. He has to go inward and inward to go onward and outward. Mixing the genetic code of the Saguaro with the code of reinforced concrete to make a synthetic forest, as Wright did in the SC Johnson Administration Building. Far beyond the local territory and far beyond the American territory, it means becoming an 'earthling' to better become a 'cosmopolitan.'

Neither the local, nor the global were Wright's obsessions, the singular and the universal were the coefficients of his geology and his geography. To put it in other words: talking about the local, we should pose the question: what locus? A locus in the sense of a place or region or even a country, Usonia? A locus in the sense of a geological or geographical event, the Camel Mountains, the South Carolina Swamps? A locality in the universe, such as earth? Some physical event such as light?

4.5.5 What's in a name?

These are not only different scales, these different loci imply different times of formation. Wright's architecture is always about humans living the time of a natural phenomenon.⁵¹² We may read it in the names Wright invented for his houses. *How to live in the southwest?* is a design made for a house in the desert, based on the figure of a snake rolling up [FIG.4.38] It refers to organic life surviving in the landscape of a mineral age. *Windswept*, the Franklin Watkins Studio (Barneгат, new Jersey, 1940 [FIG.4.39] refers to a silhouette shaped by the Atlantic Winds: the house seems to ride the storm. And let us remember the *Fir House*, in which the inhabitants live with a fir in the courtyard in a house made out of firs, looking at the grain and the patterns of fir-wood, under a construction of fir beams, as if they were sheltering in the heart of the forest: they live a dendrological time.

⁵¹² Wright often stated that "A building is not just a place to be, but a way to be."

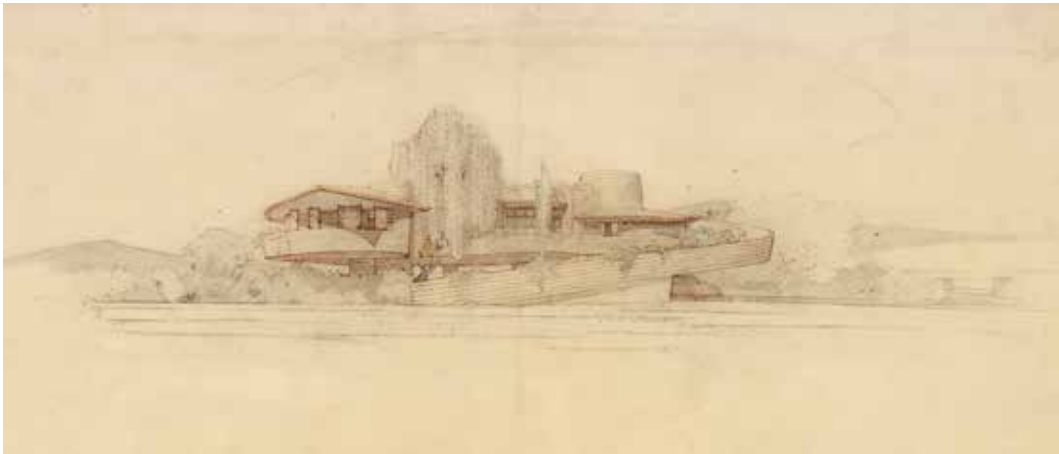


FIG. 4.38 How to live in the south-west (later to become the David & Gladis Wright House, Phoenix, AZ). [Courtesy of FLLWFA (MOMA / AA&FALCU)]



FIG. 4.39 FLW, Windswept, Franklin Watkins Studio, Barnegat, (NJ) 1940. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

If a name is the token of an inspired abode, we are speaking about spirits, a natural phenomenon caught as an affect. *Honeycomb House*, *Snowflake House*: sometimes the event refers to geometry as an 'eternal, out of time, intelligence' to be found in nature. Even materials or a material object can be such an event as a locus for architecture. *Boulder House*, the Lillianne Kaufman House (Palm-springs, California, 1951). *The Steel cathedral*. (Church for William Norman Guthrie, New York, 1926) Wright sometimes said that typologies are matter-related, and that new materials are able to give us new typologies.⁵¹³ The spirit of matter should inspire new techniques that may inspire new ways of living and building, new habits. *Fiberthin village*. Living in the vinyl-covered nylon crossover of an igloo and a tent in close contact with the climate. Even the name *desert concrete* monumentalizes a great human affect—the desert: the inhuman—by spiritualizing concrete, a stupid material to be poured into a formwork. The Sonora Desert floor becomes a human dress. Different phenomena, different times of formation, different eras: atmospheric, vegetative, geologic, cosmic molecular. In Wright's art, these times become human affects. All these names again refer to what we earlier called *haecceities*, forms of individuation in which human consciousness becomes the consciousness of some natural event.⁵¹⁴ Let us never forget that in the Westerns regions of America millions of people live in Canyon lands, on what was once the bed of a river, in a space opened up in millions of years; on terrestrial and cosmic battlefields on which atmospheric powers and the forces of the sun washed away, blew away, and crushed away the outer layers of the earth. An inhuman bed on which nonetheless human life has settled. Wright's architecture is monumental because it remembers these times of formation.

In such a conception, the great sciences of architecture no longer refer to a generic property. Typology (*utilitas*), based on the knowledge of human habits becoming habitations, must be redefined every time. Dwelling may mean 'getting the habit of a rock and a river.' Construction (*firmitas*) as the knowledge of the universal habits of materials in conducting forces may every time be warped to an unheard of case: saguaro columns. Tectonics (*venustas*), the art of dressing up construction, becomes a perpetual travesty.⁵¹⁵

⁵¹³ FLW, AB, p. 280. "The machine age should have a great many types, at least as many types as there are materials and methods of construction: genuine."

⁵¹⁴ Deleuze and Guattari, *Mille Plateaux*, pp. 318-332.

⁵¹⁵ I refer here, of course, to Vitruvius' categories of use (*utilitas*), construction (*firmitas*) and beauty (*venustas*) defining all architecture.

4.6 Silhouettes: riding the earth

A last aspect of geography must be considered here. Many of Wright's renderings testify of an intense relation between the terrestrial relief and architecture. The lines of the buildings are always in conversation with the lines of the landscape. We should make a distinction here between the weaving of patterns, always pertaining to the surfaces of a building, on which we will treat in the next chapter, and the posture and gestures of the masses or bodies of the building itself. Posture is a somewhat difficult expression in this case because stance is always precarious in Wright's buildings. Vertical lines are often the frayed corners of uneven masonry layers in walls, and vertical masses tend to dissolve into ladder-like rhythms of horizontals. Yet we will use it, despite of the deformations it has to deal with, which pertain to its origins in sculpture. We must take that origin as a chance to come to an understanding of exactly the *athletic* or *acrobatic* character of Wright's architecture.

When talking about geography, we do not only refer to the sampling of the earth. Certainly, the material constellation and its textures and patterns are part of it as much as the great geometric or typological gestures such as spirals, which pertain to a larger place such as earth or the cosmos. But we must also think here of the explorer who climbs mountains and descends into canyons to experience the 'disproportionate,' sublime character of the forces of formation and to see how a geological depth may come to shine in a mountain ridge. In architecture this experience finds its ultimate expression in a feeling of being challenged by the movements of the terrestrial crust itself. The movements of the crust: the gesture of an earth rising up to then steeply fall down, the manner in which it broadens to pacify in still surfaces. Shortly, geography also pertains to the relief of the earth as a sign of some ecstasy of the forces of formation or deformation. In the crust, earth itself has left us a monument of the geological forces, which battled or cooperated in the story of its formation. This monumental time is captured by Wright's architecture: the silhouette of the Arnold Friedman House doubled the geologic profile of the mountain side and the valley; and the obliquely pushing off tower of the Arizona Crater Resort answered the slope of the Arizona Crater.

For these reasons we should add another layer to the concepts of geography in the work of this architect. A layer in which the silhouette of the house takes the value of a contrapuntal melody accompanying the relief of the earth. Let's begin with some sketches, some scenes as we come across browsing through Wright's renderings. We see arches hurling themselves over valleys like in equestrian sports (Donahoe Triptych, Paradise Valley, California 1959); we see pathfinders moving and switching, searching traces of other life (Auldbrass, Yemassee, South Carolina, 1939 [FIG.4.40]);

a cross country runner friezes in a movement of jump-off (the Sturges House, Los Angeles, 1939 [FIG.4.41]); hang-glider roofs take off while the slope falls down (The Palmer House, Ann Arbor, Michigan, 1950 [FIG.4.42]) or the Unitarian Church (Madison, Wisconsin, 1951). The first version of the Morris House (San Francisco Bay, California, 1945) [FIG.4.43] climbs the steeps of the Californian coast, the second version dares an abseiling. These are buildings inspired by the movements of the crust of the earth itself, eminently captured in the mole's eye perspectives. Not primarily measuring the relief of the earth, as von Humboldt would have done, no, Manneristically competing with the gestures of the earth itself. Challenged. No *adequatio* but *aemulatio*. Taking architecture as acrobatics and athletics.

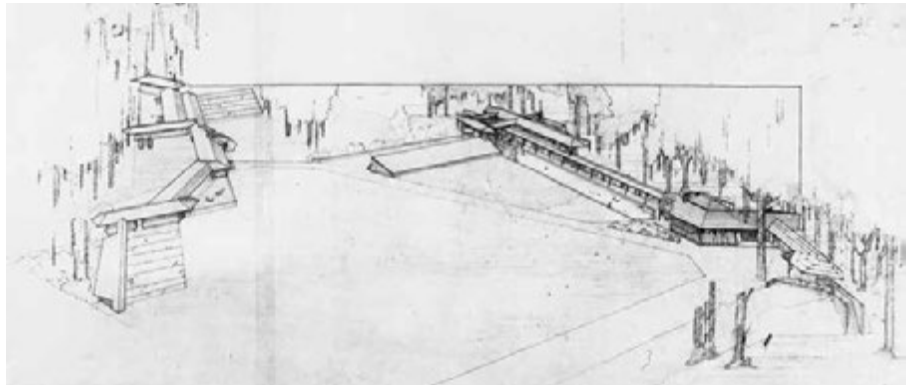


FIG. 4.40 Leigh Stevens House, Yemassee, South Carolina, 1939. [Courtesy of FLLWFA (MOMA / AA&FALCU)]



FIG. 4.41 Sturges House, Los Angeles (CA), 1939. [Photo: Frans Sturkenboom]

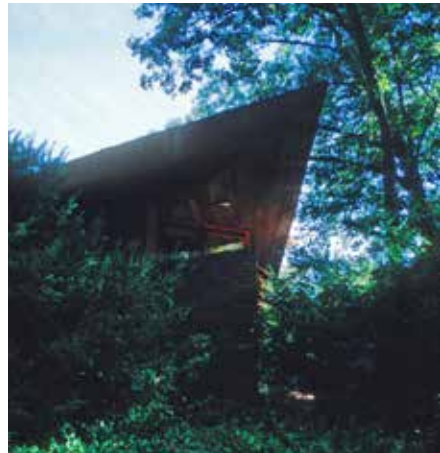


FIG. 4.42 The 'hang-glider' of the Palmer House, Ann Arbor (MI), 1950. [Photo: Frans Sturkenboom]

If we follow these silhouettes we see they are capricious lines. They do not give us rest, as the classical silhouettes of le Corbusier do. Wright's line is a line building up tension. It is made out of geometrical figures, yes, but as a contour it is shifting, breaking, sweeping. The diagonal and the repeated jumps forward or backward of a vertical resault—the telescoping gestures—introduce climbing tensions, while circles in perspective become elliptical sweeps. Empowered by this geometry, architecture becomes the adventure of telling the relief of the earth itself by climbing mountains, diving from rocks, hanging from steeps or being launched to the stars (the Mile-High Skyscraper). It becomes the athletics or acrobatics of the earth. Architecture as adventure.

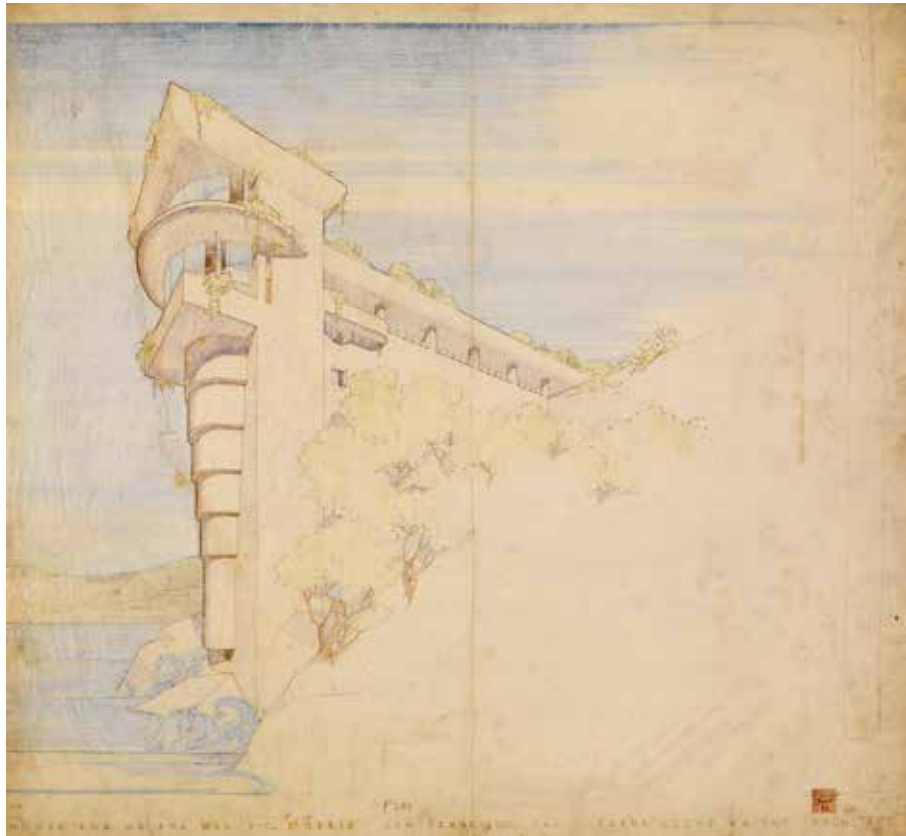


FIG. 4.43 Morris House, San Francisco (CA), 1945, scheme 1. [Courtesy of FLLWFA (MOMA / AA&FALCU)]



FIG. 4.44 Eaglefeather (Arch Oboler House), Malibu, 1940. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

A last project may further help us understand this idea of the athletic in its relation to the earth and its celestial background. If we look at the perspectives of the Arch Oboler House (Eaglefeather), we see a house dramatically protruding from a ridge of the Santa Monica Mountains in Malibu. [FIG.4.44] It is as if it wants to take flight, with the Pacific as a far destination over the hills. The reference to eagle nests, often found on the rocks along the Pacific, is obvious. If we look at the sections, we see that the great balcony continues to the other side of the mountain, indeed balancing on the crest. [FIG.4.45] At the same time, at the 'backside,' the house nestles into a higher part of the mountain, proving it is "of the hill." In the floors of the two protruding balconies a slot has been left open so from the terrace we may see the mountain sides falling away: the 'eagle experience.' In the drawings the house springs from the mountain mass, in the vertical direction growing in section width. At the upper level the main directions of the space change 45 degrees to finally close in a large lantern lighting the living room. In its angular displacement and its mass growing upwardly, the house seems to free itself from its terrestrial existence to soar in the sky. Several perspectives have been made, among them the famous 'moonlight view.' What strikes us in the coloured versions [FIG.4.46] —all taken from a very low point of view on the mountain slope—is the relation of the house to the sky and its elements, the moon, or the sun, in the upper part of the drawing. The sky embraces the house as its proper element, while in its silhouette the dark architectural mass stands out ecstatically in the lunar or solar light, 'greeting' these celestial, cosmic bodies.

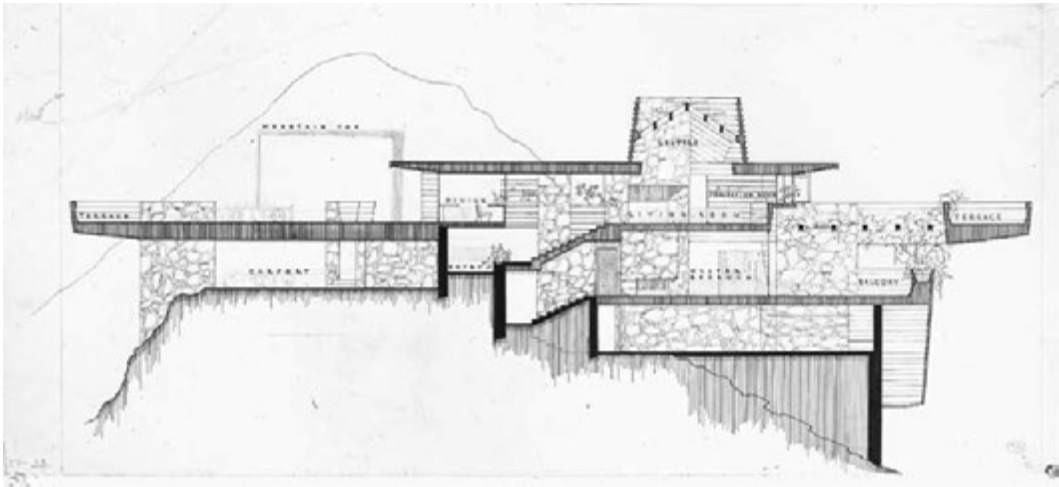


FIG. 4.45 Eaglefeather, section. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

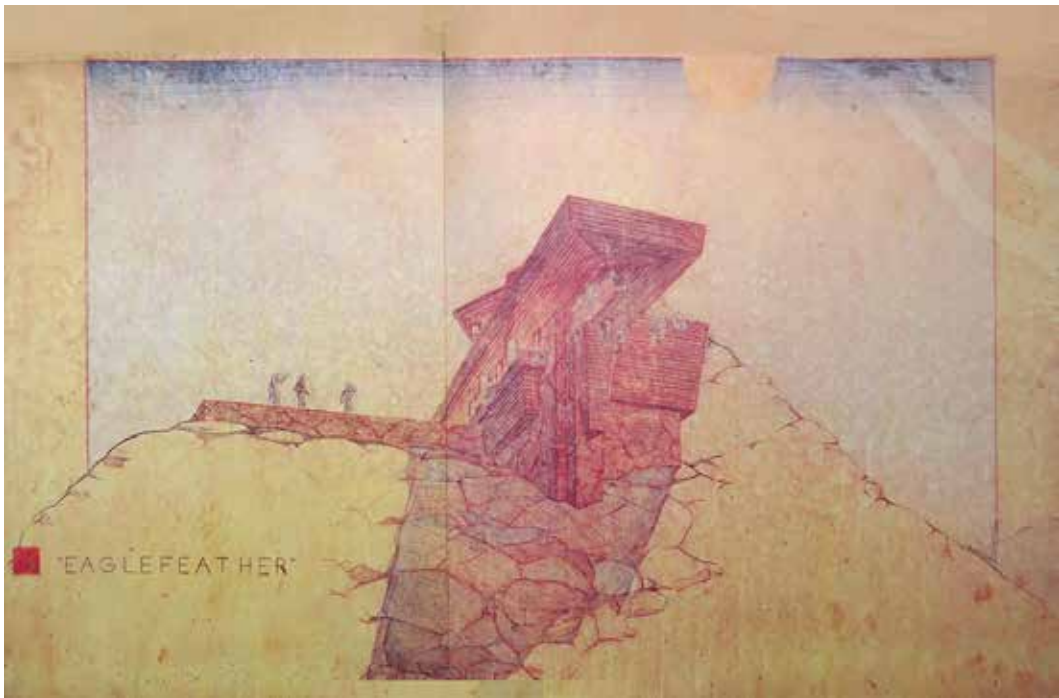


FIG. 4.46 Eaglefeather, rendering. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

4.7 Recapitulation and conclusion

Wright's architecture must be seen as a geographical expedition. The expedition is in search of a "truly American" Style. This style must be found by studying the styles of American nature and the styles of indigenous people as examples for a new, native architecture. A new people has to acquire a past, a past that may furnish a base for an organic architecture, "growing out of the ground into the light."

All what the expedition can do, however, is take samples as the possible examples of an American style. Every time, every new commission, a new specimen of 'a truly American style' is born, a new 'variation on America.' The *truth* of a 'truly American architecture,' however, remains suspended in the ever varying series.

During the expedition two distracting moments tend to disrupt the ideal of a 'properly American' style. In the first place the explorer learns to see the horizon not merely as a landscape mirroring his quest for an American identity, but also as the shore of the far and the unknown. The horizon is haunted by strange motifs of foreign and far away cultures, which disquietedly resonate with a style born from an American ground. In the second place, "drilling unto the heart of that ground" in order to find the absolutely singular or local as the 'native,' the architect finds the universals of matter and light as cosmic—ungrounding—powers and of geometry as an eternal intelligence. Romantically territorializing on a native earth and its past, its native materials and native patterns and textures, he finds matter and its ring of future possibilities, he finds light beyond its atmospheric range.

Maybe that is what Wright learned in the desert, "the place where God is and man is not," as Victor Hugo writes.⁵¹⁶ The desert: the battlefield of cosmic, inhuman forces, where nonetheless creative life finds its way. Where architecture finds new natural, pre-human events to be characterized, new forms of time to be monumentalized.

⁵¹⁶ Wright quotes Hugo when he describes his own entrance on the stage of the desert. FLW, AB, p. 333.

5 Manner and style

“Ideas can be, and are, cosmopolitan, but not style, which has a soil, a sky, and sun all its own.”

Chateaubriand

“As humanity develops there will be less recourse to the ‘styles’ and more style, for the development of humanity is a matter of greater creative power for the individual—more of that quality in each that was once painfully achieved by the whole.”

Frank Lloyd Wright

5.1 Abstract

In the past chapter we already explained how for Wright the search for “a truly American” style resulted in a research of the styles of American nature as the examples for an American architecture. I will begin by putting this search in a historic perspective. [§ 5.2.1] In the 19th century, style had become problematic. The organic bond between a style and its time had disappeared.

I will then try to sketch the notion of an architectural subsoil of problems and questions, in which any architect has to trace his roots, his own ancestors and his own traditions. [§ 5.3.1] I will do so to create a tool to understand how in Wright different historic styles and their specific problems grow together to an organic whole. Such an organic whole, however, already implies there is a singular nucleus, a magnetic force, that contracts all the lines (one cannot simply ‘compose’ Wright) and eventually it is the task of this chapter to find that unique Wright. [§ 5.3.2] A singular Wright that cannot be found by historiography if it limits itself to the method of comparison and to the concept of *Zeitgeist*.

Elaborating the idea of traditions some further, I will exemplify two of these stylistic lines, the line of Mannerism [§ 5.4] and that of Romanticism [§ 5.5]; the former embodying the idea of a pre-human, natural architecture; the latter that of a post-human or no longer only human architecture.

I will then tackle the question of Wright's own style. First I will point to the paradox of a certain eclecticism of styles (pace Wright) and the idea of native or indigenous style. [§ 5.6.1] I will argue that style proper to a place must be understood as a song. The landscape becomes a refrain (e.g. the refrain of the prairie) to be sung on many places, the quatrain further filling in the "native to a place, to a man and to a time." [§ 5.6.2]

To understand stylistic differentiation in Wright's architecture, which doesn't coincide with periodization, we must ask the question if there are indeed certain properties which allow us to categorically distinguish certain styles ('Prairie-style'/'Usonian'/'Meso-American' etc.) or that we must speak of a sort of stylistic continuum. [§ 5.6.3] I will develop the idea of differentiation as an idea of manners and maneries (Agamben/van Tuinen), in which the proper of one's own style only lives in the declination of manners. It is this declination that will lead us to the basic gestures of Wright's style, to a singular Wright.

The rest of the chapter more closely researches the manners of Wright's style. First the geometric ones [§§ 5.7.1-5.7.5]. Then the tectonic ones [§§ 5.8.1-5.8.2]. Finally I will try to make the inventory of the tectonic gestures we found in his work. I will propose to see them as Romantic symbols. [§ 5.8.3]

5.2 A truly American style

It is often said that Wright began his career with the 1893 World-Exhibition in Chicago. The orgy of eclecticism he saw there convinced him once and for all that America was betraying itself when it comes to architecture. He just couldn't believe that the new world wouldn't be able to find an architecture of its own; that it would remain dependent on Europe to find a style.⁵¹⁷ "The mother art is architecture. Without an architecture of our own we have no soul of our own civilization."⁵¹⁸ This belief in a native style, of which we sketched the contours in the past chapter, remained with him during his entire career, which in this respect may be summarized as the quest for "a truly American architecture."

During a lecture in London in the late thirties, he explicitly spoke of a "declaration of independence."⁵¹⁹ In this lecture he condemns Neo-colonial, Classicist, Renaissance, Tudor and Victorian style. Even in *The Living City*, at the end of his career, we still find the plea against "the styles" (the imported, fashionable, old European styles, FS) in favour of an indigenous style: "Styles no longer fashionable, style itself will have a chance to flourish everywhere. Style now indigenous."⁵²⁰ As we remember from the previous chapter, this native style should be organic, born from the wedding of an American society and American nature, to be consecrated and consummated in every new building: "Architecture is the mother art. Its national value lies in its natural value."⁵²¹ Every new building becomes the flag of the unison to be achieved, of a country and its architecture organically growing out of its ground. Every new building becomes a variation on America.

American "self-reliance," the achievement of a culture independent of Europe, necessarily involved the American earth.⁵²² Wright sought inspiration in the American landscape, which he considered as a building or series of buildings with

⁵¹⁷ "Eclecticism, the setting sun all Europe had mistaken for dawn." FLW, *LC*, p. 44

⁵¹⁸ <https://www.goodreads.com/quotes/7118912-the-mother-art-is-architecture-without-an-architecture-of-our>

⁵¹⁹ It is no coincidence that this declaration was proclaimed in one of his lectures on organic architecture held in London. FLW, *An organic architecture*, in *CW3*, p. 300.

⁵²⁰ FLW, *LC*, p. 132

⁵²¹ FLW, *CW5*, p. 64

⁵²² As Ackerman formulates it in his book on the villa: "At this moment (the first decades of the 19th century, FS) two issues came to the centre of American consciousness. First, that of man's relation to nature, in particular the dilemma how civilization might expand without destroying the values of the wilderness and frontier and the somewhat mythical virtues attributed to the natural man, the 'leather stocking'. Second, that of American self-realization, the achievement of a culture independent of Europe and of refinement without loss of vigor." Ackerman, *The Villa*, 1990, p. 249. *Self-reliance* refers to the eponymous essay of Emerson. (1841) https://en.wikisource.org/wiki/Essays:_First_Series/Self-Reliance

a multiplicity of faces. We saw at the same time that his architecture, finding its origins in a geographically determined nature—“there is no such thing as true style not indigenous”⁵²³—did not exclude a Chinese or Japanese inspiration and even the ‘use’ of foreign historic styles like those of the Inca, Maya and Aztec people. In this latter case we noticed that the use of the ‘foreign’ or the ‘far’ was more than only a seduction by the ‘exotic’ and implied an affinity on many levels: from the ornamental labyrinthic patterns to the constructive motifs of ‘taluds’ and ‘tableros’ and finally the typology of the temple and the way up from darkness to light. That affinity clearly resonated with the “being prostrate to the sun,”⁵²⁴ a *Grundstimmung* (a fundamental mood) of Wright’s Californian architecture.

Wright was born and grew up in a century obsessed with style. Like that century, Wright himself was obsessed with style too. The 19th century began with that somewhat desperate question of the German architect Heinrich Hübsch “*In welchem Style sollen wir bauen?*” (In what style should we build?) This question implies the loss of an organic bond between an era and its style. A loss already prepared in Hegel’s statement that a modern artist would be completely free to adopt any style, because the three eras of the Symbolic, the Classical and the Romantic had been fulfilled, and the movement of self-revelation of consciousness had jumped over from art as the sensuous expression of the truth, to religion and finally philosophy as the intellectual expression of the freedom of spirit (*Geist*).

The nineteenth century saw the great monumental works on style of Semper and Riegl. It not coincidentally ended with Viollet le Duc’s generalized statements on the notion of style as the organic product of life, turning away style from history and orientating it toward nature: “proceed as nature does in her works, and you will be able to invest with style all that your brain conceives. True, this is not easy amidst a complicated civilisation....but it is not impossible.”⁵²⁵ The 19th century was the century of style: “only when style becomes problematic, it becomes programmatic.”⁵²⁶

⁵²³ FLW, *A Testament*, 1957, *CW5*, p. 220.

⁵²⁴ FLW, *AB*, p. 334.

⁵²⁵ Viollet le Duc, quoted by John Lloyd Wright, *My father who is on earth*, New York: Dover, 1992 (1946), p. 138.

⁵²⁶ Sjoerd van Tuinen, *The Late and the New, Mannerism and Style in Art History and Philosophy*, in: *Art History after Deleuze and Guattari*, Leuven University Press 2017, pp.145-163, p. 147.

5.3 History and tradition

5.3.1 The architectural subsoil and its subterranean lines

Despite Wright's abhorrence toward all '-isms'⁵²⁷ —“isms and ists are not able to think for themselves”⁵²⁸—it remains to be seen if Western architectural history is so absent in Wright as he would have liked us to believe. Architectural history is not only a question of direct ancestors and progeny, of influences from and influences on. Neither is style merely a product of the *Zeitgeist*. It also implies something like an architectural subsoil, a mental continuum of basic questions, problems and ideas of architecture that come to life in every design. This subsoil or mycelium consists of long lines, traditions, and strata in which every architect has to find a way. It may account for all the implicit, unspoken or unconscious affiliations, but sometimes also for the more explicit *Wahlverwandschaften* (affiliations by choice): Romanticism resonating with the Gothic; Le Corbusier returning to Greece; Eisenman writing on Palladio; Kahn and his Roman arch. It is the privilege of the latecomer to hear all the resonances with past stories and histories of architecture.

Let there be no doubt that, with these subterranean lines, we find ourselves in tricky matter. An example may be illuminating. When Wright asserted “ornament is to architecture what efflorescence of a tree or plant is to its structure. *Of* the thing, not *on* it. It is the character of structure revealed and enhanced”⁵²⁹ we hear a Goth speaking. Wright often affectionately refers to the Gothic and states: “I suggest that a revival, not of the Gothic style but of the Gothic spirit, is needed in the art and architecture of the modern life of the world.”⁵³⁰ Does this make Wright a neo-Goth? To a certain degree, yes: the question is absolutely of Gothic alloy and a line to be accounted for in Wright's work, the more so because it was exactly this Gothic logic that saved him from the aesthetic failures of the modern movement in more than one respect. It prevented him seeing ornament as an add-on, redundant and thus removable. At the same time it gave him another idea of the possibilities of “the machine,” which in mechanical production could operate on structure and ornament at the same time, as in the case of the textile blocks. But if we would then

⁵²⁷ Isms: the suffix to designate so many styles: Mannerism, Gothicism, Classicism, Romanticism etc.

⁵²⁸ On 'isms' and 'ists', cf. Twombly, *An Interpretative Biography*, p. 217

⁵²⁹ FLW, *The Language of an Organic Architecture*, CW5, p. 62.

⁵³⁰ FLW, *Ausgeführte Bauten und Entwürfe von Frank Lloyd Wright*, CW1, p.101.

proceed further in this question concerning structure and ornament by looking closely at Wright's architecture, we would see that structure growing out into ornament, so typical for the Gothic, would not be an adequate expression for Wright's case. We should speak of structure "breaking into ornament," ornament becoming a kaleidoscopic reflection of structure finding its reason in a sort of fractalization. We see a breaking of structural figures into smaller units repeating the same figure. Hence the rhythmical character of Wright's ornament, probably more related to the 'mineral' than to the 'vegetative' of the Gothic. In its rhythms and configurations, ornament unfolds and explains structure. And that would be a far more Mannerist stance in which a direct continuity would be lost for a sort of reflection. The most obvious example is of course the deepened horizontal joint repeating the main horizontal accents embodied in the different architectural elements. A different example may be found in the Llewelyn Wright House. The circular walls break into the circular fragments of smaller elements like the 'donjon' and the chimney, which break into the circles of the furniture and the carpet as if they were the froth of the larger waves.

Evaluating the Gothic in Wright's work, we should speak of an injection of the Gothic in the Classicist, just as Worringer saw Baroque as "an effort to create a Gothic style, but with insufficient, while merely organic, means."⁵³¹ And this injection, flexibilizing and problematizing Classicism, was born from a conviction that life was best expressed by the "Gothic as the spirit of reverence for beauty."⁵³²

5.3.2 To compose or not to compose: a singular Wright

Designing, architects trace a path through the architectural subsoil. They are in conversation with the entire past of the profession.⁵³³ Retracing this path, we may learn how Wright was already motivated by certain questions like the Gothic one concerning structure and ornament. In this subsoil, architects will meet friendly or adverse ideas, resonating styles and no-go areas. Gradually they will learn to embody what deep within themselves slumbers as a basic and singular intuition, what is carried to them as *sol ipse*. "My architecture." A fate to be fulfilled. Wright was obsessed with it. A basic intuition becomes embodied in architectural gestures, in stylistic manners.

⁵³¹ Wilhelm Worringer, *Formprobleme der Gotik*. Dutch translation I.J. Moreels, *Vormproblemen der Gothiek*. Antwerpen: N.V. de Nederlandsche Boekhandel, p.120.

⁵³² FLW, CW5, p. 227

⁵³³ As the writer Eliot puts it for literature. See Slavoj Žižek, *Event, filosofie van de gebeurtenis*, Dutch Translation: Huub Stegeman, Boom, 2015 [2014], p.130.

These will be the two seemingly paradoxical, but in fact complementary tasks of this chapter then: the tracing of traditions, of underground affiliations and common roots on the one hand, and the quest for the singular on the other. They refer to a same form of time, what Deleuze called “the pure past,”⁵³⁴ a time in which the artist becomes contemporaneous with the entire past of his profession and necessarily repeats it in his own way and in doing so modifies the subsoil itself. Let there be no doubt that this reweaving of a pure past can only happen in real time, in confrontation with all the actual questions posed to an architect. The deep “I am,” promising a proper style, comes to resonate with the contingency of the “I am” in a historic situation with its always somewhat coincidental circumstances. One must become who one is. It is here that style becomes an adventure that may only be told a posteriori. “We do not choose the style. No. Style is what is coming now and it will be what we are in all this. A thrilling moment in any architect’s experience.”⁵³⁵

When reviewing past styles as ingredients of Wright’s architecture, in his eyes we would commit a deadly sin. We would *compose*. We would never find the living heart of his architecture. Instead we would sew together a Frankenstein-Wright. Yet, in every design there is the growing together of a past, of many past lines and a throwing out toward the future again. And it is exactly in this movement from a past towards a future that the ‘proper’ of one’s style grows to the light. “Style is what is coming now and it will be what we are in all this.”

5.3.3 Wright deconstructing the Classicist and the Victorian style

Should we be deterred then by Wright’s aversion to talking in terms of historic styles? Not at all. Wright admitted his affinity with the Gothic more than once, and he clearly positioned himself comparing his stance with that of Arts and Crafts, provocatively naming his endeavour an “Art and Craft of the Machine.”⁵³⁶ He confessed detesting Renaissance architecture and its method ‘to compose,’ a “design procedure by definition inorganic.”⁵³⁷ In his autobiography he even reconstructs his own development in the early prairie years as a sort of deconstruction of the Classicist

⁵³⁴ Ibid. 129. Deleuze develops his ideas about a pure past in the third chapter of *Différence et Répétition*, Paris: PUF, 1986 [1968] p. 108-116.

⁵³⁵ FLW, *AB*, p.180.

⁵³⁶ FLW, *The Art and Craft of the Machine*, 1901, *CW1*, PP 58-69.

⁵³⁷ FLW, *In the cause of architecture. Composition as a method of creation*, 1928, *CW1*, pp. 259-262

and Victorian styles of the American house.⁵³⁸ He speaks of the process of flattening the steeply pitched roof and of the elimination of the basement, both traits of the Victorian home; he tells us of the broadening of the eaves, the shortening of the piers becoming pedestals for urns with plants instead of bearing elements; and of the drawing-up of the stylobate up to a frieze with multiplied casement windows. These are all operations on a Classicist grammar.⁵³⁹

Again we meet two tricky cases, because in these examples the ‘destructor’ and the ‘deconstructed’ remain complicit. During Wright’s whole life we find the classical scheme with a stylobate-mound, a screen of piers—however thin they may have become in the Usonian homes—and finally the roof with the eave as a cornice, indeed often decorated. The non-bearing, hovering character of Wright’s architecture remains entirely complicit with the Classicist bearing principle of post and lintel, even if the cantilever stretches the principle to a point of breaking. Certainly, the role of the elements somewhat changes in Wright’s career: in the Prairie Houses we see the stylobate drawn up to the frieze of casement windows, but later it will become the classical stylobate again, evening the terrain in the form of a mound like in the Wall House, the Hagan Estate or the Ennis House.⁵⁴⁰ Vincent Scully is completely right determining a Classicistic trait in Wright’s architecture, even if he sees this trait as a spatial rather than a tectonic one.⁵⁴¹ Last but not least, it is striking how often, in his lectures, Wright stressed the ‘essential,’ the ‘laws’ and the ‘principles,’ referring to a sort of classical truth of architecture.⁵⁴²

The same could be said of the Victorian House [FIG.5.1]. Wright compressed its vertical dimension by stripping the house of cellar and attic. The perimeter of the Victorian House, however, with all its window-bays and niches, its jumps forward and backward, clearly prefigures the contracting and expanding contour of both the Prairie Houses and the polygonal Usonian Homes such as the Hanna House.⁵⁴³ [FIG.5.2]

⁵³⁸ FLW, AB, p. 165-167.

⁵³⁹ For all these aspects see: Donald Hoffmann, *Understanding Frank Lloyd Wright*, pp. 11-49.

⁵⁴⁰ Wall House, Plymouth, MI, 1941; The Hagan house, Chalkhill (PA), 1956; Ennis house, Los Angeles (CA) 1924.

⁵⁴¹ For Scully this trait was not Greek but it pertained to the “objectives and methods of Roman Imperial space and of the whole non-Greek Mediterranean tradition that lay behind it.” Scully, *Frank Lloyd Wright*, New York: George Braziller Inc., 1960, p.13.

⁵⁴² Robert C. Twombly, *FLW, An interpretive Biography*, p. 117.

⁵⁴³ Hanna House, Stanford (CA) 1937. Donald Hoffmann says: “So far as the terms of art, the typical Victorian House looked hopeless; and yet, its eruption of bays and turrets, the nooks and rooms that broke off rambunctiously from other rooms, at least defied the tradition of foursquare, genteel and boxy buildings.” Hoffmann, *Understanding Wright*, p. 4.



FIG. 5.1 A Victorian House. [Photo:Renelibrary, CC BY-SA 4.0 International]



FIG. 5.2 The bay windows of the Hanna House, Palo Alto (CA), 1937. [Photo: © Yukio Futagawa]

5.4 Mannerism

5.4.1 A short review of the traditions we already met

Let me be clear another time: it is not my intention to claim Wright as indebted to European traditions. Wright's whole endeavour points to the acquisition of an independent American style. But even such a style does not exclude affinities, common problems, and traditions. Wright was not the first architect to love nature and make it the object of his architecture.

I do not intend giving an overview of all the affinities, common problems and traditions crossing Wright's work. As an introduction, I will just give some lines we already met: the Roman line, referring to the large span in great public buildings (Wright's ideas about 'Collisea' and cupolas) also determining an admiration for great public works like highways and bridges, and above all the reference to the idea of *centuratio* as the real base of communal civil life in a modern agrarian city;⁵⁴⁴ the Mannerist line or the idea of the grotto, referring to a pre-natal, embryonic state of architectural elements and to a love of the lithic; the Romantic line or the question of the organic and its paradoxical embodiment in the ruin and the fragment; the Gothic line, referring to questions about structure and ornament to be organically related. All these lines would merit a chapter of their own. In this chapter we will limit ourselves to the Mannerist and Romantic lines because they seem most promising for our main question concerning time: the time of a non-human creativity of the earth or of nature.

5.4.2 Manner as individualization, differentiation, and personalization

We will begin with the Mannerist line. Allow me to explain this name: I am fully aware that anyone admiring Wright's architecture must feel staggered hearing it. Mannerism is often associated with the mannered, the unnatural, the hyperbolic, or even the *Entartet* (degenerated).⁵⁴⁵ As such it found its way into historiography,

⁵⁴⁴ For great spans, see: FLW, *AB*, p. 361; for 'highways' *AB*, pp. 350-354

⁵⁴⁵ Sjoerd van Tuinen, *The Late and the New*, p. 147. I will follow van Tuinen in his seminal essay in this entire paragraph.

which often saw historic Mannerism as the degenerated form of the Renaissance style. Contrary to this negative interpretation, I will argue that we should interpret it far more in the every-day-sense of the word in which we speak of the manners we have and which characterize us: an ethos. We would immediately come near the idea of gesture as something individualizing. When Wright stretches the cantilevering eave, this is clearly an architectural gesture, or a typical Wright manner. Seen from the point of view of Classicism—which considers style a codex—it is illegitimate, unnecessary or a formalism, a superfluous experiment with form.⁵⁴⁶

This 'naturalizing' of manner immediately connects us with that historical era of Mannerism. According to Vasari manner (*maniera*) implied an individualization or personalization of style. Let's not forget that art history begins with Vasari's account of the different manners of the artists of the 15th and 16th century. In Vasari's account, Michelangelo had his manner (*terribilità*) but a historic era or a certain country or culture could have its historically or geographically determined manners too (*maniera Gotico*, or *maniera Greca* or *Vecchia Greca*). This all very strongly resonates with Wright speaking of a personalization of conventions in the case of great Japanese artists.⁵⁴⁷ Why not speak then of Wright having a *maniera Mesoamericana*: the Californian way? A prairie-manner, a Pueblo and a Japanese manner? In manner one gives a turn to a time, to a style, but in doing so the style is itself put at risk.⁵⁴⁸

A manner is a principle of variation which pertains to the very idea of the elements of architecture itself. In historic Mannerism and in Wright. When saying “the elements” I am fully aware that I already speak of some corpus, some body of laws or conventions pertaining to an essence or truth of architecture. Something classical or when speaking of style: Classicism. Something that may be taught and learned, claiming a scientific point of view to be laid down in a treatise. Indeed, we cannot deny that historic Mannerism began as a style varying upon the Classicistic elements of the Renaissance. We cannot deny either that Wright began as such: his very first designs were highly classical,⁵⁴⁹ and, as Hoffmann tells us, “he brought a surprising mastery of the Classical language of architecture.”⁵⁵⁰ Or as we saw: of the Victorian Style, in itself already a reincarnation of the Gothic. He began stretching (deforming) “the styles”

⁵⁴⁶ Cf. Giorgio Grassi. *Il formalismo nell'architettura moderna*. 1977 In: *L'architettura come mestiere e altri scritti*. Milan, Italy: Franco Angeli Libri, 1987 (4), pp. 216-224.

⁵⁴⁷ The aspect of a personalization of conventions is treated upon by Wright in his essay on Japanese Art. Conventions, such as the face in the drawing, '*varied by each artist for himself*.' CW1, p. 120.

⁵⁴⁸ Sjoerd van Tuinen, *The Late and the New*, p.148-149.

⁵⁴⁹ In 1898 Wright entered a competition for the Milwaukee Library with a full-blown Classicist design.

⁵⁵⁰ Hoffmann, *Understanding Wright*, p. 61.

and started varying the elements: pruning back piers sometimes almost to the ground, stretching windows, eaves and parapets horizontally, perforating walls till they became screens, universalizing the bay window by folding casement windows around the corner or by introducing surprising diagonals in the plan. He learned a pedestal to be a cut-off pier; porch, porte-cochere or wing became just gradations of the same principle of continuation of the roof. Wright began learning to see architecture as a universe of variability. A genetic continuum or a *becoming* of the elements.

He learned the DNA of the styles and their principles of continuation and mutation. In that way killing their pretended truth or their claim on eternity. A claim always ending in styles without life or in so called “degenerating” styles. Wright calls this an operation of rejuvenation.⁵⁵¹ He wants to bend back style to life. This is a twofold operation. Firstly, he wants to bend it back to nature, to the American earth, he wants a “natural” or “native” style. Secondly he wants an “art and craft of the machine,” meaning he wants to open up architecture and life in architecture to all the possibilities modern technique may offer.⁵⁵²

5.4.3 Rejuvenation: bending form back to formation

This rejuvenation⁵⁵³ pertains to the finding of a formative phase of architecture. Architectural elements are trapped in a phase in which they are not yet completely differentiated. The full grown forms remain suspended. We earlier called this unfinished state “the immature vertical.”⁵⁵⁴ In chapter three we elaborated this aspect for the different gestures of architecture. To remember one aspect: the lithic parts all seemed to be treated as the same element, floors growing into parapets, parapets growing into walls, walls growing into chimneys, all variations on the verb rising, or “growing out of the ground into the light.” Wright saw all these elements not in terms of an end—their functionally or historically coded place in ‘the system’—but in terms of variation.

⁵⁵¹ See the letter to Harriet Monroe. In: Twombly, *FLW, An Interpretive Biography*, p. 95.

⁵⁵² *FLW, LC*, p. 110. The Lemma ‘Usonia’ gives us a clear example of his believe in what he calls “modern gifts.”

⁵⁵³ Wright speaks of a “rejuvenation of architecture” in his letter to Harriet Monroe. Twombly, p. 95

⁵⁵⁴ The immature vertical is exactly what we meet in historic Mannerism, in the Villa Pia of Pirro Ligorio and in the Palazzo Branconio dell’ Aquila of Raphael, and even in certain Dutch canal-houses in which the columns of the order are systematically suppressed or dissolved and we find a piling up of the horizontal. And wherever, in this study, we asserted that nothing stands or nothings ‘comes to stand’ in Wright and even the highest or tallest vertical is dissolved into horizontals, we touched upon this Mannerist ‘instant’ in his architecture.

One element is a 'manner,' i.e. a variation or modulation, of the other. [FIG. 5.3-5.4] When Wright speaks of a "roof coming down in the wall," both wall and roof have this power to take over each other's roles. This potentiation is a virtualization, it means bending back architectural form to its *virtu*, Latin for power: architecture's power to form new elements, the power of elements to take on new roles, to variegate or mutate their own DNA. "Not form but formation," as Wright put it. Let's take this as a first sign of a *virtuoso* architecture. Elements not caught in their being but in their becoming, in their potentiality. Mannerism, shortly.⁵⁵⁵



FIG. 5.3 Malcolm Willey House, Minneapolis (MN), 1934. Floor becoming wall continuing in hearth and chimney.. [Photo: Matt Schmitt]



FIG. 5.4 Malcolm Willey House. Ceiling folding multiple times and finally becoming wall. [Photo: Matt Schmitt]

⁵⁵⁵ The architecture of Giulio Romano gives us this more or less unfinished state in which architectural elements are still seeking their place, experimenting with their 'function' in the system. Bossage may pop up in surprising situations. Triglyphs hang down like in a dentil course. The parts are still floating and have not yet specialized in the system. See: Frans Sturkenboom, *De Gestiek van de Architectuur*, pp. 160-161.

We may already note here a convergence with the Romantic era. In *Die Weltalter* (The ages of the world) Schelling speaks of this virtual state as the state in which the creative spirit sees everything happen in a perfect fluid state in which “nothing is enduring or solid, but everything was in unceasing formation. For the confirming and truly expressive word was still missing.”⁵⁵⁶

A fluid state in which nothing is enduring or solid. If we look at the bay-window and the recess in Wright's work, they become elements in a permanent state of variation in the polygonal plans. The Hanna House is an excellent example. [FIG.5.5] Here every move of the folding sash in the living room gives us a new recess or bay-window on the rhythm of the hexagonal ‘tiles’ of the floor itself. [FIG.5.6] The rhythmically jumping façade, changing sign at every corner, leads to a spatial potentiation of the perimeter, multiplying the visual axes and sometimes leading to outrageous virtuoso situations with 60° folds, as in the entrance area. [FIG.5.6] The Hannas took the opportunity to niche a sculpture or vase in every bay-window on the inside, while sometimes setting pots with plants in the recesses on the outside. The somewhat exorbitant gestures of the architect are answered by a creativity of the inhabitants themselves, developing their own manners in reacting on the elasticity of the façade; using the difficulties to intensify the meeting of inside and outside.

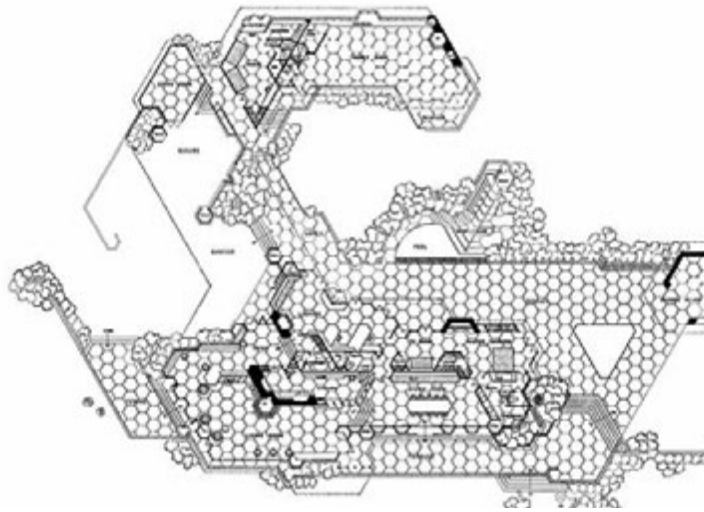


FIG. 5.5 Hanna House (Honeycomb-House), Palo Alto (CA), 1937, plan. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

⁵⁵⁶ F.W.J. von Schelling, *The Ages of the World (second draft 1813)*, translation Judith Norman, Ann Arbor, The University of Michigan press, 1997 p. 154.



FIG. 5.6 Hanna House. Left: window sash in the kitchen area. Right: 'virtuoso folds' in the entrance area. [Photos: Regis Vincent]

5.4.4 Human architecture in a natural series

We now come to a more principal variability we find in Wright's architecture. When Wright orients architecture on nature, he places the human habitat in the series of all other natural styles of inhabiting the earth. According to Wright's organic principles, life finds style in habits, "every creature worthy the name has got style in some degree." Even lithic layers have style, as we saw, style being the way in which nature inhabits the earth while building it in characteristic gestures. Wright opens up architecture to the pre-human. He reckons in geological time-spans, sees nature modifying itself, sees human's home as a variant, a natural manner, in a series in which we also find the shield of the tortoise and the canyon as the house of the river. Wright is always constructing continuities between human and non-human techniques. "Nature cantilevered those rocks over the fall, ...I can cantilever the house over the rocks"; "The saguaro, perfect example of building construction. Its interior vertical rods hold it rigidly upright maintaining its great fluted columnar mass for centuries. A truer skyscraper than our functioneers have yet built."⁵⁵⁷

⁵⁵⁷ "Steel in tension enables the support to slide into the supported or the supported to grow into the support as a tree-branch into a tree-trunk." Levine, *The temporal dimension of Fallingwater*, In *Wright studies two: Pittsburgh and Fallingwater*. Carbondale and Edwardsville, Southern Illinois University Press, 2000 (Narciso G. Menocal editor), p. 52. About the saguaro: FLW,AB, p. 334.



FIG. 5.7 Frank Lloyd Wright nonchalantly conversing in front of the heavily overloaded columns of the SC Johnson Administration Building. [Courtesy SC Johnson].

In order to visualize such transfigurations, Wright creates difficulties in order to find opportunities to prove architecture's power *as* the power of nature or even competing with nature. He dramatizes architecture. When we look at the famous photographs of Wright proudly and nonchalantly conversing all but under the heavily overloaded dendriform columns of the SC Johnson Administration Building—columns in a test bearing a multiple times the necessary weight—we see a Mannerist artist par excellence: an artist having created his own difficulties to show his ability to stretch architecture to unknown possibilities. [FIG.5.7] This is the very definition of *sprezzatura*, a concept central to Italian Mannerism.

In Buontalenti's grotto in the Boboli Gardens in Florence, which we met in the third chapter as an outstanding example of Mannerism's subterranean fascination, we find a large spume-stone in the centre of the first grotto-room. Water seeps out at the top, flowing down slowly at all the sides in a large basin. [FIG. 5.8] This procedure once repeated itself in all the walls, water flowed down over the bas-relief sculptures, optically bringing them in a fluid state.⁵⁵⁸

⁵⁵⁸ This water seeping cannot be seen anymore today, but was a full part of the design of Buontalenti.



FIG. 5.8 Buontalenti's grotto: the bas-relief in the grotto and the *spume* stone in the middle. [Photo left: Sonofgroucho CC BY 2.0. Photo right: unknown]

The figures born in the bas-relief of the wall, the shepherd and his wife, the sheep and the trees, even man's attributes, seem to be the dream of the stone out of which they have been sculpted. They appear as the possible states of a still active creation, of nature moulding and kneading life. In Mannerist gardens we often find such stones, either in a basin in the heart of them, or in some small nympeum or grotto somewhere at the side.⁵⁵⁹ [FIG.5.9] These overflowing stones, from which the whole of nature in the garden seems to be flowing out, make us think of that statement of Wright that "in the stony bonework of the earth (...) there sleep styles for all the ages for all of man." In the centre of Fallingwater we found a rock: all the lithic parts seemed to flow out of this stone in what has so often been described as a cave-like abode.

⁵⁵⁹ Villa Gamberaia is a very beautiful example, but Villa Lante too, where we see a whole world unfolding from a fountain-grotto.



FIG. 5.9 Villa Gamberaia, Settignano, Italy, 1600, garden. Left: basin with rock with seeping water. Centre: nympheum-grotto. Right: stone 'dreaming' of all kind of formes and faces. [Photos: Frans Sturkenboom]

Mannerism refers to the pre-human. It sees the human as a stage in the great metamorphosis of nature. It bears on a 'not yet.' The artistic category of the *non-finito* pertains to the idea that when the block of marble stops suggesting forms, the sculpture remains unfinished. Like Michelangelo's slaves. It is the stone that *suggests* the forms. The style of the artist remains bound to that of the stone.⁵⁶⁰ What Mannerism seems to suggest is that human's style remains an open form, nature in formation. Nature experimenting, nature variegating. Giordano Bruno, the great philosopher of the 16th century, called human the *omniform*. Human is the one able to communicate internally with all the levels of creation, from dust to the sun. A theme in some sense to be found in Schelling, too. "To plumb the depth of nature is to sound the depth of one's own nature."⁵⁶¹ Whenever the human plumbs this depth, he may come to creative bonds, he may come to a creative jump. It is this tenor that we feel as an insistent strain in Wright's work.

⁵⁶⁰ Cf. Sjoerd van Tuinen, *Matter, manner and idea in Michelangelo, Leibniz and Deleuze*, In: *Inflexions. A Journal for Research Creation* 2010, issue 4.

⁵⁶¹ Gord Barentsen, *Schelling's dark nature and the prospects for ecological civilisation*. In: *Cosmos and History: The Journal of Natural and Social Philosophy*, vol. 15, no. 1, 2019 pp. 91-116

5.5 Romanticism

5.5.1 The ruin: the journey to the post-human

Just like Mannerism, Romanticism posits the human era in a far larger timespan. In the concept of the Absolute or the Organon, Schelling tried to find the ground of the “infinite productivity of nature.” In his famous *Freiheitsschrift* he finds it in a rift tearing through nature itself, from the Absolute to Man. It is the “abyss of freedom” which makes the Absolute not something static. It is a battle of forces, the forces of formation, of contraction and expansion in the heart of nature. In every chapter we met these forces. In the first place we saw them as the spatial habitus of Wright’s houses, contracting around the hearth—around a terrestrial past—, but at the same time opening up towards a future horizon shining at the periphery. But we also saw them in the idea of a contraction on native America, at the same time however opening up towards a Mesoamerican or a Japanese variation, posing an America only living and perpetuating itself in new examples. And even in the material constellation of his architecture the contraction on “the nature of materials” somehow finds its reciprocal force in a ‘next nature of the material,’ in opening matter to new compounds, new molecular possibilities, an extended or expanded range of new material manners.

Where Mannerism stressed the pre-human and saw the human in a zone of indiscernibility with other life—not deciding for her on any definite place in nature— Romanticism also stressed the possibility of a post-human era. If nature is really creative and if this freedom means that nature in its experiments is capable of unreasonable, exorbitant and even monstrous products, and if it also deranges itself in diseases and the dead lineages of evolution, shortly if it also aborts its products, it is possible that the human may come to an end too.⁵⁶² In fact, one of the findings of geology, a product of the Romantic age, testified of the possibility of the erasure of complete species. In nature and in the human we find a latent ruin.⁵⁶³

⁵⁶² These are all themes of Schelling. See Gord Barentsen, *ibid.*

⁵⁶³ Ton Lemaire, *Filosofie van het landschap*, pp 147-152.

In more than one place we mentioned the idea of the latent ruin in Wright's buildings. Wright always designed his buildings in such a way that they would be overgrown by greenery. He alluded to the forces of erosion in his use of materials and he deliberately opened material surfaces to weathering—refusing to finish them with an extra protecting layer. Rocks and trees pierced the walls and the floors of his buildings. His winter-camp Taliesin West was dismantled during summer looking like a prehistoric ruin. Wright proudly reports his wife Olgivanna saying that “the complex looked like something we had not been building but excavating.”⁵⁶⁴ And finally: Wright found himself confronted with the first signs of the Anthropocene, the very power of evil in “The Moloch that knows no God but more,” the metropolis as the “disappearing city” with its citizen disappearing in clouds of pollution. The caption of the famous photograph says it all: “find the citizen.” Has she disappeared? We see the virtual ruin of the modern city.⁵⁶⁵ During a lecture in London, Wright speculates on the end of historic cities that will become grand museums, and he says: “We occasionally go to the graveyards of our ancestors, why not to the remains of their cities?”⁵⁶⁶ Ruins insinuate themselves in many aspects of his thinking.

In looking at what happened before man and in looking at what may happen with man or after man, humanity becomes suspended. In the Romantic extension of human's finitude, in looking into an immemorial past and in an uncertain future, human's habitat is placed in an open series. The human becomes a question, it may be finite, not just mortal as an individual, but finite as a species too. Culture becomes a *Sein zum Tode*. The hypothetical character of humans and their products is reflected in many aspects of Wright's architecture. In the previous chapter we spoke of a scientific, geographical expedition. We could just as well speak of a historic, archaeological and ethnological expedition. [FIG. 5.10] Humans visit the ruins of past civilizations speculating on the end of their own.⁵⁶⁷ Taliesin West, where we find Hohokam petroglyphs exhibited, old Japanese and Chinese sculptures built in the masonry, is an ethnological monument too. Erecting such a monument, however cruel, means studying the traces of the death of a civilization, staring into mortality, seeing the human species as finite.⁵⁶⁸ In the great chain of being man is just a layer. A possibly past layer? Already a fossil?

⁵⁶⁴ FLW, *AB*, p. 480.

⁵⁶⁵ In Wright's new 'order' there was no need to go to the old city except to “view the ruins.” FLW, *AB*, p. 354.

⁵⁶⁶ FLW, *An Organic Architecture*, CW3, p. 325

⁵⁶⁷ Ton Lemaire, *Filosofie van het landschap*, pp 147-152

⁵⁶⁸ Ton Lemaire, *Ibid*.



FIG. 5.10 Taliesin West, Hohokam signs: Architecture as an ethnological expedition. [Photos fltr: InSapphoWe Trust, CC-BY-SA 2.0 generic; Steven C. Price, CC-BY-SA 4.0; Courtesy of Andrew Pielage]

5.5.2 Science fiction architecture

The hypothetical character, which we already met in the floating, hovering, and ephemeral parts of the buildings, is also embodied in the science fiction character of Wright's late architecture. I do not refer here to the Ennis House becoming the scenery for the famous science fiction film *Blade Runner*. This is only the result of the Ennis House reflecting a fictitious past of America. All 'futurism' in some way reflects the past. In science-fiction films we see future humans not only showing themselves in all kinds of past clothing such as togas or cuirasses or loin clothes and all kinds of past hair dresses, we also see them in a pre-human past, genetically mixing with all kind of animals. Humans become humanoids. We see nature experimenting in redeveloping lines of evolution in anthropomorphic animal habits or vegetative life having become mobile. The future reflects itself in a natural past. Science fiction shows nature to be creative in all kinds of exorbitant products, never to be foreseen. Post-Human has become Bruno's *pantomorf* figure. It is as if Enlightenment, on the very moment it proclaims that spirit has come to itself in self-consciousness, in totalizing the encyclopaedic range of its past, had to explode into an unknown future full of new combinations, melting the human down to its very core, in order to build it up again in new future postures. New strange assemblages. *Frankenstein*, Mary Shelley's Romantic masterpiece, is often seen as the first new science fiction novel for its synthetic man. In science fiction, a Romantic product, we are past the human, exploring the 'great outdoors.' An orgy of contingency and catastrophe. 'It' may have happened, it may not have happened, we do not know.

Many of Wright's late buildings have a science fiction look. They explicitly pretend to be the ships of a next civilization having landed on earth. Their existence seems to suspend real time. The Daniel Wieland Motor Hotel: a ufo-terminal [FIG.5.11] ; the space ship of the Marin Civic County Center, whose arches do not bear but still

hang in the air: a fata morgana Roman aqueduct. The flying saucer of the Greek Orthodox Church, coupling with mother ship earth by interlocking with a concrete substructure. [FIG. 5.12] Going into the future means going back in the pure past. In the greater Baghdad project, we dig out a future Mesopotamian civilization. [FIG.5.13] Past civilizations mirror themselves to future ones. From the myriapod-space ship of the Pilgrim Congregational Church to the huge rocket-tepee of the Trinity Church.⁵⁶⁹

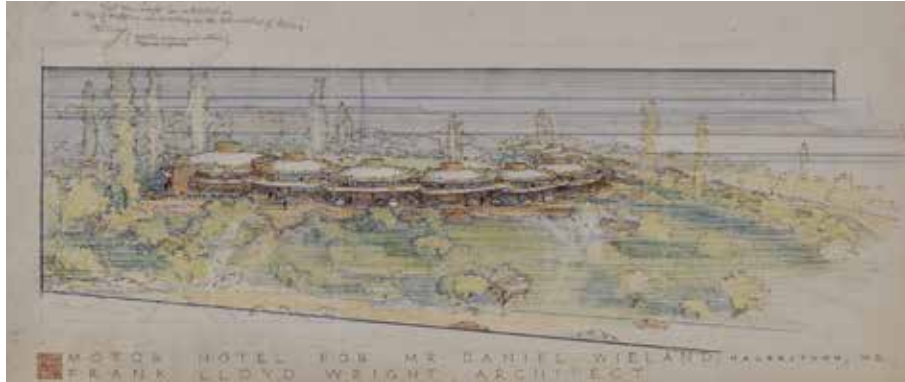


FIG. 5.11 Daniel Wieland Motor Hotel, Hagerstown (MD), 1955. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

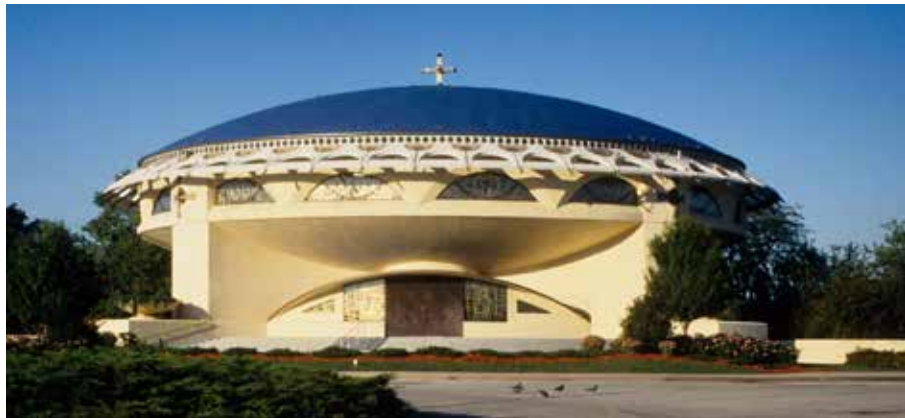


FIG. 5.12 Greek Orthodox Church, Wauwatosa (WI), 1961. [Photo: Frans Sturkenboom]

⁵⁶⁹ The Daniel Wieland motor hotel, Hagerstown (MD), 1955; Pilgrim Congregational Church, Redding (CA), 1958; Trinity Church, Norman (OK), 1958.

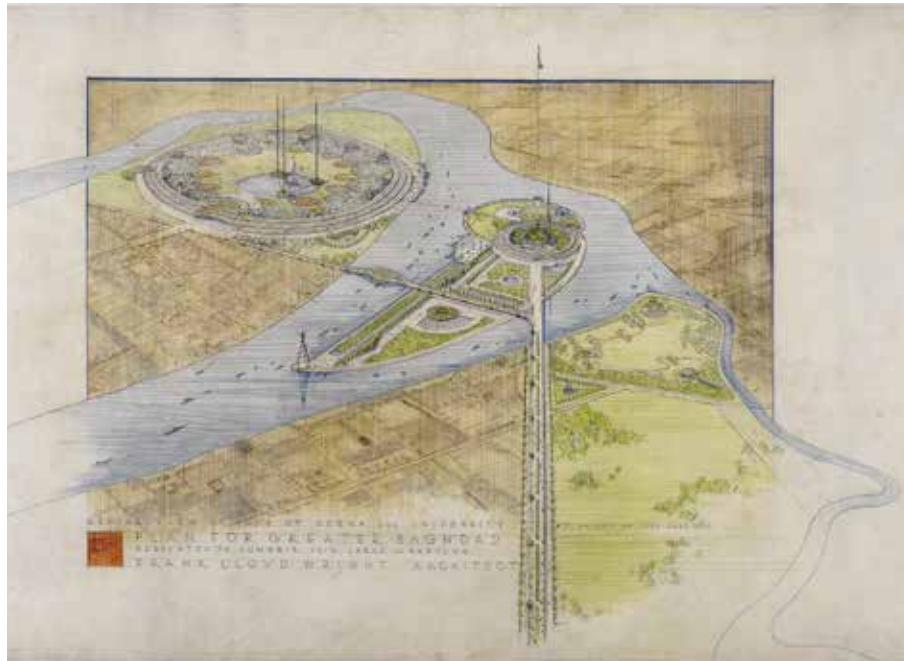


FIG. 5.13 Greater Baghdad Project. Baghdad, Iraq, 1957. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

One of the most fascinating aspects of the late architecture are the large glass domes. Wright explores another branch of the evolution. The “sky parlor” of the Donahoe Triptych [FIG. 5.14-5.15]: are we looking through the semi-circular cockpit-window of a space ship heading for the sun or through the eye of a monstrous insect? The high legged spider of the wedding chapel in Claremont; The different cupola’s of the Bagdad Art Centre which look like multi-eyed aliens having landed on top of human’s buildings to infect them with a post-human future.⁵⁷⁰ And what to think of the antennas appearing in late buildings and designs, which seem to be sending messages to some cosmic mothership? Mark Wigley associates Wright’s sending devices to an entomological posture of the human.⁵⁷¹ The celestial city, the city of transport and communication high in the air, the city of technique, only lands by mirroring itself in an alien branch of terrestrial evolution. We already saw the aerators of Broadacre city landing on Wright’s tree-like and icicle-like buildings. All these artefacts speculate on America’s next frontier, a 20th century space odyssey. In the ‘night-perspectives’ we see them in full glory beaming into a cosmic night. [FIG.5.16]

⁵⁷⁰ The Bagdad Opera, the cupola for the Guggenheim, the crystal of the YWMC.

⁵⁷¹ Mark Wigley, *The human insect, antenna architectures 1887-2017*, Het nieuwe instituut. 2018. <https://dissidentgardens.hetnieuweinstituut.nl/node/4404/human-insect-antenna-architectures-18872017>



FIG. 5.14 Donahoe House, Paradise Valley (AZ), 1959. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

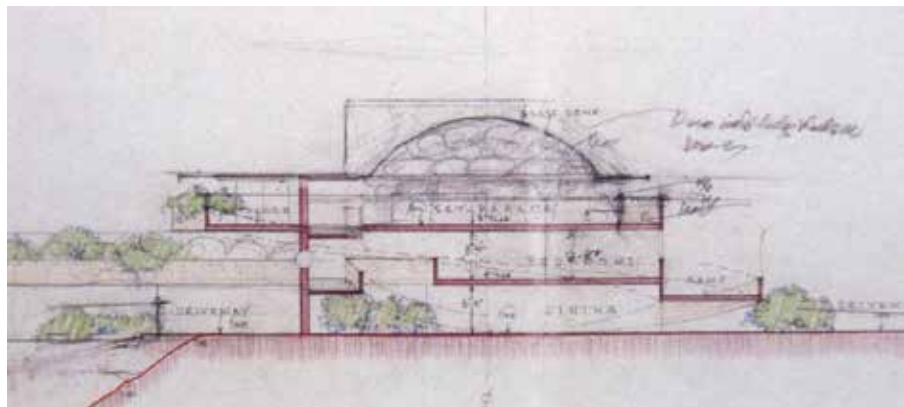


FIG. 5.15 Donahoe Triptych, section with the sky-parlour. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

At the very moment humanity, in its great 19th century scientific expeditions, begins to discover past civilizations, it mirrors them towards future times. Science fiction architecture is the *omniform* state of architecture. It mirrors Bruno's *pantomorf* capacities of man. The 'not yet' of Mannerism is symmetrical with the 'no more' of Romanticism that opens up to a 'yet again differently,' to resurrection in 'futurism.' Wright's scientific expedition finds a vigorous expression in his science-fiction manner.



FIG. 5.16 Night perspective of the Guggenheim Museum. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

Wright's work is a built reflection on style. We recognize here the reflecting character of the Romantic work of Art. All styles, that of the stone as much as that of the Hollyhock, that of the Saguaro as much as that of Hohokam, are nothing but fragments of an original boundless creativity of nature in which the artist participates. This creativity remains unconscious in nature itself but becomes reflected in the work of art itself. The tensed unity of the work, its rest or equilibrium in restlessness, its expansion in contraction, reflects the *Ungrund* or the abyss of organic forces, an abyss in which we should situate 'the decision' of *natura naturans* to rise up (to exist) in a natural history, in *natura naturata*.⁵⁷² Creative nature rises up in a procession of natural styles to be felt and reflected upon in the styles of art itself. Any unity of organic forces is always provisional, from the very beginning, and the work of Art for that reason remains a sketch, a fragment or a ruin—according to Schlegel⁵⁷³ all synonyms for the provisional character of the work of art.⁵⁷⁴ All the fragments remain in dialogue, they refer to each other, they reflect each other and so leave the finite work open as a product of the metamorphic, variegating experiments of that original infinite creativity, the great modulating stream of nature.

⁵⁷² F.W.J. von Schelling, *The Ages of the World (second draft 1813)*, translation Judith Norman, Ann Arbor, The University of Michigan press, 1997 p. 132.

⁵⁷³ Karl Wilhelm Friedrich Schlegel, (1772 – 1829) was a German poet, literary critic, philosopher, philologist, and Indologist. He was part of the German Romantic Movement. https://en.wikipedia.org/wiki/Friedrich_Schlegel

⁵⁷⁴ Frank de Veire, *Als in een Donkere Spiegel. De Kunst in de Moderne Filosofie*, Nijmegen: SUN 2007 [2003] p. 81.

5.6 Stylistic differentiation

5.6.1 Organic or eclectic, nativity or travesty?

All the fragments remain in dialogue. They do so by differing. Differing means taking distance, becoming a new manner.⁵⁷⁵ Inka, Maya, Navajo, Yamasee, Cherokee, Pueblo, Japanese. Settler, Wanderer. Saguaro, Snowflake, Honeycomb, Crystal, Tortoise, Hollyhock, Spanish moss. There is an ultimate recycling and reinvention of styles in Wright. And certainly, many pertain to the local or native, but some to ‘foreign’ or ‘far’ origins. A Maya Frieze in a Wisconsin Warehouse [FIG. 5.17].⁵⁷⁶ Wright must have seen them all in a post-historical continuum as if indeed Hegel’s “end of art” had exploded into the infinite multiplicity of manners. As past styles of life they become part of new life-styles. If Wright considered the styles of nature—in the most extended sense of the word—as the true ingredients of his design, is this not the ultimate eclecticism? Architecture dresses up with the beauty of nature, including that of human civilizations.

This would be a shocking conclusion. What about “the organic”? How do we come from this travesty to a style “native to the place, to the time and to the man”? To an organic style? We seem to be utterly lost. How did we go from a singular style, a style standing from within, to a style born from everywhere? When it comes to style, Wright verbally always adhered to the principles of Viollet le Duc who stated that all natural phenomena have their style: “the leaf of a shrub, a flower, an insect—all have style; because they grow, are developed and maintain their existence according to laws essentially logic.”⁵⁷⁷ For Viollet, style is grounded in reason, it is compellingly organic, organic in the sense of functional. “Arts that cease to express the want they are intended to satisfy, the nature of the material employed, and the method of fashioning it, cease to have style.”⁵⁷⁸ Indeed, it is as if we hear Wright speaking.⁵⁷⁹ Wright insisted on the same principles: “Any consistent expression of an organic

⁵⁷⁵ Sjoerd van Tuinen, *The late and the new*, p.154. “Instead of a spectacular mimesis of more classical practices, a manner is a latent transportation and translation of an original difference.”

⁵⁷⁶ Wright designed the German Warehouse (Richland Center, WI) in 1921.

⁵⁷⁷ Viollet le Duc quoted by John Lloyd Wright, *My father, Frank Lloyd Wright*, p. 138.

⁵⁷⁸ *Ibid.*, p. 137.

⁵⁷⁹ According to his son John, Wright saw the lectures of Viollet as ‘essential schooling.’ John Lloyd Wright, *My father who is on earth*. Dover New York, 1992 (1946), p. 131

entity, as such; any animal, tree or plant has character we may observe. In varying degree this character may appeal to us as beautiful. It may even be what we call ugly and possess the character which is the secret of *style*.”⁵⁸⁰

But let us not hurry to conclusions. As we saw in the last chapter, organic does not mean a closed organization of the parts and the whole. Integration is only one power of the organic, but association or the opening up to a next, is another. It is exactly when character begins to shine in order to associate—when it becomes a lure—that it becomes style. Wright often equates character and style: “Observe that we may use the word “character” for “style” and the word “style” for “character” with no great inconsistency.”⁵⁸¹ Though he admits that the “two words are not interchangeable,” he does not explicitly explain the little gap between the two. But it is in the difference between the two that character as the individualizing principle differs from style, because it is in style that character becomes a character—a role—and loses its organicity. It loses its organicity as long as we consider organicity as the strict reciprocity of cause and effect, as finality in the Kantian sense. As long as we forget the overflowing, associating moment.



FIG. 5.17 German Warehouse, Richland Center (WI), 1921, [Photo: Lowell Boileau, CC BY-SA 3.0,]

⁵⁸⁰ FLW, *In the cause of architecture II*, In: *CW1*, p. 268.

⁵⁸¹ FLW, *Ibid*.

When Wright sees organic buildings as “growing out of the ground into the light, holding that ground as an essential part,” the ground—structuring the building—grows out into ornament as the associating moment. It is in ornament that the ground and its character begin to shine. They become a character searching for a public.

5.6.2 Matters of expression

Let me rephrase my question a last time: how do we come from style as compellingly organic to style as adopted, as a free principle? In *On the refrain* Deleuze and Guattari give us the answer: style develops when the *proprius* becomes a *quale*, when a property no longer forms the signature of some form of life on its territory (something own)—but instead becomes a quality and as such part of a “matter of expression.”⁵⁸² Expression acquires its own freedom vis à vis the territory, it loses its functionality. The bird may express its organic impulses or its feelings in a rhythm but those impulsive expressions acquire an own life and become “rhythmic motifs” which in their turn may be varied upon evoking new affects. The bird may see the sun rising at the border of its territory and give it an expression in its song. Eventually it learns to sing it as a “melodic landscape” even when the sun is not there. It sings the sun as an affect. These rhythmic motifs or rhythmic characters and these melodic landscapes grow in ever more complex relations to become “matters of expression” freed from their direct organic impulses or situations. They become a style of the bird expressing its character or landscape without a territorial or organic reason. It is here that art appears and that character becomes a character. Deleuze and Guattari refer to the French composer Messiaen who declared birds to be true artists and who based his *Catalogue d’oiseaux* on their art.⁵⁸³

Just like the sun of the bird, Wright’s prairie once was the immediate affect of the settler: the feeling evoked by the horizon as the “free wide.” Wright still cherishes that feeling when he associates the earthline-horizontal with freedom: “the true earthline of human life, indicative of freedom. Always.”⁵⁸⁴ The Prairie House is designed with the horizontal as the earthline rhythmically stepping up staying parallel to the earth. But it is immediately subject to variations and the intensification of the inner relations of all the parts: stylobates stepping up to the band of casement windows, eaves extending, sills accentuated, caps pronounced, joints deepened,

⁵⁸² Gilles Deleuze and Felix Guattari, *Mille Plateaux*, pp. 387-391.

⁵⁸³ Ibid, p. 389.

⁵⁸⁴ FLW, *AB*, p. 349.

roofs flattening etc. It becomes a matter of expression: the Prairie House may be painted without the horizon in sight, evoking the “free wide” as the true home, evoking a prairie as *never seen before*. Hoffmann gives us a very useful clue when he shows us that the prairie had already largely disappeared in Wright’s time.⁵⁸⁵ The Prairie House is a souvenir of the prairie, it monumentalizes its traits in architecture, it evokes the sensation of the prairie as the feeling of pure freedom. The house is a nostalgic song, the prairie-*nostos* having disappeared. And every Prairie House is a new variation on that theme, a new manner, a new arrangement of these traits, and by that a variation on the American prairie. Factually, some of these houses appear on a steep slope, and others cross the woods and they are certainly not all native to the Mid-West. They sing the song of the prairie in “rhythmical motifs” and in “melodic landscapes.” Prairie-style is a “matter of expression.” In a way it is a personification of the prairie, the Greek *persona* being the mask of the actor, it is indeed the *character*, but the character as a role. It may strike a chord in many of us and may be sung on many places.

Yes, it will acquire a new tone every time it will be sung. It must be appropriated. It must become native to a place, a time and a man. Indeed by looking at local vegetation, the local light. And it must be open to a future of innovative techniques. When Wright says ‘native to a time’ he opens the ‘native to a place’ to a future repetition. The having taken place (the place as built) opens to a next taking place. The song of the prairie becomes the song of the horizon as the element of the vehicle, of velocity and mobility, transfiguring the prairie-earthline to a streamline. Singing the song of the past to electrify the future.

“Native to the man”: the Usonian home pertains to the feeling of settling, it is the great monument for the American settler. It is a heated floor slab, like a carpet to be ‘rolled out’ on the spot (no deep foundations, only the so called ‘watertable’), a hearth and a chimney, and a wooden tent (the log-cabin) to be put up on a spot. It refers to a technique of a quick putting up, and is fit for anyone inaugurating a new phase of life in which to resettle or to re-invent oneself. The Usonian home is a *portrait* of the settler. It may portray anyone of us, leaving the burdens of a past to inaugurate new, lighter, more hopeful futures. It is the refrain for a new life.

The song of the falling waters, the song of the eagle, the song of the Meso-American Temple. If such a song resonates with a place and a time and a man, it may be sung. The houses: events to be characterized, events to be personified, refrains to be repeated. *In welcher style sollen wir bauen?* What is the proper style? The style

⁵⁸⁵ Hoffmann, *Understanding Wright*, pp. 5-7.

appeals to “the man,” humans may carry it if feeling carried by it. It waits for them. It is no longer anyone’s property, but a wandering quality, waiting on someone to grow into it, to stand up and modify it, to make it one’s own.

5.6.3 Wright’s stylistic continuum

A quick overview of Wright’s work already gives us a multiplicity of manners. We can distinguish the Meso-American manner, the Usonian or Settler-manner, of course the Prairie-manner. Usonian Automatic too. Most of these names stem from Wright himself. The differences between these main ‘manners’ are indeed partly related to materials or material techniques, such as the Usonian Automatics with their concrete block system and the original Usonians with their sandwich of batten and board or overlapping vertical boards techniques. But the material techniques do not overlap exactly with the names. The Barnsdall House,⁵⁸⁶ often reckoned to be a Meso-American house, is not built with a textile block-system, as the rest of the Californian houses of the twenties.

In Wright’s whole oeuvre we find many incidents like the designs for the Morris Houses, highly futuristic and maybe the beginning of a new science-fiction line. Where to situate Fallingwater, a work often called unique in Wright’s oeuvre? They all refer to a specific matter of expression, a character that seeks to be incarnated in a “place, a time and a man.” The fact that these works seem to be unique, does not say they could not be varied upon. Factually, Fallingwater finds a somewhat insipid look-alike in the cottage studio for Ayn Rand. All incidents may become part of a series or indeed already are part of a virtual series or manner, even if variation may be postponed for the rest of Wright’s career, or seems to be exhausted as was the case for the Prairie Houses.

In Wright’s case we should speak of a stylistic continuum in which many parameters may vary. The idea of an easy set-up technique, which we meet in the Usonian home, returns in a textile block technique, giving rise to the Usonian automatic, a technique for self-builders. The local material is such a parameter too: Usonian homes must ideally vary in their lithic parts according to the materials found on the spot. Settlers used local stones to pile up in the chimney. So we have desert-Usonians too (The

⁵⁸⁶ Barnsdall House, Los Angeles (CA), 1919.

Pauson House and the Boomer House⁵⁸⁷) using desert concrete for those setting up their camp in the desert, resulting in desert-settler-manners. The Hagan estate has a sandstone stylobate and walls and a chimney of the same materials, but remains a Usonian in many ways. It may not fit the criterion of ‘moderate cost,’ one of the reasons of existence of the Usonian home,⁵⁸⁸ but we may inverse the argument: by using the quick set-up technique of the wooden elements at least in the upper structure and the interiors, a larger home with a more explicit lithic root becomes possible. On the other hand: because the economic criterion was the main reason of existence of the Usonian homes, many of them were executed in brick even if that was not a local material. Later even in concrete masonry. A fine example of stone as a product of “native to the man” was the Henry J. Neils House, executed in so called marble brick masonry for a dealer in natural stone.⁵⁸⁹

In the stylistic continuum we may approach a style from many sides, depending on the criteria. If certain manners like the overhanging eave are crossed with the technique of the textile block we get the Usonian Automatics such as the Kalil, the Tracy and the Tonkens House.⁵⁹⁰ [FIG. 5.18] With their geometrical block patterns and their somewhat shady interiors they keep remembering us of their Meso-American textile block ancestors. We see here that the Usonian Automatics may be inferred from the Usonian homes in their quick set up, but may be affiliated with the textile block system too. Certain lines converge, others diverge.

Ways and ways and ways through the stylistic continuum. Wright was the virtuoso handling the slide-bars of style. Every time a new manner evoking a slightly different feeling, varying upon technical, geological, geometrical, geographical, historical, and economic qualities. Taking distance of some and coming close to certain other lines or series. All houses end up in a name, as we saw in the previous chapter, often referring to some natural event concerning nature’s use of geometry (Snowflake, Honeycomb) or a geographical phenomenon (Windswept, The Fir). Indeed, there is a signature, but it is only drawn when the song is really sung, when the house is designed to become a geographical event.

⁵⁸⁷ Boomer House, Phoenix (AZ), 1954

⁵⁸⁸ FLW, AB, pp. 515-520

⁵⁸⁹ Henry J. Neils was a trustee in a marble company and was able to acquire the material for a good price. The house dates from 1949 and was built in Minneapolis (MN).

⁵⁹⁰ Gerald Tonkens House, Cincinnati (OH), 1954; W.B. Tracy House, Normandy Park, Seattle (WA), 1956; Toufic Kalil, Manchester (NH), 1955.



FIG. 5.18 Gerald Tonkens House, Cincinnati (OH), 1954. [Photo: Factfile8, CC BY-SA 4.0]

Indeed it is often difficult to lay your hand on what exactly makes a Usonian a Usonian when so many principles may vary. When Usonian Automatic is Usonian too. All 'Usonians' adding something peculiar, leaving out something else. It is as if the definite form of the Usonian home is suspended in the series. *Usonian* is always in formation, mirroring *Usonia* (The United States of America) in formation. Usonian automatic: "the democratic ideal of variety."⁵⁹¹

Giorgio Agamben speaks of *maneries*, again a nominalist concept.⁵⁹² It gives us an idea of 'suchness': you can point to it, you can collect all the examples, but you cannot isolate the final defining concept. The concept defining the series remains inconsistent. You can have the series—the Jacobs, the Pew, the Affleck, the Hanna, the Loyd Lewis, the Rosenbaum, the Goetsch-Winkler, the Llewelyn Wright, the

⁵⁹¹ FLW, *The natural House*: 1954, *CW5*, p. 77-127

⁵⁹² Agamben, *The coming community*, p. 6.

Palmer, the Wall, the Price etc.—, at the end all your original properties may have been replaced, but it remains a Usonian. An open series. The Usonian manerie gives us the *time* or even better: *the hour of the settler*. A singular mood or atmosphere.

Many critics have shown themselves to be highly amazed by the fact that Wright often recycled unexecuted designs. It seems to be contradictory to the idea of a house native to a place. But that is only as long as we suppose some causal relation between the style of the house and the style of the place. But it is exactly in style that character loses its organicity. As soon as we think in terms of “matters of expression” seeking a proprietor or place, we see a song that eventually acquires colour and timbre as the last manners or variables, “a sun and a sky all its own” as we heard Chateaubriand saying. The design *becomes* situated.

There are many intermediaries or parameters that allow a mediation between the house and its place, time, and commissioner. Technical, architectural ones, such as the stylobate, evening the differences in geographical relief in different situations, stylobates that may even become ponds from which water pours down; materials and local styles; finally program; they may all be modifying factors. If we look at the design for the Windfohr House (Fort Worth, Texas, 1949) becoming the Bailleres House (Acapulco, Mexico, 1952) becoming the Miller House (probably Roxbury, Connecticut, 1958) we see an invariable in the main geometrical scheme with a grotto-like circular living room as a hinge between several wings. In the recycling process it adapts supply to different programmatic demands by adding some minor wings without changing the ground scheme. The use of ‘desert concrete’ is an invariable—the material would have variegated according to the different geological ingredients (stones and rocks) to be taken from the site. The concrete shells of the roof are invariables. A glass ‘underwater’ cupola on the living room in the Windfohr House changes to a real patio with a fountain bathing a boulder in the Bailleres House, and then back again to a cupola in the Miller design. We see differences in the terraces and pools (working as stylobates) accommodating the plans to their respective sites. There may be a variety of occasions to sing the same song, the quatrain may change, the refrain will remain the same. Only the first house, the house for F. Windfohr, has got a name (‘Crownfield’) referring to its situation (a hilltop) while the other two never reached a stage far enough to be baptized.

5.6.4 A singular Wright

Eventually every house must become a variation on America. And indeed, even America is a *manerie*, both in its nature, to be discovered again and again in every house, and as a society, an always “coming community”⁵⁹³ on Whitman’s “open road.” Wright’s American = Usonian home: you can only point to it. Such and such and such. It is a style that must be reincarnated and appropriated, that means be varied upon to become a manner, it lives in its row of examples always to be extended. All the houses give a sketch of America, a fragment to be reflected in the next fragments.

Maya, Inka, Aztec, Inuit, Japanese, Cherokee, Yamasee. Gothic, Mannerist, Roman and Romantic. Wright’s work is a grand hallucination of the history of architecture. Even European history is part of it, as we saw, but in its most hidden layers. Jean Baudrillard says that American spaces are all refractions of all the other spaces on the earth and they may become as unreal as television.⁵⁹⁴ This was one of Wright’s ultimate nightmares. America ending up in hyper-kitsch. This was the whole point of his anti-eclecticism: any style coming from abroad had to be reflected in a natural, native style. It had to graft itself on nature. This was Wright’s real intuition. It is what makes any Wright building a typical Wright building. The wanderer must settle. Style must acquire a body, again and again, it must strike root, go through the earth, to eventually become a “song of the earth.” All Wright’s architectural gestures, his manners are about this arriving, drilling into the earth to grow out again and unfold into the light. The settler must dress up with a terra incognita in order to become a child of the ground. Settling means positing oneself in a series of habits and habitations of all kinds of life having already found a habitat on the spot. Acquiring an American habit, an American manner.

The American Earth, off course, was only a first step. There could be a Venetian house, a Venetian manner, as we see it in Wright’s proposal for the Massieri Memorial. The fate may be a universal one. A Baghdad manner. In the era of hyperreality, of images reflecting in other images, beaming around the earth in the celestial city, the adoption of a local earth is a crucial task. Native to the place means native to some natural event. Pairing architecture with nature.

It must be clear then that despite the multiplicity of manners, there is certainly a Wright style, a stylus, a pen or signature. In the coming paragraphs we will zoom in on some specific qualities to see what this style entails.

⁵⁹³ To use Agamben’s words again. Ibid.

⁵⁹⁴ Jean Baudrillard. *Amérique*, Parijs: Grasset & Fasquelle, 1986. Dutch translation Maurice Nio and Ernie Tee: *Sideraal Amerika*, Amsterdam : Duizend en Een, p. 162.

5.7 Geometry

5.7.1 Wright's geometries: Baroque and Mannerist operations on basic geometry

We have seen many aspects of style now, historic and natural aspects, technical and material aspects. In order to evaluate them we will now look at their relation to Wright's geometries. We have to speak in the plural again here, because one can find different geometrical styles in Wright's work. As put earlier [§ 2.4.1], one may even see a real development going from a somewhat restricted, Classicistic, to a free Mannerist and even Baroque habit, and in some works one can observe a tendency to the differential curve. Geometry, according to Wright, was the very "soul of the thing": the soul of nature building and thus the soul of human building. "Geometry has spell-power over man."⁵⁹⁵ For that reason it is of crucial importance to acquire geometry as a second nature in order to understand the structure of all things. Wright advises the young architect: "Get the habit of analysis, analysis will in time enable synthesis to become your habit of mind."⁵⁹⁶

"There is a life-principle expressed in geometry at the centre of every nature-form we see." In his essay on the Japanese Print, Wright immediately gives us the first reason to learn geometry: it should tune us to life and to all the products life as *natura naturans* produced in nature as *natura naturata*. Nature can only inspire us if we see its intelligence, its architectural principle. The geographical expedition of Wright's fleet is in need of the specific tools to understand nature's power of structuring, organizing and clothing itself. Geometry is spiritual, it is a science of life. Life builds intelligently even if it does unconsciously so. Schelling speaks of "flashes of insight." He explains that nature builds with science, but that it has no science of this science, it builds scientifically uncon-science-ously: "Hence raw matter blindly strives, so to speak, toward orderly form, and unknowingly adapts purely stereometric forms, which nonetheless certainly belong to the realm of concepts and are something spiritual in the material. The most sublime art of number and measure is native to the stars and is performed in their movements without the stars having any concept of it."⁵⁹⁷

⁵⁹⁵ FLW, *CW1*, p.117

⁵⁹⁶ FLW, *To the young man in architecture*, *CW3*, p.101.

⁵⁹⁷ F.W.J. von Schelling, *On the relationship of the plastic arts to nature*. Translation, Jason M. Wirth, Kabiri, vol. 3 (2021) p.139.

When speaking of a development in Wright's architecture we must always be alert. Yes, in the urban plans we went from the grids of Broadacre to the circularly plotted earth of some later plans as Galesburg and Pleasantville. In the houses we went from the early crosses and fourfolds to the polycentric plans of later houses such as the Norman Lykes House⁵⁹⁸ or the Llewellyn Wright House. The fact that Wright stayed experimenting points to the Mannerist character of his work. Style doesn't stabilize, there can always be added a new manner. A scrupulous investigation of Wright's geometric styles would teach us that most of them remain 'operable' while new ones appear. Square or rectangular grids are invariables from the first to the last Usonian, polygonal ones appear in the late thirties. In the very first—sometimes still 19th century—plans we see a more Classicist, articulated use of separate geometrical forms, as in the Cooper House [FIG. 5.19] and the Glasner House.⁵⁹⁹ In the early Prairie House plan there is a certain simplicity in the use of circles, squares and polygons that hardly comes back in the later plans. Very soon we see the use of overlapping geometrical figures *eroding* each other. We see squares 'leaving' squares, rectangles crossing rectangles, circles eating parts of squares or adding on them, and vice versa; a complete program to dynamize geometry. Wright begins to understand a logic of operations: of overlaps and subtractions, of rotations and translations. An octagon may be an ideal figure but it is also a square with four eroded corners. Wright learns to see geometry in terms of formation and deformation, he learns to see what he calls "geometry as the grammar of form." In the plan a resault is often a movement produced by a rectangle of which the corners have been pushed inward or of which a central bay has been pushed outward, as in Unity Temple; or vice versa, as in the Larkin building.

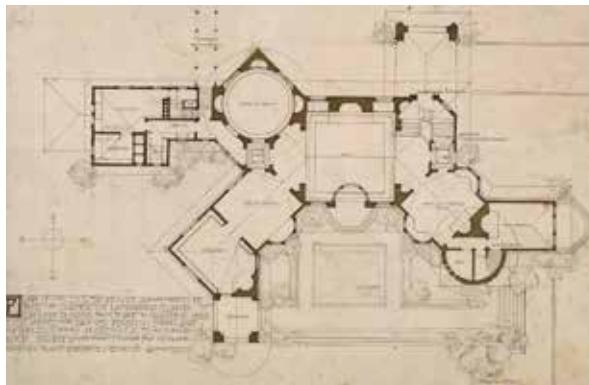


FIG. 5.19 Cooper House, La Grange (IL), 1890. Example of a more 'additive' geometry. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

⁵⁹⁸ The Norman Lykes House, Phoenix (AZ), 1959/1967.

⁵⁹⁹ The Cooper House (La Grange, 1890) dates from Wright's time as an employee in the Adler-Sullivan-firm. The Glasner House (Glencoe (IL), 1905) is clearly a Prairie House.



FIG. 5.20 Wingspread, The Johnson House, Wind Point (WI), 1939. Telescoping gestures. [Photo: Mark Herzberg, courtesy © The Johnson Foundation]

We must distinguish two directions here, the first a typical Mannerist one in which a contour becomes subject to expansion and contraction in operations of extrusion and intrusion, of pressing and tearing smaller volumes out of larger ones, resulting in stepwise gestures often leading to telescoping figures. The telescoping volumes of the sleeping wing of Wingspread are a good example [FIG. 5.20]; the widening overlapping boards technique we came across in works like the Pauson House gives us an example on a tectonic level. The second direction is the Baroque overlapping of circles and squares leading to concave and convex gestures such as those we saw in the Johnson Administration Building and the Llewellyn Wright House but also in the Kenneth Laurent House.⁶⁰⁰ [FIG. 5.21-5.22]

The ideality of the basic geometrical figure becomes problematized in all these operations. This is remarkable because in his essay on the Japanese print there is certainly a Classicist inspiration when Wright explains geometry. Wright talks of form as the embodiment of an idea and refers to Plato.⁶⁰¹ He even specifies that “certain geometrical forms have come to symbolize and potently suggest certain human ideas, moods and sentiments—as for instance: the circle, infinity; the triangle, structural unity; the spire, aspiration; the spiral, organic progress; the square integrity.”⁶⁰² Apparently, for Wright, their use in complex geometrical overlaps, their erosion by subtraction or their drifting away in multiplying centres, does not hamper them in being ideal. The virtuoso use is just a flexibilizing of geometry, a higher bid of ideality. A Baroque manner. [FIG. 5.21-5.22]

⁶⁰⁰ Kenneth Laurent House, Rockford (IL), 1951

⁶⁰¹ FLW, *CW1*, p. 118.

⁶⁰² FLW, *CW1*, p. 117.



FIG. 5.21 Kenneth Laurent House, Rockford (IL), 1951. [Photo: Bluefish815, CC BY-SA 4.0]

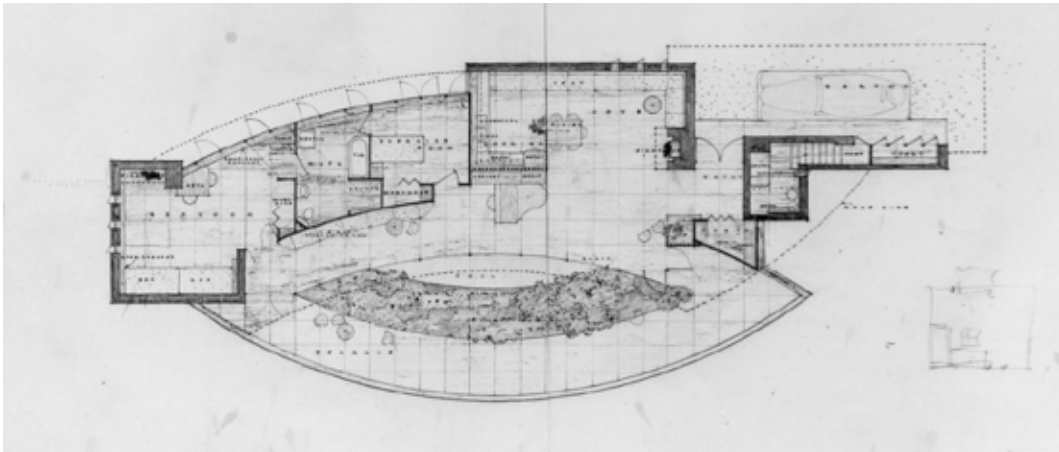


FIG. 5.22 Kenneth Laurent House, Rockford (IL), 1951, plan. [Courtesy of FLLWFA (MOMA / AA&FALCU)]



FIG. 5.23 Example of Wright's use of the polyhedron: Vallet National Bank, Tucson (AZ), 1949. Courtesy of FLLWFA (MOMA / AA&FALCU)]

In historic Mannerism the circle becomes part of a series of ellipses. It was an ellipse whose two foci happen to coincide. In the same way in Mannerism the triangle and the square are placed in a series of polygons. In Wright's Usonian plans they often divide into each other. A hexagon may divide into triangles (Hagan), triangles may add up to rhombi (Palmer) or hexagons. Their symbolic ideality is stretched in the series in which all the geometrical figures become modifications or numerical variations on each other.

We can see the three-dimensional exploration of these figures in the work of the Mannerist genius Wenzel Jamnitzer, the *Perspectiva Corporum Regularium*, an outrageous exploration of complicated so called 'platonic solids' and 'dual platonic solids.' In Wright's later work the polygonal figure is repeated in plan-grids as much as in the broken surfaces of three-dimensional roofs or even multifaceted cupolas, such as the polyhedron of the Tucson Bank⁶⁰³ [FIG. 5.23].

⁶⁰³ The Vallet National Bank in Tucson (AZ), 1947 was never built.

5.7.2 Polygonal grids in the plans

In the history of architecture, the introduction of ellipses, parallelepipeds, trapezia, and polygons was a typical Mannerist extension and empowerment of the classical geometrical grammar of architecture.⁶⁰⁴ We must look at the introduction of Wright's polygonal grids from the thirties onward in the same way. These dynamized grids were introduced to better act and react to complex landscape conditions. In the Hagan Estate, based on a triangular grid with angles of 60°, “the acute angles would thrust the house into the landscape while the obtuse angles (120°) would let it embrace the hill and at the same time open the interior space in unexpected ways.”⁶⁰⁵ The house may nestle better in the landscape relief, while at the same time taking distance when necessary. We get a dynamic perception of things nearby and things far off. Moving over such grids we may even get a feeling of deformation because when directed over certain lines, a series of windows or doors may enter our field of view obliquely. It again corroborates the impossibility of a real confrontation with the outside, nature and humans always somewhat obliquely approaching or distancing. And the deformation is in a way objectivized in the materialization of the sharply kinking walls. Needless to say that these resulted in a very complex building technique, which took some years to stabilize in standard details. Again we see the conscious introduction of a difficulty in which the architect (and the builder) may excel, a form of Mannerist *sprezzatura*.

A last example of such a virtuosity may be given with the Palmer-House.⁶⁰⁶ [FIG.5.24] This house is again based on a triangular grid resulting in rhombic, hexagonal and triangular rooms. When I visited the house in 1995, Ms. Palmer showed me around and drew my attention to the rhombus-form bedroom with a rhombus-form bed and rhombus-form drawers in the linen-closet. And when opening the drawers she told me that she had tackled the problem of storing the linen economically by folding the sheets in an equilateral triangle shape. A virtuoso architecture may inspire a creative marriage and a creative household and a corporeal knowledge of the eternal forms of geometry.

⁶⁰⁴ One may think here of Villa Pia designed by Pirro Ligorio (Rome, 1558) and of Palazzo Farnese in Caprarola by Giacomo Barozzi da Vignola (Caprarola, 1575)

⁶⁰⁵ Donald Hoffmann, *Frank Lloyd Wright's House on Kentuck Knob*, Pittsburgh (PA), University of Pittsburgh Press, 2000, p. 30.

⁶⁰⁶ Palmer House, Ann Arbor (MI), 1952.

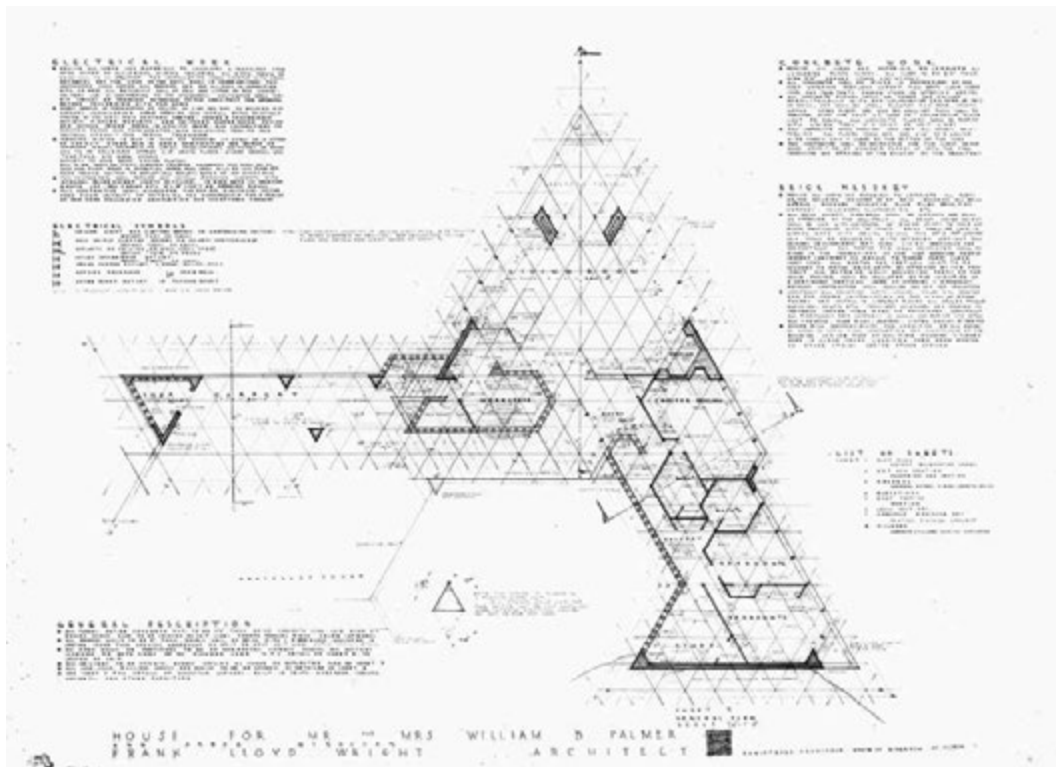


FIG. 5.24 Palmer House, Ann Arbor, Michigan, 1952. Plan. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

5.7.3 Figures of growth, latent curves

Wright uses geometry as a tool to analyse nature in his geographical expedition: geometry must be the supple tool able to account for the creative genius of the earth. It must understand the patterns, figures and configurations, in which this genius manifests itself from place to place. “Let us learn to see within, at least far enough within to grasp essential pattern in all created things.”⁶⁰⁷ Architects need geometry to rewrite nature as the “unconscious poetry of the spirit” (Schelling) in architectural words,⁶⁰⁸ connecting nature’s past to an architectural future.

⁶⁰⁷ FLW, *In the cause of architecture, composition as method in creation*. 1928, *CW1*, p. 260.

⁶⁰⁸ In his *System of Transcendental Idealism*, Schelling called nature or the objective world “the unconscious poetry of the spirit.” Schelling, *System of Transcendental Idealism*, (1800) translated by Michael Heath with an introduction of Michael Vater, Charlottesville: University Press of Virginia, 1997 [1978], p. 12.

Because nature is quite a virtuoso, quite a genius when it comes to geometry, man must intensify Euclidian geometry. An essentialist geometry of simple solids –Le Corbusier’s “*toutes est sphères et cylindres.*”– does not suffice.⁶⁰⁹

When Wright described his Ocotilla fleet moving through the desert, he said: “the one two triangle used in planning the camp is made by the mountain ranges themselves around about the site.”⁶¹⁰ And it is true, there was a wonderful resonance between the lines of the mountains and those of the camp. Just like Ferdinand Hodler, whose paintings of landscapes were praised for their geometrical abstraction, Wright had this eye to abstract the natural configurations into basic geometrical figures. He must have felt, however, that such elementary figures did not suffice to account for the suppleness and complexity of the lines of force and growth and the patterns of nature. Hence his effort to come to that ‘grammar’ able to flexibilize and complicate basic geometry. We already mentioned the telescoping figures suggesting *diminuendo* and *crescendo*. Often, when an extending movement to the horizon needs a vertical support, we will see a typical Mannerist operation of a stepwise ‘rounding off,’ introducing the vertical supporting element to the horizontal movement, and thus making the one to a figure of the other, reading them in a tension between contraction and expansion. In the section, the immense cantilevering balcony of the Sturges House [FIG. 5.25] gradually grows out of the brick footing. Figures step towards each other, grow into each other. Even when looking at a simple Usonian like the first Jacobs House, in the plan we see some stepwise movements mediating between the two wings. However big these steps may be, they are part of the idea of grading the change in direction. The one direction grows into the other. In the overhanging eaves of many of his houses we find a one-sided telescoping profile. [FIG. 5.26] The Mannerist gesture of rounding off in a stepwise movement is an invariable in Wright’s work. Tectonic gestures such as the repeated resault, constructional gestures such as curving pedestals, they are all part of the grammar of growth in Wright. We already met the quasi-hyperbole movement of the columns in the SC Johnson Administration Building, in segments growing from a vertical circular support to a horizontal circular roof-segment;⁶¹¹ or the terrace-garden in the first scheme of the Llewellyn Wright House, spreading fluidly from a pedestal to a terrace. [FIG.5.26]

⁶⁰⁹ “Sphere and cylinder are all there is.” The reference is to Le Corbusier’s famous statement in ‘*Vers une architecture.*’ Let me take the opportunity to note that Le Corbusier, towards the end of his life, complicated his spheres to spheroids and warped surfaces of all kind, as we may see Ronchamp and in the Philips-pavilion.

⁶¹⁰ . FLW, AB, p. 335.

⁶¹¹ In fact the columns resemble so called path curves or Bèzier curves.

It is true that Wright, certainly in the first part of his career, used diagonals and oblique lines (as in the Imperial Hotel) as well as 'broken, graded or stepping figures' to suggest this idea of growth. The spiral was the only continuous form he used. Indeed, as we saw, because it contracts *while* it expands, or as we heard Wright saying, because the spiral is the figure of organic progress.

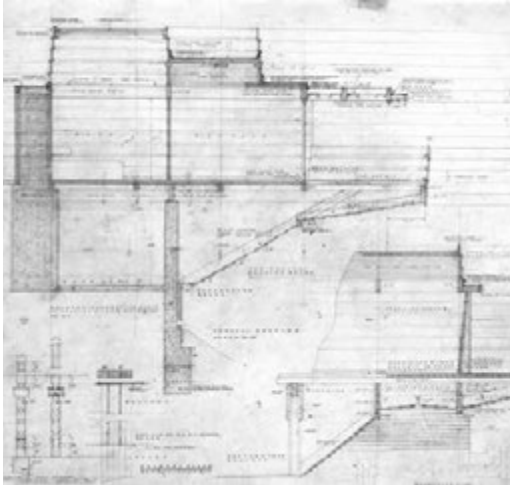


FIG. 5.25 Sturges House, Brentwood, (CA), 1939. Mediating 'outgrowth' at the base of the cantilevering balcony. [Drawing left: courtesy of FLLWFA (MOMA / AA&FALCU). Photo Right: Wright chat/Frank Lloyd Wright Building Conservancy]

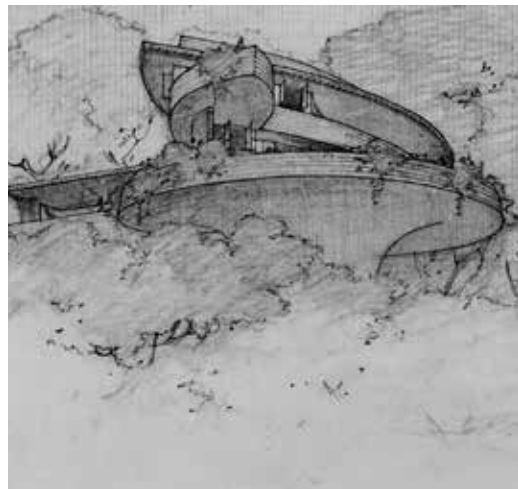
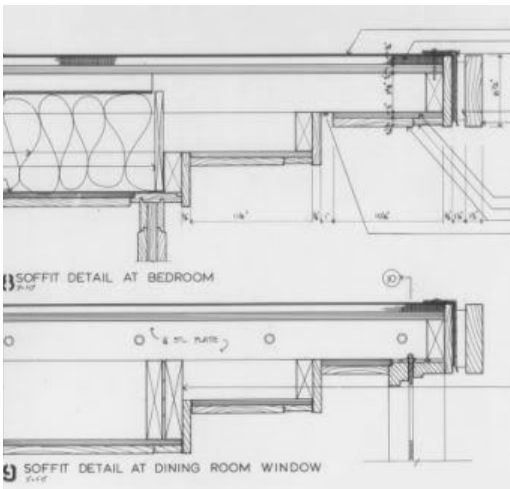


FIG. 5.26 Drawing left: telescoping figure of an overhanging eave, detail. Drawing right: the rounded off pedestal of the Robert Llewelyn Wright House. [Both drawings: courtesy of FLLWFA (MOMA / AA&FALCU)]

5.7.4 Typologies: great organizing figures, the limits of classical figures

It is significant that for his public buildings, Wright sought for great geometrical typologies in which this process of growth would be imagined as organic. For these public buildings Wright often resorted to spirals for a more fluid figure of growth, and to polyhedra, such as the heptahedron of the Arizona State Capitol Building and the tetrahedron of the Beth Sholom Synagogue, which result in more explicit crystalline figures with a mineral inspiration. We hear Schelling say: “Artists should at least emulate the spirit of nature, which acts within things, and which only speaks through form and figure as if they were symbols. Only insofar as they grasp this in living imitation have they created something true.”⁶¹²

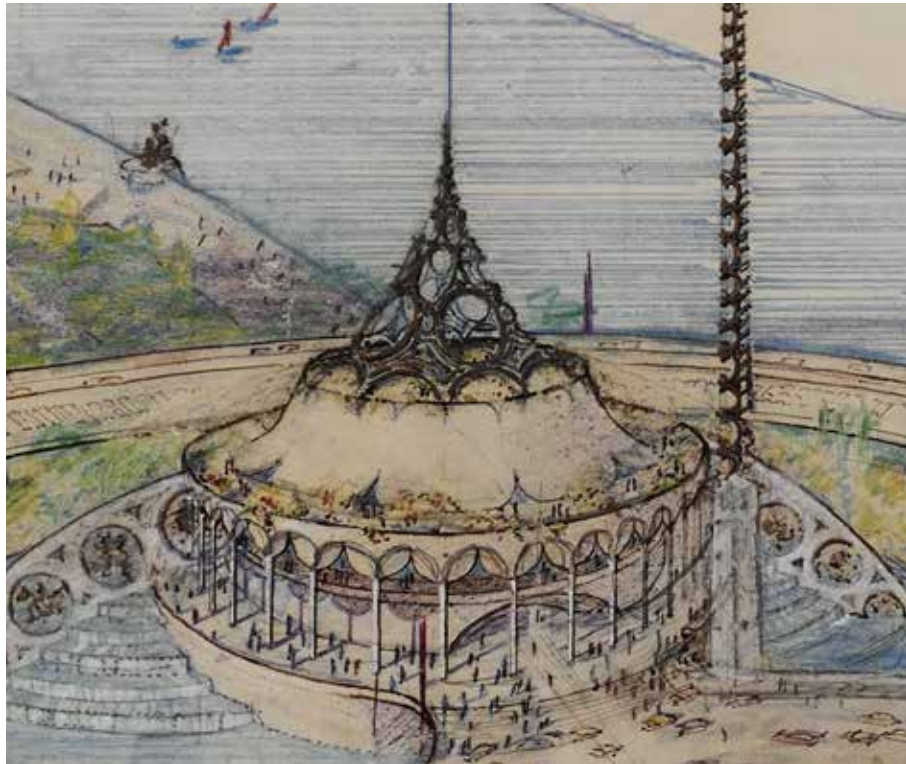


FIG. 5.27 Baghdad Opera House, Greater Baghdad plan, Iraq, 1957. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

⁶¹² Schelling, *On the relationship of the plastic Arts and Nature*, p. 140.

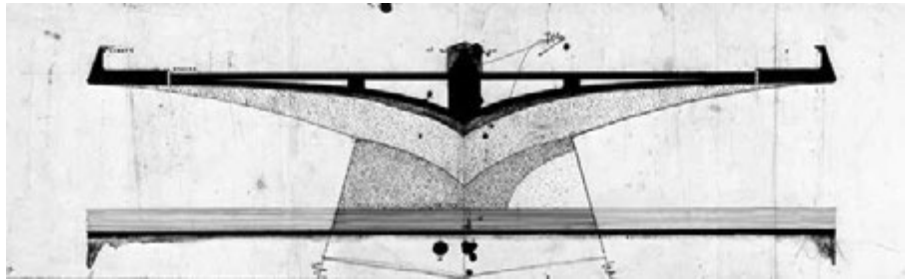


FIG. 5.28 The Differential curve: section Butterfly Bridge, San Francisco Bay, CA, 1956. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

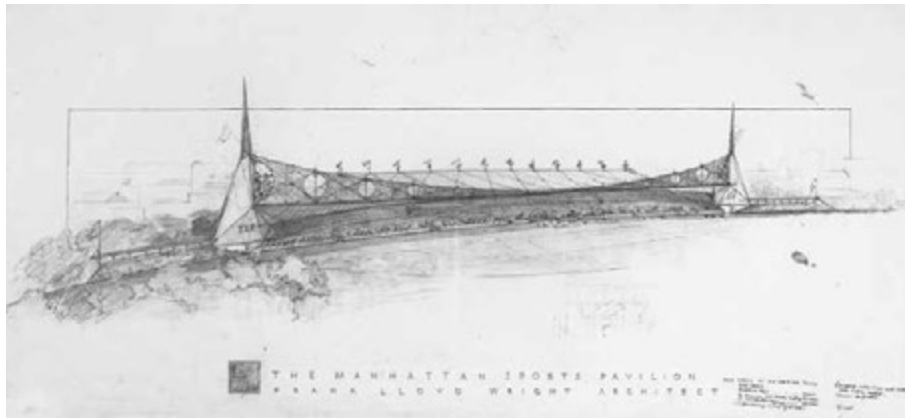


FIG. 5.29 Manhattan Sports Pavilion, Belmont (N.Y.), 1956. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

In certain cupolas, the circle as the reference for the rounding-off figure becomes complicated in the use of reticula with round windows, as in the cupola of the Baghdad Opera House, implying a projective geometry. [FIG. 5.27] In the transparent cupolas of the Lenkfurt Electric Plant, we see double curved surfaces. And finally: in the long skew roof-construction of the Manhattan Sports Pavilion, and in the curves in the sections of the Butterfly bridge, it is as if Wright's flexibilized and intensified basic geometry with chamfers and round arches reaches its limitations and tends or indeed bursts into the differential curve. [FIG. 5.28-5.29] Looking at all these figures we must immediately think of d'Arcy Thompson with his *reticulum plasmaticum*, his spirals and his radiolarian skeletons, mathematizing nature in his *On growth and form*.⁶¹³ We see form as the product of formation, life organizing its natural buildings in spiritual geometries.

⁶¹³ D'Arcy Wentworth Thompson, *On Growth and Form*, Cambridge: Cambridge University press, 1917.

5.7.5 Form and formation

We distinguished different geometric styles in Wright's work and provisionally we assigned them a place in a certain development, from simple to complicated. Yet, as always in Wright's oeuvre, styles may exist together, they point to differentiation, to the acquisition of new manners, which do not necessarily exclude the old ones. The spiral as the "symbol of organic progress"—one of the great 'types'—remained with him his entire life, and the square as a "symbol for integrity" no less. Moreover, we can see that in many designs geometric styles are combined, for example when the Mannerist operation of rounding off pertains to the elevation while at the same time the Baroque recombination of basic figures reigns in the plan. Is it possible to further precise the respective roles of the different geometric styles in Wright's architecture?

In 1912 Wright wrote that geometry was the "grammar of form."⁶¹⁴ As we heard, he considered basic geometric forms as symbols, but I must add that at the very moment he speaks of symbols he already says that such geometric forms "*suggest* certain human ideas, moods and sentiments"⁶¹⁵ (italics mine, FS). It is clear that the symbol for Wright doesn't work as an abstract denotation, it pertains to what is felt in the figure itself. The spire may symbolize "aspiration," it is not a code. The striving is felt in the contracting reaching for.... When the spiral suggests "organic progress," we can literally follow the widening of growth and the integrating towards a one, indeed the perfect figure of organic growth. We do not need to know what such figures signify, as structuring figures we immediately feel what they suggest as gestures.

When Wright later asserted that he was "not interested in form but in formation," he did not eliminate the basic figures or the monumental types. Yet, when he began experimenting with the Baroque geometries of overlapping figures and the Mannerist geometries of growth, such a move may point towards a conviction that "the spirit of Gothic" as the "spirit of beauty" could not be reached with the simplicity of the classical, stubborn but indeed characterful figures of basic geometry only, regardless their suggestive power. Stronger, the problem could even be a 'too much of character' isolating such figures of their surroundings. Wright must have felt that he needed a larger, more flexible or even more lively grammar, able to meet 'the circumstances.' The great types and the basic forms only come to shine when they rest in the surroundings. Adaptation, dealing with the circumstances, is a condition to show character, a character that distinguishes them as a singular example of creative nature. Thus he needs both the symbol *and* the broken geometry adapting to the site.

⁶¹⁴ FLW, *CW1*, p. 117.

⁶¹⁵ *Ibid.*

Following Schelling, in all beauty there is not merely character, based on individuality and expressing itself in form, but there must also be grace, *charis*, *charisma*. He associates it with goodness. Beauty means a sharing, an opening up towards the others.⁶¹⁶ Characteristic beauty, the beauty of simple figures, is beauty of the roots or of structure, but the plant must bear fruit, it must give itself away.⁶¹⁷ It must come to shine in a world, it must become sensuous beauty too.

In Wright's architecture such a sensuous beauty translates to refinement in ornament such as the rounded edges of the cantilevering eaves in Fallingwater, capturing a sensuous range of light; it translates to structure fractalizing to jagged contours, opening up and sewing buildings (in)to their surroundings, as I called it talking of the perforated lace-like or serrated eaves [§ 2.3.8]; it translates into textures breaking large surfaces able to capture the changing light and making a building "a child of the sun too"; finally it translates to patterns weaving the elevation into the landscape.

But before all this, it translates to the structure of a plan opening up to the surroundings in receiving and giving gestures, in concavity or folds and in convexity and prow. As we heard Wright saying [§ 2.7.3], the polygonal geometries of the plan were meant to better accommodate to the relief and to surrounding nature. The broken perimeter of the plan [FIG.5.30-5.31] in fact describes the choreography of a dance with the surroundings, a dance or a meeting with nature. The choreography describes movements of association and dissociation, of taking distance and of approaching. Thus there is a need for a flexible, elastic geometry in reacting to the surroundings, leaving room where needed and taking it where possible. In the plan both the Baroque and the Mannerist geometries point to a same purpose: to open up the hard contours in order to act in and react on the surroundings. This is the first form of 'goodness' or 'grace:' the dance with the surroundings. In the horizontal sections we saw this "*for nature*" in the Hanna House: the repeated hexagonal bay window opens to multiple directions in order to find 'the many,' the many possible associations or dissociations—the far and the near—while the slow switching lines at the backside moving around a hilltop, give the hill the chance to grow into the light. We already saw this giving way to nature in the overlapping circles of the Llewelyn Wright House, dreaming of mixed bodies, associations with surrounding nature, with trees and other natural beings, all having their own circles or worlds, the human circles overlapping with such worlds.

⁶¹⁶ "This beauty, which emerges out of the consummate pervasion of ethical goodness and sensuous grace, grips and enraptures us wherever we find it with the power of a miracle." Schelling, *On the relationship of the plastic arts to nature*. p. 147.

⁶¹⁷ *Ibid.*, p. 144.

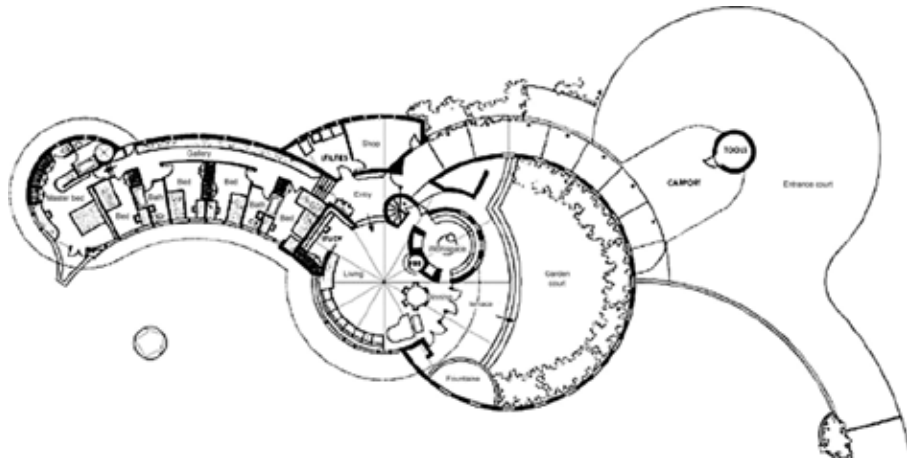


FIG. 5.30 “The dance with the environment.” Norman Lykes House, Phoenix (AZ), 1957. [Drawing: William Allin Storrer]

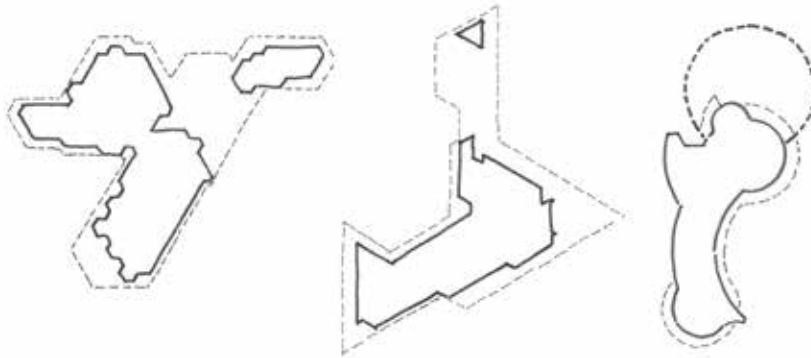


FIG. 5.31 “Broken perimeters of the plan.” The too much of form leads to relatively formless contours able to meet the *environ* of the environment. [Drawings: Frans Sturkenboom]

But, as said, the choreography of the plan is only the first step towards refinement. The meeting with nature must grow out in ornament, the refining of the Baroque waves to a foam by repeating convexity and concavity on a smaller scale just like in the woodblock prints of Hokusai [FIG. 5.32]; or by fractalizing the Mannerist deformed grids to smaller units or lines, as we see happening in many a preliminary sketch [FIG. 5.33] [FIG. 5.34]; or in texture as we see in the textile blocks Wright designed for the San Marcos in the Desert Hotel,⁶¹⁸ repeating the main triangular geometry on the level of the fluting of the blocks. [FIG.5.35-5.36]

⁶¹⁸ San Marcos in the Desert hotel, Chandler, Phoenix (AZ), 1929.

Indeed “structure revealed and enhanced.” Textures are meant to invite the light, to invite the hand, the eye becoming hand in haptic perception. Sensuous beauty reminding the hand and the eye of a short-circuit in perception.



FIG. 5.32 Katsushika Hokusai, The Great Wave, 1831. The structuring lines of the waves break to foam.

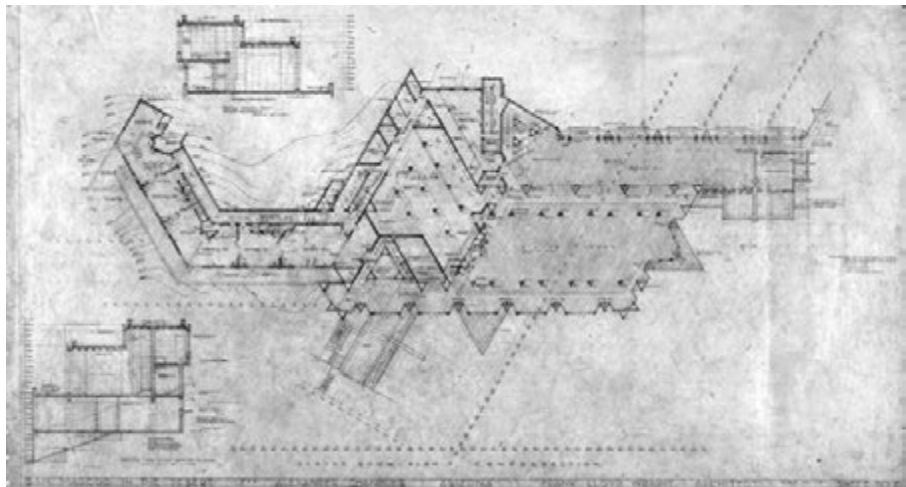


FIG. 5.33 San Marcos in the Desert, Salt River Mountains (AZ), 1928, preliminary sketch of the plan. Observe how the triangular structure refines towards the edges. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

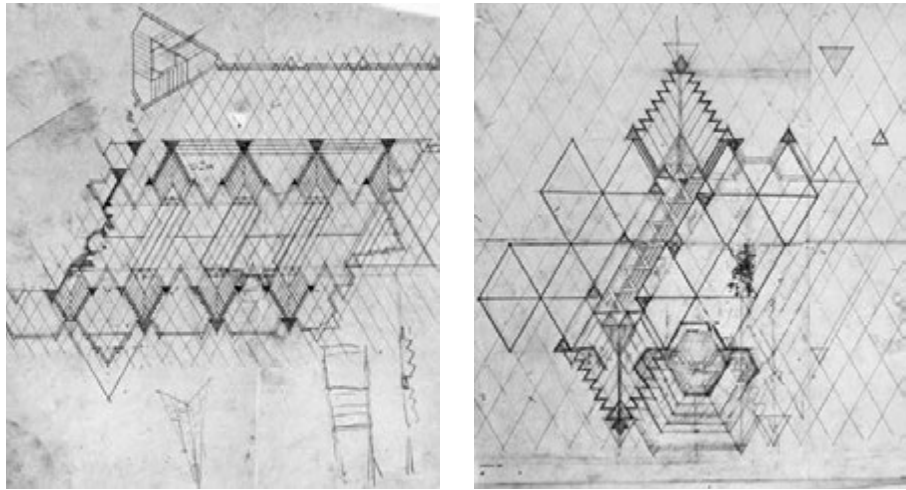


FIG. 5.34 San Marcos in the Desert, Salt River Mountains (AZ), 1928, preliminary sketches, plan. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

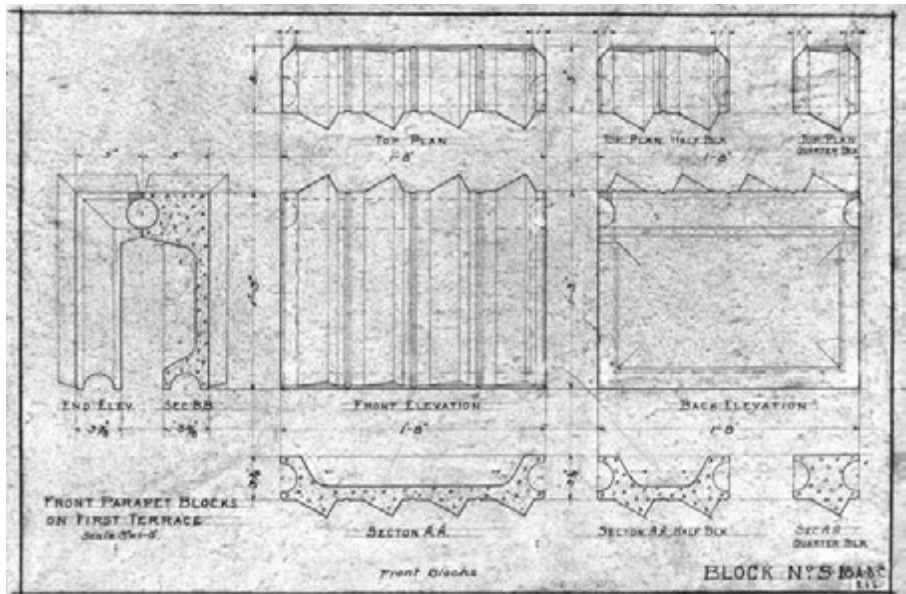


FIG. 5.35 San Marcos in the Desert, drawing of one of the textile blocks. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

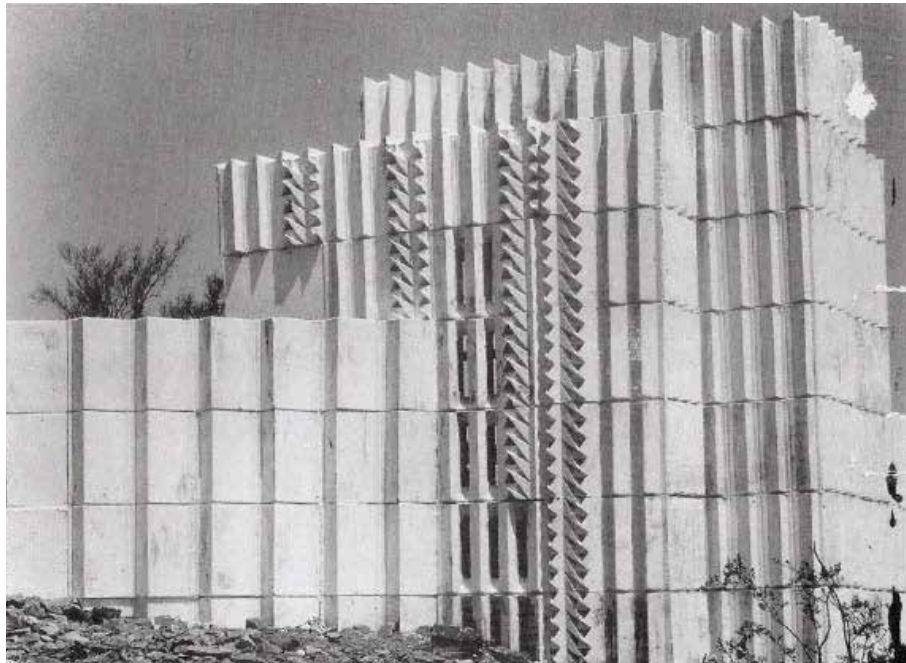


FIG. 5.36 Fluting of the textile blocks meant for the San Marcos in the Desert project. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

The same happens on the level of the roof or the eave, when the larger gestures of the plan repeat themselves on a smaller scale [§ 2.3.7]. In the Hagan Estate, the hexagonal structure repeats itself in the hexagonal openings in the eave further refining to a cornice. At the same time the angular structure repeats itself breaking the light to multiple nuances according to the horizontal and vertical orientation of the facets of the openings [FIG. 5.37]. One of the most beautiful examples is certainly that of the Greek Orthodox Church. The encompassing circle of the plan, a character “suggesting infinity” according to Wright, is intruded by four major circles overlapping with the main circle to form the convex hollows of the façade: a first invitation. It then breaks in multiple steps when climbing up: first in the semi-circular windows, then to the semi-circular lace pattern of the edge refining to an even more delicate fringe of partial circles and finally to the chain of little circular oculi immediately beneath the roof [FIG.5.38]. The eye may linger indefinitely in this lace-like zone where the building, resting solidly on its substructure, becomes ‘of the sky.’



FIG. 5.37 The Hagan Estate, Kentuck Knob, Chalk Hill (PA), 1956. [Photo: Klaske Havik]



FIG. 5.38 Greek Orthodox Church, Wauwatosa, WI, 1956. [Photo: Kevin S. Hansen, CC BY-SA 3.0 unported]



FIG. 5.39 Storer House, Los Angeles, 1923. Canopy on one of the terraces. [Photo: unknown]

In ornament, architecture gives itself away, it must shine to associate, it must seduce or invite the light to nestle in the lace-like edges or the serrated eaves; it must invite the wind in the canopies of the Storer House [FIG. 5.39]; it must associate with the fluted columnar saguaros in the fluted relief of the San Marcos walls. It must embrace the landscape, becoming “of the hill,” as we heard Wright say [§ 3.2.4]. To become part of a larger whole, which—eventually—will be the cosmos. Cosmos, for the Greeks, was the whole, the beautiful, ordered and measured whole.⁶¹⁹ Cosmocosmetics is not an add-on, it is the overflowing moment of the whole in which the original fire of creative nature comes shining through.⁶²⁰

In the horizontal sections we find a certain elasticity: structural unity persists in a process of accommodation and negotiation with the surroundings. In the vertical section the figures of growth dominate. They may do so in the great natural, spatial types of spirals and spires; they may do so in the form of a stepwise or rounded off growing into each other of elements—floors growing into walls growing into roofs—according to Wright’s ideal of plasticity; they may do so in the growing out into the sensitive tip of the eaves. And the final growing out is found in the ‘rounding off’ of the contour. In the elevation, character as the beauty of structure or of the roots, after having gone through the irregular contour of the plan—the dance with the surroundings—must finally close its contour to acquire a definite, but mitigated, measured form. Wright’s buildings often end up in geometrically quite simple roof-structures: the triangles of hipped roofs, the pyramids of tent-like structures, the

⁶¹⁹ Martin Heidegger, *Aufenthalte*, p 17.

⁶²⁰ It is the point of transfiguration Schelling talks about when saying: “In most corporeal things there lies a point of transfiguration that is often almost sensibly perceptible. Things do not seem fully completed by what constitutes their existence in the strictest sense; something else in and around them first grants them the full sparkle and shine of life. There is always an overflow, as it were, playing and streaming around them, an essence that, though indeed intangible, is not for that matter unremarkable. But this essence that shines through everything – is this not just that inner spiritual matter which still lies concealed in all things of this world, only awaiting its liberation?” Schelling, *Ages of the world*, p. 151.

round cupola's of glass. Structure, the striving for a one, organizing the building, eventually exteriorizes itself in a silhouette. And indeed it is in the silhouettes that Wright's buildings individualize, become characters. It is in the silhouettes that 'the beauty of the roots' as the beauty of the structure re-appears. In the plan the 'too much of form' destroys hard basic form. The perimeter is quite formless in order to open up to the surroundings. Eventually, in the elevation, form closes to let a character shine. It is here that architecture becomes an armature. After having picked up the lines of the landscape, the building continues and contracts them in a posture and accomplishes its stance. It comes to stand in the light, in the wind, in a cosmos. And this posture in itself must be seen as an individualizing gesture of the earth, a being born-being carried from the dark to the light, an appearing such as we speak of a natural phenomenon. It is in the vertical movement that the figures of growth return to a one. This posture must crown the place as its singular manifestation, as a monument of the landscape. The earth comes to shine in an architectural gesture. The ringed 'necklaces' of the glass cupolas, the transparent diamonds of the polyhedra, the copper folds of simple roofs, they are all part of a shining armature-ornament, they are all part of the cosmetics of architecture. We do not have to look at the night perspectives to see them shine. Even in the weathered shingled triangles of simply hipped roofs, Wright's "fundamental verities of structure"⁶²¹ come to shine to celebrate the geometrical genius of creative earth.

The Baroque and Mannerist geometries of the plan may combine in many ways with geometries of growth in the elevation. The spiral of the Guggenheim museum, a symbol or gesture of organic progress, must accommodate to the surroundings, negatively reflecting them in the convex forms, while positively adapting to the grid with the balcony-rectangle of the third floor. Finally it invites the passer-by in a fluid falling back between two circular movements. We see both adaptation to the site and the manifestation in an irresistible symbol.

In the plan Wright seeks elasticity, a going through all possible forms, an ethos of meeting. In the section Wright seeks *plasticity*, elements definitely changing in the growing out of the roots to the fruit.⁶²² Another ethos: growing to shine as a character. At the end character shines as a singular manifestation of Earth building—a gesture of Earth as a gesture of *natura naturans*.

⁶²¹ Wright speaks here of the Japanese artist and his knowledge of geometry enabling him to see the structure of all things. "To him they are fundamental verities of structure, pre-existing and surviving particular embodiments in the world." FLW, *CW1*, p. 118.

⁶²² On the different aspects of elasticity and plasticity see also Sjoerd van Tuinen, *Elasticity and Plasticity, Immunology and the Crisis of Repetition*, in: *Critical and Clinical Cartographies*, A.Radman, H. Sohn (editors), Edinburgh University Press, 2017, pp. 243-268, 2017, pp.145-163.

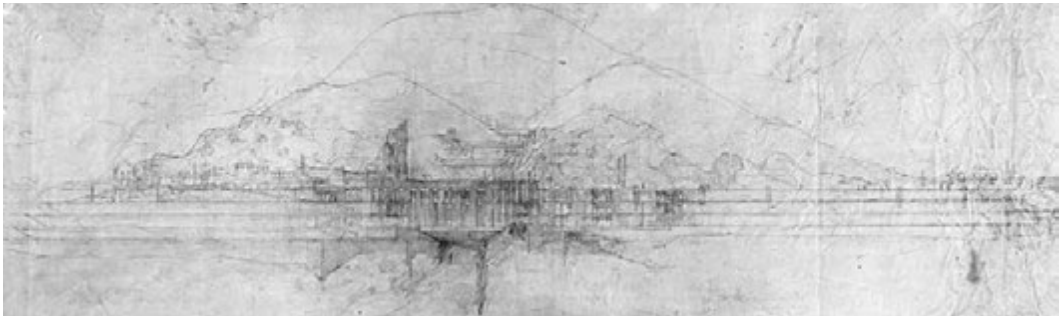


FIG. 5.40 South elevation of the San Marcos Hotel, Salt River Mountains, Phoenix (AZ), 1928. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

It is in this way that form as the manifestation of being, an appearing of the idea, is reconciled with formation as the necessarily formless moment of nature.⁶²³ And if Wright says “growth is the only method worth an architect’s time,”⁶²⁴ and when he compares that method both with how trees grow and how engines work—purposeful according to an original motif or design—we may experience that method in the interlocking of the different geometries, orchestrating the growing out of the ground into the light. And it is here again that we may remember Heidegger’s play with the etymology of ‘being’ having the same proto Indo-Germanic root as building, notably *bhu* or *bheue* (being, growing, and building) also to be found in Greek *phuien* (growing) which one knows from physics as the science of nature. Form as being, formation as growing, they are the same. One grows to become who one is. This growing out of the ground into the light is the plastic moment of style. An existence as an ecstasy, the *axis mundi* of a life. Wright’s organic buildings have character indeed, they have form, but the formless trembles in its meandering, fractalizing and refining contours, the perimeter accommodating to the *environ* (the approximately) of the environment.⁶²⁵ The *environ* is the element of elasticity in which a building comes to rest in the environment, bears fruit without losing an original beauty of the roots.

In order to summarize Wright’s “method of growth” we will take a preliminary sketch [FIG.5.40] of the elevation of San Marcos in the Desert project, a commission Wright did in the early thirties for Raymond Chandler, who wanted to build a holiday resort near Phoenix in Arizona. We will combine that sketch with the drawings we already met [FIG.5.33-5.35].

⁶²³ When nature (*natura naturans*) builds it builds in a continuous process and for that reason it remains without form, or as Schelling puts it. “Or that the art of creative nature is formless because it itself is not subjugated by any form.” Schelling: *On the relationship of the plastic arts to nature*, transl. Wirt, p. 143.

⁶²⁴ FLW, *CW1*, p.259.

⁶²⁵ For the environment as the element of the (French) ‘*environ*’: § 3.2.8.

On the drawing we see a triangular mountain splitting up in two promontories. Between the two lower triangular hills a cascade of horizontals comes down. We surmise it is a stream, canalized by the architect. In the middle of the drawing the cascade broadens to capture the full width of the mountain. The stretching lines seem to indicate the widening base of its triangle. Scattered about the mountainside we find saguaros, recognizable as the verticals sprouting out of the ground, branching into multiple vertical columns. Finally, a little bit left of the middle, a strong vertical figure rises to fix the stretching lines by anchoring the width to the rising and falling lines of the promontory and the mountain. At the baseline, two diagonal but irregular landscape lines root the ensemble in two folds of the landscape, of which one is presumably the old bed of the canalized stream.

In combining the summary information of the drawing with the two sketches and the technical drawings of the blocks, we can see how geometric logic functions in Wright's architecture. Wright borrows his main motif from the triple triangle of the mountain and the promontories, the triangle translating to the structuring and characterizing figure of the plan, but also to the zigzagging contour of the perimeter and the ribbed texture of the blocks. The horizontals in the elevation gather all the elements of the landscape in a succession from left to right (or vice versa), the wings of the building thus become the receiving gesture of two arms. They function as the weft of the weaving. The fluted saguaros, translated to the fluted masses of the building and the fluted textures of the blocks, constantly weave with the cascading horizontals: first those of the terraces of the hotel rooms, then those of the horizontal joints of the blocks and the rails of the windows, intensifying the rhythms of the landscape. The saguaro becomes the shuttle shot through the weft of the horizontals.

In the plan the main characteristic figure of the triangle fractalizes to a broken perimeter, its ethos in the elevation manifesting itself as a "weaving with the landscape." The figure of growth is completed (is crowned) in the contour of the two diagonals of the rising mass in which the building acquires its definite character. That mass rises up like an "organ tower of copper and concrete blocks (which) rose like a giant saguaro (...) intended to give voice to the whole."⁶²⁶

⁶²⁶ FLW, *MNG 5*, 1924-1936, p. 56.

5.8 Tectonics

5.8.1 Tectonics as gesture: Wright's element

Wright described his buildings as growing out of the ground into the light. Like plants, they are gestures of a creative earth. The growing out while dressing up to give itself away, the *Es gibt* (it gives: there is) of the building, finds expression in the domain of tectonics. It is in tectonics that Wright's intuitions come to flourish.

With the interlocking of the different geometries and the refining from structure to ornament we have already fully entered the domain of tectonics which according to Boetticher, the inventor of the concept, should be understood as the differing of core-form or work-form (structure/construction) and art-form (architecture as an ornamental system).⁶²⁷

In §§ 4.3.1-4.3.3, I studied Semper's tectonics of *Stoffwechsel* and transfiguration in order to understand the travesty of Wright's designs. We just saw an example in a design transfiguring the triangular figures of a mountains to plan gestures and weaving a dress with horizontal water-levels and the fluted texture of saguaros.

For Wright in tectonics the character of a place, a built earth, must become the 'figure' of a human or a people. Character is the individualizing principle. For Wright the source of style is character as the source of beauty is truth.⁶²⁸ Character already appears in nature, "character appears to be nature's Art."⁶²⁹ Tectonics transfigures the characteristic gestures of the earth—the gestures of stone, of plants, of animals, of mountains—to human architectural gestures.

⁶²⁷ Karl Boetticher, *Tektonik der Hellenen*, Berlin: Verlag von Ernst und Korn, 1874. p.18-30

⁶²⁸ FLW, *CW1*, p.268

⁶²⁹ Ibid. We hear a strong echo from Schelling: "From its first works onwards, nature is thoroughly characteristic." Schelling, *On the relationship of the plastic arts to nature*, p. 142.

Boetticher taught that in the gesturality of the Doric column one might see the soul of the Doric people shine. It appears in the whole of the Doric order but also in every joint, e.g. in the interplay of shaft, abacus and echinus. With its minimal *entasis*⁶³⁰ it stands fiercely—in the echinus swinging out to receive the load of the architrave and the tympanum. The abacus mediates and shows a surplus of receiving surface while the column austerely but supply resists the load. The Doric temple appears as the armature of the Doric soul. It reflects the sturdy, proud and fierce soul of a people. The curves and other lines of the art-form (as distinguished from the core-form) *suggest* the Doric character.⁶³¹ (Boetticher speaks of analogy⁶³²) Speaking about architecture as the ornamental system, Boetticher uses the word *Kosmos* and translates it as *Zier* (ornament).⁶³³

As we saw, Wright defined the American soul as the genetic crossing of the settler and the wanderer and earlier [§ 5.6] we recognized its manifestation in “the arriving, drilling into the earth to grow out again and unfold into the light.” This movement is embodied in the tectonic gestures of Wright’s style. It is in the vertical and horizontal looping that the buildings prove their character, a characteristic beauty of the roots eventually flourishing in an ornamental beauty as the fruit. Looping via the earth—rooting—, and looping via the surroundings—flourishing—, a building acquires stance, stance as style. In this process style becomes “native to the place, native to the man, native to the time.” Place must become individual, a singular idea must shine and, as Schelling puts it when speaking of characteristic beauty, the idea must become “an archetype or primordial image.” Place as characteristic is eternalized in a building, a dress woven with rhythmical motifs and melodic landscapes.

“Native to the man.” The man, the wanderer must become native to the place in order to become a native American. One becomes a native American by dressing up in American nature, when both carrying and being carried by the American earth. [§§ 4.3.1-4.3.2] “The man,” the commissioner or the commissioner’s representative—the architect—becomes the priest of the place. The priest ceremonially celebrates the place. The place as what has supposedly taken place, must be taken on the shoulders to carry it into a future.

⁶³⁰ *Entasis* is the application of a convex curve to a surface for aesthetic purposes. <https://en.wikipedia.org/wiki/Entasis>

⁶³¹ Karl Boetticher. *Tektonik der Hellenen*, pp. 155-160. <https://www.northernarchitecture.us/gothic-architecture-2/karl-botticher.html>

⁶³² Karl Boetticher. *Tektonik der Hellenen*, pp. 31-50.

⁶³³ *Ibid.* p.25.



FIG. 5.41 Gladney House, Fort Worth, (TE), 1924. [Courtesy of FLLWFA (MOMA / AA&FALCU)]

5.8.2 The Gladney house

Let's have a look at the drawings for the first scheme of the Gladney House to elucidate this hieratic moment [FIG.5.41]. We see a hillside with a projecting octagonal concrete mass which 'telescopes' when going up like a Babylonian mound. On the lowest level greenery spills over the edge and hangs down. At the actual grade level the house itself takes over the movement upward until on the second floor the wooden parts inverse the contracting movement of the terrace into a widening one, using the overlapping boards technique. The mass ends up in a decorative band just beneath the soffit, which spreads to an ornamented eave. The cantilevering roof—its hip-rafters reconnecting to a chimney mass in the middle of the house—completes the movements of contraction and expansion. The whole gives us the image of a square chalice with an oversized cover.

The house rises where a hill falls away. A balcony projects towards the horizon again in a two-step protrusion. This gesture is repeated in the bay-window at the side of the house. The balcony has the character of a pulpit. It is covered by a trellis with a probably textile covering (like in the Storer House). The tent becomes the canopy. At the corners of this canopy two unidentified elements seem to indicate chords with tassels. They are there to be moved by the wind, just like the canopies

of the Storer House. They remind us of the fact that 'becoming of the sky' may be a question of becoming of the light, but certainly also of becoming 'of the wind' as the anima of a universe. A gust of wind: a breeze of the gods on the brow. A rug hangs down the parapet somewhat eccentrically. In the landscape at the left and right side a large and a small fountain of green form a contrapuntal gesture with the falling diagonal lines of the hill. The broadening movement of the eave finds an echo in an atmospheric 'horizontal' discolouring, stretching over the entire width of the drawing sheet, affirming the 'airborne' character of the upper part, which looks like an ark.

The projecting lines of the balcony, the terrace and the bay window must cross somewhere in the middle of the house in or around the chimney mass. All the movements seem to build up the tension for that final moment of appearing on the balcony as if it was the pulpit. The doors are open and we feel an ultimate suspense. We wait for the priest coming out to perform the rite. But it is unnecessary because the house itself performs the grand ceremony of an earth offering itself to the sky.

For some reason Wright decided to leave the drawing largely uncoloured. The lines say it all: the long verticals of the mound that give us the rising; the repetition of the *temenos* in the telescoping terrace and the overlapping boards; the refined decoration of the eave and the narrow frieze; and finally the jagged and capricious lines of the greenery spouting and dripping; it is all summarized in the grand **T** of the house itself. This is indeed the architecture of the seventh day in which everything points to the empty frame, the airborne frame in which the inhabitant repeats the act of the gods interlocking the earthly and the heavenly *templum* and as such celebrating the birth of a world, the *gesta* of the gods of creation.⁶³⁴

⁶³⁴ In *The Sacred and the Profane* (pp.69-70) Mircea Eliade writes that *Illud tempus* refers to "the time that was created and sanctified by the gods at the period of their *gesta*, of which the festival is precisely a reactualization. In other words, the participants in the festival meet in it *the first appearance of sacred time as it appeared ab origine, in illo tempore.*"

5.9 Conclusion

Wright's style is an absolute singular style. Singularity however doesn't exclude a multiplicity of historic threads woven together in a unique dress. Although Wright hated all the 'isms' it is the privilege of the latecomer to hear the resonances of his style with other historic styles. We picked up the threads of Mannerism and Romanticism because they embodied the question of a pre-human and a post-human time, positing architecture in the long time-spans of nature. Wright deepened the time of human style to the time of natural style: "all creatures worthy the name have got style in some degree." He freely 'used' and transformed them to his own style. A style breaking to manners (Prairie-manner, Usonian manner), such manners implying series already modulating or varying in multiple manners or maneries; all these series together describing a stylistic continuum.

Wright's work often appears as a grand hallucination of styles. Both history and nature are considered as a quarry.⁶³⁵ The lines of style eventually converge towards the idea of a wanderer-settler trying to get situated on a *terra incognita* by dressing up in local, native styles and by greeting the styles of other people at the border of the American territory. Wright's architecture is an architecture negotiating with the surroundings while searching for something proper in a local history to be found in the temporal depth of the earth. We find these characteristics in the traits of his geometry. In the horizontal section geometries must be supple, able to adapt to the landscape, finding their element in elastic Baroque gestures of invitation and collision and Mannerist gestures of taking distance and approaching. In the vertical section we find the reason of existence of the building in the search for the proper and the characteristic 'figure,' characterizing the site as having been built. This root-figure must eventually reappear in the beauty of the fruit after having gone through a process of growth, mediating with the surroundings.

⁶³⁵ As Lewis Mumford says for the free use of history by the Transcendentalist, especially Emerson. " 'Life only avails, not the having lived.' There is the kernel of the Emersonian doctrine of self-reliance: it is the answer which the American, in the day of his confidence and achievement, flung back into the face of Europe, where the "having lived" has always been so conspicuous and formidable. In a certain sense, this doctrine was a barbarism; but it was a creative barbarism, a barbarism that aimed to use the old buildings (the cultural institutions, FS) not as a shell, but as a quarry. Mumford, *The Golden day*, p. 104.

6 Conclusions

“To her fair works did Nature link / The human soul that through me ran.”

William Wordsworth, Lines written in early spring.

6.1 A Romantic, a contemporary and a future Wright

My conclusions will consist of two parts. In the first part I will try to answer the more general questions I posed at the beginning of this research, the questions which formed the original incentive of this study. Why time instead of space? In what way does Wright's “natural architecture” cohere with this temporal dimension and what is the role of the notion ‘earth’ in the explication? If Wright poses a continuum between nature and architecture what does that mean for the role of the human? What about the place of technique in such a natural architecture? In answering I will refer back to the more specific and concrete elaboration of these questions in the different chapters. Finally, I will come back on Wright's motto “proper to the place, the man and the time” by reviewing the different aspects of the *axis mundi* we met in this research: I will show how these aspects point to Romanticism as the real cradle of Wright's architecture.

In the second part of my conclusions I will come back on the quote of Walter Benjamin at the end of the first paragraph of my introduction. Benjamin stated that the past only becomes readable again when it contains a prophesy for one's own time. I will try to fill in this prophesy by asking how the themes broached by Wright continued to occupy the minds of modern architects in the late twentieth century and how they embody the questions of our own time. According to Benjamin, the true image of the past can only arrive as in a lighting flash in which the past connects and binds itself with the present into a constellation.⁶³⁶ I will sketch such a constellation as the open end of this study.

⁶³⁶ Walter Benjamin: Über den Begriff der Geschichte. In *Gesammelte Geschriften Bnd 1-2*, p. 694.

I will answer the following questions: what has happened to Broadacre, what about the “extended instead of the contained city?” What about the metropolis itself? Has it ruined itself, has nature begun to overgrow its surfaces?[§ 6.2.1] How do we get situated in times of climate change and what are our new *templa* of the sky and our new *templa* of the earth?[§ 6.2.2] Concerning the geology of architecture: if there exists a continuity between architecture and nature and if such a continuity unfolds to an ethical dimension giving nature more space—space in the sense of *lebensraum*, space of life and play-space—how does it seize on architecture today? [§ 6.2.3] If the specificity of place becomes volatile as a result of the entropic forces of modernity, how and where may the differentiated and differentiating graph of the earth come to incarnate itself in architecture, realizing a program of specificity and individualization?[§ 6.2.4] Finally, referring to geometry as the science of this differentiating line: can we already see the beginnings of new styles explicitly honouring the lines of nature? [§ 6.2.5]

6.2 Answering the questions of the study

6.2.1 Why time instead of space?

In our era, the era of a ruthless exploitation of the earth—and in current ecopanic times even its sky—philosophers have come to see space as the not so innocent medium of an ultimate rationalization and consequential human domination of the earth. As Timothy Morton says: space is a fully anthropocentric conception.⁶³⁷ This certainly goes for the Cartesian space of the modern movement, the coordinate system being the very tool on which modern society was crucified and dissected in functions and the transport of bodies and masses. The *Neufert*,⁶³⁸ with its mechanical definitions of a man-machine as the operator of that very space, may

⁶³⁷ Timothy Morton. *Dark ecology. For a logic of future coexistence*. New York, Columbia University Press, 2016, p. 11. Morton even states that the ecological era brings us “the revenge of place,” as the entity of a revolt against indifferent space. Place here is defined as not necessarily human: “dinner table, house, street, neighborhood, Earth, biosphere, ecosystem, city, bioregion, country, tectonic plate. *Moreover and perhaps more significantly: bird’s nest, beaver’s dam, spider web, whale migration pathway, wolf territory, bacterial microbiome.*”(Italics mine) Morton, *Ibid*, p.10.

⁶³⁸ The Neufert is better known as *Neufert Architect’s Data*. Ernst Neufert was a German architect trying to come to a far reaching standardization of building. The data he gathered in analysing existing practices became the quantitative, programmatic and typological prescriptions for many an architect up to our own time.

be seen as the perfect example of such a dissection. The architects of the modern movement dreamed of the city as a completely transparent process to be controlled by architects and urbanists. Science and planning entered architecture definitely.

In the second half of the twentieth century, architects and urbanists began to criticize the ruthless objectivation of urban and architectural space and chose for a more humanist approach. They proposed to build up the city in a series of human gatherings on progressing scales, “from chair to city.”⁶³⁹ They saw place, the place of the human, as the new centre, in a more organic and a more social conception of space. ‘Room,’ an inner horizon, would make infinite exterior space graspable.⁶⁴⁰ In many ways this humanist approach only affirmed the anthropocentric conception of space, constructing a universe of widening social circles instead of a technical X,Y,Z-space with the human on the crossing of the axes.

Even when in the 1970s Italian rationalists like Aldo Rossi and Giorgio Grassi came to see the city as a temporal document, endowing it with a collective memory to be reconstructed in every new architectural design, they remained within the confines of humanism, restricting such a memory to the city as a social construct. Nevertheless this step was important, time as the historical time of the layered and complex construction of the city was deemed worthwhile accounting for in architectural design. In fact, the metaphor of the city as a palimpsest, often used in that period,⁶⁴¹ opens up the possibility of thinking human space in a more layered way, visualizing the presence of deeper temporal layers, which were often ignored in earlier, more functionalist conceptions of the city.

Long before Italian rationalism, Wright had already discovered the vertical axis as the axis of time, making the human and his constructs part of a larger natural history, the history of earth as a building. [§ 4.1.2] In our time, we can no longer dodge the necessity of this ‘lengthening’ of the vertical axis of time, time has already done so in the notion of the Anthropocene, reckoning the human as a geological force to be thought of on an inhuman scale of time. The shift from space to time opens up the possibility to see architecture as a natural discipline, an art celebrating creative earth. It opens the way for an architecture locally engaging with nature, an architecture in which the human is one of the guests.

⁶³⁹ *Van stoel tot stad* (from chair to city) is the title of a manuscript of Jaap Bakema, one of the leading architects of post-war team 10 architects. It was a passionate plea to reconcile the scale of post war city planning with “the human measure.” <http://schatkamer.nai.nl/nl/projecten/manuscript-van-stoel-tot-stad>

⁶⁴⁰ Cf. Geert Hoving. *De ervaring van de woestijn. Over het wonen bij Aldo van Eyck*. Oase 26/27. 1989

⁶⁴¹ Harvey, David, *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*, Oxford: Blackwell, 1990. Harvey defined postmodern urbanism as ‘a conception of the urban fabric as necessarily fragmented, a “palimpsest” of past forms superimposed upon each other.’

6.2.2 A natural architecture: Earth building

The shift of an architecture of space to an architecture of time was the central theme in this research. In chapter 2 I first dynamized the notions of room and space by reconstructing them as the forces of a gathering (around the hearth) and extending (towards the horizon), to then 'temporalize' them by showing how they implied the contraction on a past and the expansion into an open future. In chapter 3 I then looped back this temporal dimension to space to construct the notion of space as a bas-relief of the earth. A shallow space in which humans live close to the earth and in which the sky is always nearby. According to Wright, humans build their homes from the very depth of the earth, piling up its materials and learning its creative power of structuring. Talking of a bas-relief, the surface of the earth appears as a deep surface implying time, the time of earth as a building (verb and substantive) and of *natura naturans* revealing itself in *natura naturata*. In § 3.3.7 I demonstrated that this bas-relief of the earth can be seen in all the surfaces and through all the scales of Wright's architecture. Firstly, in the way how architecture folds the geographical surface into a spatial constellation, nestling in the landscape. Secondly in the element of the ressault, determining space as an abode in the relief of the wall. Thirdly, in the textures of the different types of masonry and desert concrete, in the grain of wood, etc.. Highlighting the processes of formation of materials, these surfaces are revealed as the products of a deep time.

I spoke of geology not only as the natural history of a stratified earth revealed in the landscape and condensing in architectural planes, but also of a transcendental geology (ch.3 & 4) as the process in which the human mind is constructed by nature and, though making a leap, remains perforated by its multiple dimensions. We met such perforations, or percolations as Serres calls them: the stream of time freely coming back on itself,⁶⁴² in the way Wright designed his buildings. In the first place in the atmospheric aspects, populating architecture with the voices of the —lithic, vegetative, animalesque, and meteorological—*genii loci*. In the second place, more generically, in valuing the intelligence of *natura naturans* in constructing *natura naturata* and making it an example for human construction. Finally I showed how these atmospheric and constructional aspects fused in a tectonic lesson of nature structuring itself in its products and refining such a structure to ornament when appearing in the light. [§ 5.8.1]

⁶⁴² Michel Serres, *Geometry, The Third Book of Foundations*, translated by Randolph Burks, New York: Bloomsbury, E-book, chapter I, paragraphs: *percolator, time*.

6.2.3 Continuity and separation: the role of art

Wright dreamed of an architecture in continuity with nature as we may hear in his often repeated mantra “an organic building should grow out of the earth into the light, holding that earth as an essential part of itself.” This continuity, however, also implied a moment of severing, a certain leap, and for that reason I introduced the notion of a hyphen, of architecture as a hyphen between the earth and human’s buildings, a notion providing both continuity and separation[§ 3.3.7]. When Wright states that “crystals are proof of nature’s architectural principles,” he posits architecture in nature, but that does not exclude that architecture in its turn becomes a *free* reflection of nature in human’s buildings; it means, in other words, that architecture also changes when it becomes a human product. For Schelling in art the human receives the gift of a spiritual creative power. This power may be at work in and as nature when it creates any being, but in the human the circle closes when nature, realizing itself, lays all its spiritual creative power in the hands of one creature in one stroke.⁶⁴³ And he tells us that the circle may close another time when the spirit of nature fulfils itself when art becomes grace as a chain between moral goodness and sensory appearance:

“Although the spirit of nature appears everywhere independently of the (human) soul and even resists it, (in art) it seems to fuse with the soul by a free settlement and by the pure inner fire of divine love; the spectator will be overtaken with a sudden clarity by the remembrance of the original unity of the being (Wesen) of nature with the being (Wesen) of the soul: the certainty that all oppositions are merely semblance, and that love is the inner bond between all beings and that goodness is the ground and contents of the entire creation.”⁶⁴⁴

When Wright speaks of beauty as the goals of all art, he speaks of the same bond, but uses the word sympathy and not love:

“When we say something is beautiful, we mean that the quality in us which is our very life recognizes itself there or at least what is its very own: so their vibrates in us a sympathetic chord struck mystically by the flower. Now as it is with the flower it is with any work of art and to a greater degree. Because a work of fine art is a blossom of the soul, and so more humanly intimate.”⁶⁴⁵

⁶⁴³ F.W.J. Schelling, *Over de verhouding van de beeldende kunsten tot de natuur*, p. 140

⁶⁴⁴ F.W.J. Schelling, *Over de verhouding van de beeldende kunsten tot de natuur*, p. 134 translation from the Dutch version, is mine, FS.

⁶⁴⁵ FLW, *CW1*, p.117.

This citation shows us that for Wright the inner bond between the work of art and nature is decisive, but it remains a question of ‘degrees’ when it comes to a distinction between the beauty of nature and the beauty of art. And it is the same for (occult) grace, which Wright calls “a reflex” or “the natural easy attitude,”⁶⁴⁶ which is exactly what humans should re-appropriate by orienting themselves on nature. This reorientation is done consciously, but it is not consciousness that leads the artist when designing. It is the conscious decision to let nature again strike a chord in the soul and to fuse the soul with the creative power of nature in which we must recognize the leap. In other words: it is the conscious, free decision to become part of nature as the “unconscious poetry of the spirit” (Schelling) in which the jump is made. And of course that jump or conscious decision reflects itself in architecture, which cannot suffice imitating nature as it is in its products (*natura naturata*) but must become creative itself (*natura naturans*) by discovering new potencies in materials and new techniques. And that is where architecture must associate with science and mathematics in order to open up to a future, larger, and more beautiful whole, a more organic whole.

6.2.4 Natural techniques and human techniques

When it comes to materials, a natural architecture cannot mean an architecture only using so called natural materials or techniques. When Wright formulated his ideas of building “in the nature of materials,” a sense of the proper use of the properties of materials is certainly there.[§ 4.4.4] In the eponymous essays, however, he always shows how human tools follow human ambitions and feelings and how they may open up to new natural possibilities. Wright, who almost unconditionally believed in modern industrial production, stayed experimenting throughout his life with materials, discovering new possibilities and impossibilities by testing abilities and proving that any material may still surprise us when it comes to what it is able to. Wright’s believe in the monolithic—the “plastic”—building in a way summarizes this belief in the different roles a material may assume in building, and shows us his conviction that it is exactly modern technique that must facilitate such a change of role. We saw that synthetic materials are absolutely part of this range.[§ 4.4.4] Wright does not even distinguish them from natural materials. He sees modern technique as the laboratory of nature. I characterized this conviction as Mannerist [§ 5.4.3] because in the Mannerist grotto we find ourselves in the belly of the earth and we see nature experimenting, ‘melting’ stone to cast it in ever new forms in

⁶⁴⁶ FLW, CW3, p.302.

a never ending metamorphosis. I identified a similar conception in the relation between the rock and the sandstone walls, floors, lintels, cantilevering shelves, and stairs in Fallingwater. [§ 3.3.6] Mannerism works in the cosmic kitchen of nature eventually hoping to refine its products so they may better be able to show spirit, to become 'of the light.' A spiritual light. In this sense I called Wright an alchemist, a characterization which becomes all the more convincing when we follow his trajectory when it comes to material techniques capturing the light.[§ 4.4.4] From the traditional leaded coloured glass to the corrugated fiberglass. Celebrating the translucent: materials giving matter as light.

6.2.5 Native to the place, the man and the time

I will finish the first part of my conclusions now by returning to the question of place. In § 4.4.4 and § 4.4.5 I indicated that Wright's concept of place was a multifaceted one and could pertain to different entities such as a site gathering the different geographical specificities, to the earth as a building, to America as a nation in search of an own style and to the cosmos as the kitchen of patterns, structures and materials. By once again passing the review of these different layers, I will take the opportunity to clarify my use of the notion of the *axis mundi*.

The notion of the *axis mundi* is originally an anthropological one. It was introduced by Mircea Eliade in the 1950s⁶⁴⁷ and referred to "any mythological concept representing the connection between Heaven and Earth" or the "higher and lower realms."⁶⁴⁸ The notion of the *axis mundi* coheres with a stable cosmological order. I explained how such an order was implied in the Roman inauguration-rituals founding a new town. The *templum in terra* marking the *umbilicus mundi* was connected to the *templum in caelo*, in which the signs of the gods had to be read before a first *orbis terrarum* could be defined in the *pomoerium*, the city wall. The notion of the *axis mundi* reappears in the post-war humanist approach in the couple of place-space, organizing space around a spatial or materialized vertical axis indicating place, the place of an exclusively human gathering.

If, in this study I kept on using the notion of the *axis mundi*, it was exactly to show that in Wright the axis is a broken, a displaced, a moving or a multiplied one. It no longer corresponds to a universe in rest and to a single centre ordering a world.

⁶⁴⁷ Mircea Eliade, (translation Philip Mairet), *Symbolism of the centre*, in *Images and Symbols*, Princeton 1991, p.40.

⁶⁴⁸ Cf. https://en.wikipedia.org/wiki/Axis_mundi#cite_note-3

If we think of Wright's definition of the American soul as uniting the soul of the settler and that of the wandering tribe, the *axis mundi* should account for a tension between a rooting in the ground and the horizon as the element of promise. It will always be a crossing between the chimney and the pole of the tent. Settlers 'come from' and 'go to,' they never lose their unrest to wander away again. Now let us look how Wright's story on the settler and the wanderer united in the American soul, reflects itself in the different layers of his notion of place and how the *axis mundi* changes character in these different layers.

In chapter 1 I explained that everything begins with the acre. Wright assigned every citizen an own acre as the very base of an appropriation of the self. [§ 1.4.3] The acre is the place where one takes place, where one erects oneself. One gathers oneself in working the ground, in going through and growing out of the ground into the light. In Wright's view the acre should be the mental birthplace of any American. In turning the ground and mixing earth and sky one becomes a character. The acre is the arena in which to become creative oneself, eventually in building an own, individual house. The house is the instrument to get situated, to become native to the ground, to individualize and to ground oneself, to erect oneself in one's own style. The house is the *axis mundi* of the acre.

Inside the house the *axis mundi* is embodied in the hearth and its chimney. It is the token of a celebration of family time as the centre of the human gathering. I spoke of the sacred character of Wright's interiors with the hearth as the altar, revealing the importance of family life in early twentieth century America, reminding us of the Romans with their hearth as the domain of the Lares and the Penates as the deified ancestors. But in contrast to the Romans, where every member of the family remained a serf to the *pater familias* as the priest of the ancestral cult, Wright's hearth as the centre already implies the existence of a perforated periphery, in which every member of the family may search an own horizon. The multiplication of the terrace door [§ 2.3.7] and a tendency to multiply the balcony [§ 2.3.8] witnessed of such a dispersing counterforce to the gathering. I spoke of an inauguration of the many when moving away from the hearth. When Wright decided to make the hearth just a corner or fold in the wall, the *axis mundi* multiplied indefinitely to every corner of the resault of the interior, while every style in the window became an *axis mundi* for a future world. One leaves family time to become an individual, the lights of an own future shining at the horizon. Having entered the terrace, one stands alone under an immeasurable sky, pierced by a ray of sunlight. The *axis mundi* has been displaced, one has to take the omens again and go one's own way.

For Wright one does not only become an individual, constructing an own *axis mundi*, one has to become an American too. The I now becomes the I of a nation.⁶⁴⁹ Wright loved Whitman's poem *The leaves of grass*. In that poem the subject of history (the 'I'), having reached the New World, reflects itself in a myriad of scenes in which Americans try to get situated on an American Earth by associating with each other and with American nature. Having wandered away from their home-countries, for the new-born Americans every meeting implies a new eccentric centre, a new gathering, a new *axis mundi*. As individuals searching their own style, Americans have to find their own American style, shaping their own American enterprises, among them their own Usonian homes. Every *Axis mundi* is now an American flag. One cannot be an American by nature, one is an American by choice. One feels thrown onto a *terra incognita* and one has to appropriate that destiny by adopting a piece of the American earth and inoculate on its nature. The house must become a specimen of the American earth and its skies. Designing is a probing of the geological depth, spanning from the lithic layers to the atmospheric ones. The drilling tower [§ 4.4.4] is the next *axis mundi*, but it is again a multiplied one, differing from landscape to landscape, in search of a definite trait for a unified American style, but losing that trait in the multiplicity of specimens itself. [§ 4.2.3]

Already my explanation of the *axis mundi* has entered a third level. From the hearth as the place of family time to the Usonian home celebrating the birth of an American nation, we now go to the time of the earth as a common ground for all life, the birth of a terrestrial house. The *axis mundi* is deepened, human history becomes part of a natural history. Life once crept out of the womb of the earth to become the 'critter' called *human*—literally meaning earthling—i.e. a terrestrial species among other species. The Romantic era is in search of a home for this species. Human existence is romantically depicted as a journey (ch.4) of the wanderer over the surface of the earth, seeking its own place in a no longer merely human landscape, an earth opening up to the abyss of the non-human time of a natural history. Romanticism is the time of the great scientific expeditions, digging out humankind from the depth of the earth. The human tries to situate itself in this 'deep time' and it does so by reflecting itself in geographic and geologic difference. The styles of animals, vegetation, rocks, winds, continents, atoms may strike "a sympathetic cord" and become style for the human, because they are steps on the way to the human. "I contain multitudes" says the I in the *Leaves of Grass*.

⁶⁴⁹ As Andrea Wulf puts it nicely in here book on Romanticism. Last chapter.

In the house the axis of the chimney as the centre of the human gathering again becomes an axis among others. In analysing the Llewellyn Wright House we saw this multiplication in and around the house, its main body already shaped by an overlapping of the circle of the human city with the circle of 'the city of nature.' [§ 2.4.1] And all the other overlapping circles, designating new associations of humans and stones, humans and books, of lilies and trees. A multiplication of the *axis mundi*, decentering the human, who in associating with nature changes to an earthling among others.

This ecstasy of the *axis mundi*, however, does not merely imply the fathoming and celebration of a common natural history. Becoming an earthling already means becoming a cosmopolitan: one dwells against that huge background of the cosmos which approaches at the very moment the human tries to figure out its own temporal depth. "Buildings are children of the earth *and the sun too.*" (my italics) Earth becomes a star among others, and we wander the firmament as the "abiding expanse," indeed the axis again multiplying indefinitely with every star. The perforated eave and the lace of the balcony-parapet, inaugurating the movement of the glance going up, sew together earth and sky at the edge of the house. One has to become native to a place called earth, inaugurate the time of the human as a species, and stand out toward a future time, become a cosmopolitan. In a way the personal axis mundi can only be grasped in the different associations with all the other axes mundi. This was the true revolution of Romanticism.

Summarizing, one could say, the human tries to settle—in the sense of to come to terms with—its own individuality, its own nationality, its own naturality. It tries to settle but is doomed to wander away, to settle in a next event. Settling cannot do without a diaspora, identity only settles in the next specimen, it is a series of associations. "I don't want to settle down anywhere again. I want to take the fact that we are all just wanderers on earth entirely literary," said Caroline Michaelis-Böhmer-Schlegel-Schelling, the inspiring centre of the German Romantic movement, who in her own lovelife gave the example of such a series of associations.⁶⁵⁰ The house is an abode, it is a tent dreaming of a cave and a cave dreaming of a tent.

⁶⁵⁰ Andrea Wulf, *Magnificent Rebels*, p. 370.

A last step remains to be made. If the *axis mundi* is a wavering or wandering one, in the last instance this is so because it reflects an eternal past in which *natura naturans*, God or the creative force of the universe, decided to leave itself and to externalize itself in *natura naturata*: Wright's "*nature as the body of god*." God is the first Wanderer. According to Schelling, God's decision to split off from the eternal self opens up time, the time of creation or of a natural history. Existence. To be more precise: if God is *natura naturans* as the unity of the organic forces of contraction and expansion, when extending and opening up space-time and the great chain of being, shortly when existing ecstatically, God must retreat at the same time and contract to an ever deeper and unrecoverable depth of time. God or *natura naturans* is the abyss of forces or as Schelling puts it, it is the *Ungrund*.⁶⁵¹ It is the non-place, the non-time in the sense of an eternal past, or as Whitman puts it: "Eternity lies in bottomless reservoirs, its buckets are rising forever and ever, they pour and they pour and they exhale away."⁶⁵²

In the last instance the multiplication of the *axis mundi* is due to this lack of a last place and a last time. This is why the house cannot come to rest. It is built on *Strittigkeit* (Schelling), on contradiction, the abyss of organic forces. It is built on an ever retreating, ever stirring ground and tends to an ever moving horizon. God, or *natura naturans*, settling ever deeper, is still forced to wander away to a next whole. And one could add: so are its creatures, so was Thoreau pushed to explore the woods to find animal and plant-friends, so was Whitman, driven onto the road again to find a next American scene, so was Wright's Usonian home, never rooting deep enough not to be pushed towards the horizon again.

⁶⁵¹ Schelling, *Philosophical investigations into the essence of Human Freedom*. Translated and with an Introduction by Jeff Love and Johannes Schmidt.. Albany (NY), State University of New York Press, 2006, p.69.

⁶⁵² Whitman, *Leaves of Grass*, p. 77

6.3 A contemporary and a future Wright

6.3.1 Romance

Wright often used the word *romance*. It is one of the nine points of the program for an organic architecture, which he wrote in 1953.⁶⁵³ In the first instance one is inclined to associate romance with the romantic habitus of his work, but in his explanation of the term Wright comes with a surprising definition: “Organic architecture sees actuality as the intrinsic romance of human creation or sees essential romance as actual in creation. *So Romance is the new reality*. Creativity *divines* this.” In this quotation we become aware of Wright’s conviction that romance happens to all of us, it is the new reality, but that we need a creative individual to make it explicit, as he later puts it in the same essay.⁶⁵⁴

One gets the impression that romance implies adventure, it is something personal but it may be happening to all of us, and it pertains to what is changing and what we do not possess but must engage with. And it is here that we may remember the etymological root of both the terms romance and Romanticism, the French *roman*, the novel, describing the vicissitudes of knights seeking adventure to proof their bravery.⁶⁵⁵ Andrea Wulf, in her entertaining history of the German Romantic era,⁶⁵⁶ clearly shows us how such adventures became the prime substance of the novels of her heroes. Amorous adventures, scientific adventures, adventures on life and death, they all implied an exploration of the self and an exploration of nature and the earth as the lap of this self. Before all they meant an adventure of language trying to convey events never seen but intuitively found.

Just like Wright, who wanted to evade “a reactionary and sentimental use of the term,” the “magnificent rebels” of Wulf wanted to say that “to romanticise was not to be sentimental, lovelorn, or overly emotional.”⁶⁵⁷ To romanticise meant facing

⁶⁵³ FLW, *The language of organic architecture*, CW5, pp. 60-61

⁶⁵⁴ Ibid., p. 61.

⁶⁵⁵ Giorgio Agamben, *Avontuur*, vertaling Willy Hemelrijk, Amsterdam, Uitgeverij Sjoboet, 2016 [2015], pp. 18-19.

⁶⁵⁶ Andrea Wulf, *Magnificent Rebels*, the chapter 11 sublime impertinence, Kobo-e-book

⁶⁵⁷ Ibid.

reality, seeing it as that mine through which to go in order to be born a second time, an adventure to be poeticized in art. Or as Novalis explained, “By giving the commonplace a higher meaning, by making the ordinary look mysterious, by granting to what is known the dignity of the unknown and imparting to the finite a shimmer of the infinite, I romanticise.”

Romance, the new reality. What is the new reality for us? We live in a world heavily plagued by the effects of human’s decision to separate from nature, to see the earth as an object at disposal, a world scourged by “the Moloch that knows no God but more.”⁶⁵⁸ We are petrified in a thinking of nature and the earth in terms of availability and controllability. Nature seems to take revenge in a series of events rolling off inexorably, in no way to be possessed again, they possess us. Given the severity and urgency of the current problems of climate-change, destruction of biodiversity, and the ever more harrowing division of those falling down in utter poverty and those rising on the tides of capitalism, it seems naïve to plea another time for a romantic approach. Inversely, we may pose ourselves the question if a new and higher bid in technical solutions will ever help us to understand what is happening to us, what adventure is hidden in the new reality, what romances are promised. Earth engineering⁶⁵⁹ is just more of the same megalomania, more of a thinking in terms of being in command, of availability and controllability. It is difficult to see how forests of wind-turbines or the forcing of rain will change our attitude vis à vis the earth when they colonize atmospheric layers just as the old technical thinking saw and still sees the terrestrial layers as a standing reserve of materials and energy. Facing hyper-objects⁶⁶⁰ like climate change, the main thing is that we are out of control and that we have become eccentric beings. As it is so often put today, what was once the quiet background of the actions and passions of the human, the weather, has become the main actor on the terrestrial stage.⁶⁶¹ Foreground and background have changed roles. That is the new reality and it implies an architectural adventure too.

⁶⁵⁸ FLW, *The Disappearing City*, CW3, p. 82.

⁶⁵⁹ In Wikipedia Earth engineering is found under the lemma of Climate engineering. Climate engineering (also called geo-engineering) is a term used for both carbon dioxide removal (CDR) and solar radiation management (SRM), also called solar geo-engineering, when applied at a planetary scale. https://en.wikipedia.org/wiki/Climate_engineering

⁶⁶⁰ Hyperobjects. According to the oxford dictionary of critical theory, edited by Ian Buchanan, “a hyperobject is an object or event whose dimensions in space and time are massive in relation to a human life(…)” Timothy Morton developed the notion in *Hyperobjects. Philosophy and Ecology after the End of the World*, Minneapolis: Minnesota University Press, 2013.

⁶⁶¹ Bruno Latour, *Agency at the time of the Anthropocene*, in *New Literary History* Vol. 45, pp. 1-18, 2014 “Such is the frightening meaning of ‘global warming’: through a surprising inversion of background and foreground, it is *human* history that has become frozen and *natural* history that is taking on a frenetic pace.”

Now allow me to propose 5 points of Wright's romance to see how his thought may remain vital to our present, while inaugurating our own romance, our own eccentric reality. I will pose Wright's questions again and pose them as our own questions. If the past becomes readable again, it flashes up to bind with our present to a new constellation, as Benjamin phrased it. I will endeavor to sketch such a constellation in the form of a mosaic of Wright's past and our present. Let me be clear: if in this mosaic names of contemporaneous architects appear, it is not to show them as being indebted to, or influenced by Frank Lloyd Wright. They appear because they have posed the same questions on the relation between architecture and nature. It is because they did so, and completely in their own way, romancing with the new reality, that Wright's work has come to speak to us again.

I will follow the order of my chapters and will re-baptize them a last time. Of course, speaking of the present implies speaking about a near future too. For that reason my approach will be more speculative, following my antennas and making my Wright-science a science fiction.

6.3.2 Terrestrial and celestial cities

Wright's words about the metropolis as "The Moloch that knows no God but more" appear highly prophetic when we face the problems of the Anthropocene. Today we see metropolises ever more eating the earth, colonizing nature, changing the climate by their very CO2 emissions, exhausting and stifling the crust of the planet. And indeed Wright's dream of a city "doing no violence to nature (...) when using it(...), understanding and conserving natural resources"⁶⁶² seems almost naive. What to do with this realm of the *more*, of pure quantity, or of what Heidegger called *das Riesenhafte* (the huge). Should we flee it and find redemption in the countryside, as Wright proposed again and again, reckoning with the self-destruction of the big city? Or should we try to surf on its unpredictable waves?

Rem Koolhaas, the Dutch architect-urbanist and the founder of the *Office for Metropolitan Architecture (OMA)*, who with his book *Delirious New York* kindled a new architectural and urbanistic fascination for the metropolis, has always been a fervent advocate of the latter strategy. In his book *S,M,L,XL*, Koolhaas still spoke of "a global 'triumph' of the urban condition."⁶⁶³ He proposed to take "Bigness,"

⁶⁶² FLW, *LC*, p. 142.

⁶⁶³ OMA, Rem Koolhaas and Bruce Mau, *S,M,L,XL*, Rotterdam, 010 publishers, 1995, p. 961.

the realm of pure quantity reigning the city, as a chance for a new urbanism and a new architecture because “only Bigness instigates the regime of complexity that mobilizes the full intelligence of architecture and its related fields.”⁶⁶⁴ And he added: “Bigness is no longer part of any urban tissue,(...) its subtext is *fuck* context.”⁶⁶⁵ Bigness produces its own context.

Given this background, it is all the more surprising that OMA and its think-tank AMO have quite recently taken up the question of the relation between the land and the city in the exhibition *Countryside: The Future*.⁶⁶⁶ If we take a first look at the exhibition and its catalogue *Countryside: a report*, we initially get the impression the whole of the earth has become this “fucked” context of the metro-megalopolitan text. “A central thesis of ‘Countryside: The Future’ is that our current form of urban life has necessitated the organization, abstraction, and automation of the countryside at an unprecedented scale.”⁶⁶⁷ The countryside seems to have become a mere annex of the city.

If we take a closer look at their study, however, Rem Koolhaas and Samir Bantal come to a remarkable re-evaluation and a nuanced image of the new countryside. They construct a polarity between the city and the land in order to make the countryside a real counter-side of the voracious megalopolis. In order to reload the countryside, they assess concepts found in the communal history of city and land such as the *otium-negotium* relation; they weight the chances of old concepts like Fourier’s Phalanstère, in which people work, enjoy, and rest in local communal buildings on the land. Finally they make the inventory of new current initiatives for revitalizing the countryside and stopping the untenable emigration to the cities. Among them we find the so called Taobao initiative of Alibaba and local Chinese governments, an effort to digitalize Chinese villages and to plug them into high-speed transport systems in order to facilitate local populations to offer their products directly on the internet.

⁶⁶⁴ Ibid., p. 497.

⁶⁶⁵ Ibid., p. 502.

⁶⁶⁶ OMA/AMO, *Countryside: The Future* was based on years of research by AMO (The think-tank of OMA, lead by Samir Bantal and Rem Koolhaas) in collaboration with students of the Harvard University. The research resulted in an exhibition at The Guggenheim museum in New York (Guggenheim curator: Troy Conrad Therrien) and in a publication *Countryside: A Report*, Taschen, 2022.

⁶⁶⁷ And they continue: “Data storage, fulfilment centers, genetic engineering, artificial intelligence, robotic automation, economic innovation, worker migration, and the private purchase of land for ecological preservation are in many cases more actively explored and experimented with in the countryside than the city.” <https://www.oma.com/projects/countryside-the-future>

Broadacre city and OMA/AMO's countryside are in many ways incomparable. Wright's Broadacre is a design, *Countryside: The future* a research into the state and status of the countryside. But bringing them together, the latter shows us that many of the thoughts bearing Broadacre are alive and kicking. The idea of a countryside no longer the reverse side of the city, empowered by new means of transport and communication—what we called “the celestial city”—was at the very base of Wright's Broadacre city. Communing around some special traits of the landscape and thus building a terrestrial city, countryside inhabitants were supposed to move around the globe virtually (phone, telegraph, broadcasting) and actually. Locally producing goods on their acre and selling them on local markets may now find a logical supplement in selling them on e-commerce markets.

Broadacre is alive. Covid-19 taught us that the times of no physical contact may have a heavy decentralizing effect on the city. Suddenly, globally, villages and small towns, sometimes even already deserted, became wanted resorts to live in and work communally but at a distance, via the internet. It was a new chance for local communities which functioned as a sort of para-sites, not so much parasitizing on the metropolis physically, but embodying a sort of counterparts to the existing cities, the villa-ideal not that far away. A new chance to settle locally and to wander around virtually. Although the new media will never entirely replace physical contact, the countryside seems more than promising to meet the new dystopian, volatile conditions in which we operate today. Add an ever stronger desire for autarky, rapidly spreading at least in the west, enjoying one's own grown crop and using one's own generated solar kilowatts and part of the Broadacre conditions are fulfilled. And indeed, Broadacre was invented to give its denizens the possibility of at least partially growing one's own food and the implied ideal of autarky was also one of the principles of the Taliesin Fellowship which had its own energy plant and its own farm. Finally, the small community-plans for Galesburg, Pleasantville and Kalamazoo, were partially based on Emerson's ideal of self-reliance.⁶⁶⁸ People chose to gather around the special traits of a certain landscape to become the protecting angels of a site and decided to communally sustain their vegetable gardens and vineyard.

In one of Koolhaas' and Bantal's scenarios for a future relation between the city and the land, they speak of the possibility of unyoking both entities. “Maybe we should stop asking anything from the countryside and make the city self-sufficient.”

⁶⁶⁸ Desmond, Michael, *A clearing in the woods*, pp. pp. 525-560.

In such a scenario the countryside may even return to “the wild.”⁶⁶⁹ As a counter-scenario I think we should actualize Wright’s question too: will the metropolis disappear, will it return to “the wild”? If so, how?

To begin with, we cannot deny its existence, but we should see the metropolis in another way, indeed we should romanticise it as already being part of nature. In *The Natural Contract* Michel Serres formulates that proximity of nature and the metropolis with a telluric description: “The hard, hot architecture of megalopolises is equal to many a desert, to groups of springs, wells, lakes – or to an ocean, or a rigid and mobile tectonic plate.”⁶⁷⁰ The megalopolis is part of the bas-relief of the earth, and as such we should see it as a new *ground* and look what may “grow out of that ground into the light, holding that ground as a basic part of itself.” Already we see it becoming the ground of urban farming, vertical forests and roof gardens. Heat isles in overtly petrified urban spaces are fought with creepers, climbers, pergola’s and pools, and old subways become elevated prairies.⁶⁷¹ If we look at Piet Oudolf’s Highline Garden in New York City, we cannot but conclude that we see an invasion of nature in the city.⁶⁷² [FIG.6.1]

Bit by bit the metropolis becomes a subterranean city, a system of grottos, a bas-relief of the earth. In reusing old infrastructure and constructing new bridges between urban entities, architects, urbanists and garden designers will complement the new grotto-spaces, dug out of the existing metropolis, with new arteries and new para-sites,⁶⁷³ eating and feeding the megalopolis at the same time. The “Big Wall,” Wright’s name for the metropolis, will become a canyon wall or a cliff on which daring cantilevering spaces may seize, like the Morris Houses seized onto the steep slopes of the Californian coast and Fallingwater balanced above its stream, holding firmly to its rock and mountain slope.

⁶⁶⁹ In an interview with the Dutch newspaper Trouw, Koolhaas and Bantal –in describing one of a series of future scenarios for the city-countryside relationship, suggest freeing the land of all claims of a -in the future-self-supporting city. A countryside returning to “ the wild.”

<https://www.trouw.nl/cultuur-media/de-noodkreet-van-architect-rem-koolhaas-red-het-platteland~bbfe8fdb/>

⁶⁷⁰ Michel Serres, *The Natural Contract*, translated from the French by Elizabeth McArthur and William Paulson, Ann Arbor, The university of Michigan Press, Kobo e-book, no pagination, chapter: *war/peace*, paragraph: *we*.

⁶⁷¹ Sanda Lentzholzer’s book *Weather in the city, How Design shapes the Urban Climate*, (Rotterdam, NAI/010 Publishers, 2015) gives numerous examples of all these new strategies.

⁶⁷² The Highline was renovated and made a garden strip beginning in 2006. Piet Oudolf is a Dutch garden-architect. (1944-)

⁶⁷³ In the Netherlands, the idea of para-sites was first suggested by Kas Oosterhuis & Ilona Lénárd in 1993/1994. They designed a series of ‘urban torsos’ to be situated on the river Maas and in the ports of Rotterdam and indeed sometimes on top of its slabs. “The city of Rotterdam could host thousands of such para-sites, it would be much enriched by them, would co-evolve with its paraSITES as a receptive host. These paraSITES represent the ideal of the freestanding villa in the city center (...).” Kas Oosterhuis & Ilona Lénárd, *kas oosterhuis architect & ilona lénárd visual artist*, Rotterdam: 010 publishers, 1998, pp. 20-21.

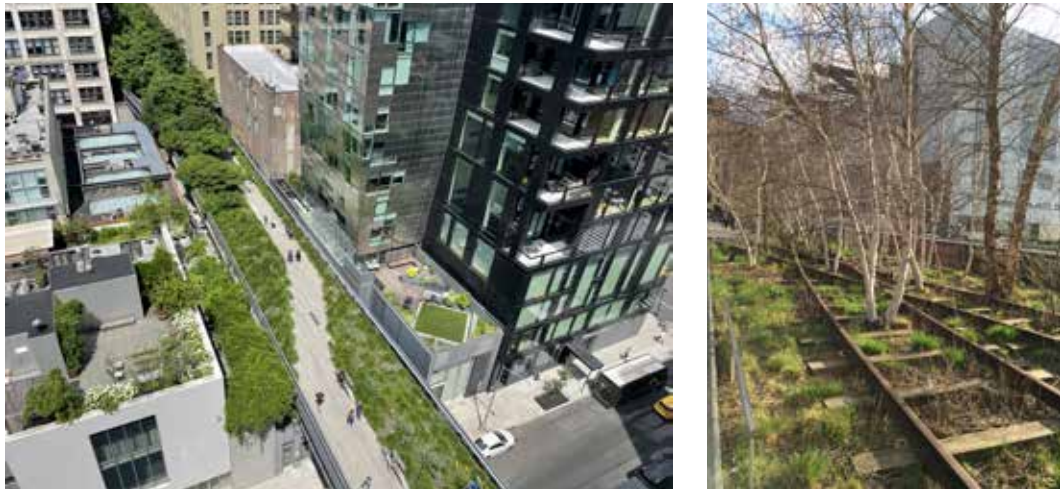


FIG. 6.1 Piet Oudolf, Highline, New York, 2012. [Photo left: Wil Fyfordy; CC BY-SA 4.0 | Photo right: Plagman; CC BY-SA 4.0]

In Wright's own metropolis—the ruinous disappearing city—architecture became the pedestal of nature. The design for the Golden Beacon, a 50 storeys skyscraper in Chicago, is a good example. The upper storey becomes a ground for all kinds of bushes and trees luxuriously growing into the sky while all the balconies at the corners of the building manifest themselves as planters ready to spit out their greenery. I formulated that “one cannot even be sure if nature is the only ornament worthy to embellish architecture or if architecture is nothing but a pedestal for living nature.”

During the last 15 years numerous projects have been designed and realized in which we see vegetation conquering the surfaces of architecture. Boeri's *Bosco Verticale* in Milan, Nouvel's *One Central Park* in Sydney, MVRDV's *Amsterdam Valley*, BIG's *Mountain-dwellings* in Copenhagen, and many others, saw architects and landscape designers cooperating to realize Wright's dream of a built landscape in which architecture and nature have become one. It is as if Wright's sometimes still hesitating high-rise greenery has finally grown to a full jungle.

The simple fact that so many people today live in houses with green roofs and even green facades is a sign that they may have mentally entered ‘the belly of the earth.’ We want to live in grottos, the earth has become our very skin, and our very roof. Slowly but definitely we come to see a way to live with nature instead of separating from it.

6.3.3 Time: a new templum of the sky and a new templum of the earth

In my introduction to this last paragraph, I spoke of hyperobjects, Timothy Morton's notion to designate "objects so massively distributed in time and space as to transcend localization"⁶⁷⁴ Climate change was one of them. If we accept such conditions as a chance for a romance, we should ask ourselves how buildings can contribute to get situated in such spatio-temporal conditions. Or to put it in the notions we revitalized in the second chapter, what kind of *templum in terra* and what kind of *templum in caelo* do we need to come to peace with our new conditions.

In a surprising way, Koolhaas' conceptualization of Bigness seems to cohere with this meteorological condition of the new building. The sheer size of investments and their corresponding programs and the usually limited size of urban locations, make big buildings enter the sky almost automatically. Such buildings do not only act on the urban stage, they act on a global stage too as if they were Goya's Colossus. One of the most beautiful examples is certainly OMA's *De Rotterdam*. A quantitatively huge program of requirements injects the waterfront of Rotterdam to revitalize the area. While the sheer size of the program threatens to eclipse the sky, OMA cuts open the slab-like building as if it was a painting of Lucio Fontana to draw the background of the sky into the city. The building opens the city to the weather so it can shine through in every cut or nestle in the relief. In one of the renderings of OMA's CCTV-building, we see a sun rising: the building manifests itself as a new Stonehenge, indeed a new door of perception. The human becomes the audience for a play of the 'meteors,' all phenomena in the midst of the sky. [FIG.6.2] Herzog's and Meuron's Elbephilharmonie receives the imprint of a cloud in its silhouettes and with its misty skin dissolves in the Elbe-fogs drifting into the Hamburg port.

Buildings become the new parergons framing the weather, romanticizing the new meteorological reality. In this study I tried to revitalize the notion of the *templum* and indeed these big buildings, para-siting on the city while belonging to the sky, are the new public templa of the sky, the *templa in caelo*, anchoring our lives in this new reality and enveloping urban life in the realm of the new gods of the weather. Architecture has become the centre-stage of the Tempest, the human chased into the coulisses.

⁶⁷⁴ https://en.wikipedia.org/wiki/Timothy_Morton



FIG. 6.2 OMA/Rem Koolhaas, CCTV, Beijing, China, 2012. [Rendering: OMA]

The new templa are not necessarily big, as Koolhaas itself shows us. OMA's version of the Serpentine Paviljon was a helium filled balloon tied to the ground by ropes, freely deforming in reacting to atmospheric pressures and ready to soar to stratospheric layers. The public sat beneath this weather balloon merely watching the weather in its normally invisible actions. The Serpentine Pavilion was a new *templum* of the sky, sensibilizing the human for its new conditions.

To get situated in the new times, the *templum in caelo* should be connected to the *templum in terra*. Given the idea that the metropolis or megalopolis has become part of the relief of the earth, many of these *templa in terra* are indeed incisions in the city as the new soil, again para-siting on the urban tissue. The Elbephillharmonie has landed on a huge, old warehouse, inserting its stair-sting into the flesh of the old city and transporting us up to celebrate the new meteorological reality on top of Hamburg. The same happens with Zaha Hadid's Zeppelin landing on top of the 'Havenhuis' in the Antwerp port and with the Caixa Forum of Herzog & de Meuron in Madrid.

Again we may ask if Wright's proposals for urban buildings were not already such parasites: the Guggenheim museum, with its original proposals for pink and orange skins,⁶⁷⁵ was already a *templum in terra* 'cutting into' the "Big Wall," at the inside a *templum in caelo*, its winding horizon pushing us upward in the natural phenomenon of a vortex.

These are the new public *temppla*, those of the sky and those of the earth, demonstrating how to get situated in our new meteorological reality. But we should also look how, on a smaller scale, the scale of the house, we all connect to these new realities. Again architects and artists have 'romanticized' our new atmospheric conditions by constructing new textile realities. Shigure Ban designed a Curtain wall House,⁶⁷⁶ in which the human and the wind interact on the stage of the balcony of a house. Petra Blaise, in refurbishing OMA's villa in Bordeaux, gave us a new grotto-tent. The house cuts into and finds an internal, subterranean path up through a hillside. When opening up the sash of the first floor, curtains now form a new tent acting and reacting on the *tempus* in multiple ways. [FIG. 6.3] Looking at such 'weather-works' one is tempted to say that the tent has become our new grotto, that we build our new homes in and with the weather, cut out of the weather.



FIG. 6.3 Inside outside/Petra Blaise: Maison à Bordeaux/Bordeaux revisited. 2011-2012. The villa is a design of OMA/Rem Koolhaas. [Photo: Inside outside]

⁶⁷⁵ Wright experimented with different colors for the facades when designing the Guggenheim. Among them pink and orange. Cf. *CWD3*, pp. 20-21.

⁶⁷⁶ Tokyo, 1995

6.3.4 A transcendental geology of architecture

I defined the geology of architecture in a double way. Firstly architectural place is a temporal construct, it does not only imply a human history, but also the full history of nature building earth. All the layers of such a geology—lithic, vegetative, animalist, and meteorological—may come to resonate in the landscape as the phenomenological screen. All the life having built the place, up to the stony bonework of the earth, may come to inspire architecture when framing place.

Secondly we spoke of this first geology as implying a transcendental geology, the process of potentiation implied in natural history, going from inorganic nature to organic nature up to “the sweet and blessed figure of man”(Schelling) and beyond. I transplanted that idea to architecture: the fact that architects may become inspired by nature tells us that the spirits of nature may come to occupy our minds because they are congenial to our own spirit. The word transcendence means that the process of natural history is a process of steps of potentiation in which the human, making a leap itself, may look back and descend into nature to learn from it and to become seduced by it in order to make a next step. Such forms of association may pertain to nature’s intellect, e.g. nature using science in structuring the world, they may pertain to the senses, e.g. colors as the sensuous means to seduce. Transcendence and descendence are reciprocal. More in general, to descend into nature, to perforate its layered building and to let time percolate, we have a chance to better understand ourselves and more freely enjoy nature. Taking that chance will enable us to build better worlds. Looking at the future, transcendence means that the human may make another leap in associating with nature and more deeply engaging with it, an attitude we recognized in the so called haecceities, in which human consciousness resorts on the same plane with nature, as happens in the Japanese haiku.⁶⁷⁷

Are we able to take another step, a step with nature, instead of opposing and supposedly staying on top? Better worlds today will certainly mean *lighter* worlds. Light in all the meanings of the word. *Lighter*: to begin with, to become more light-hearted. We are not Atlas, we do not bear the skies on our shoulders. It is better to locally engage with nature instead of engineering the globe finding alibis to stretch the times of destruction. It is not we that enable nature, it is nature that enables us. Deeply engaging means we may play together in local endeavors. We should use

⁶⁷⁷ Deleuze and Guattari , *Mille Plateaux*, p.319.

A haiku is a short poem of three phrases. An example of a Haiku by famous Haiku-writer Matsuo Basho: “kare eda ni / karasu no tomarikeri / aki no kure.” Translation: “on a withered branch / a crow has settled--/ autumn evening.” From *Basho’s Haiku: Selected poems of Matsuo Basho*, translated and with an introduction by David Landis Barnhill, Albany (NY) State University of New York Press, 2004. p. 25.

Wright's meteorological instincts. Living in the desert, he noticed the cool laminar flows of air striking the ground and picked them up by an easy system of oblique walls and canvas valves, leading cool air into his tent-like roofs. A natural form of air-conditioning. He was rewarded for his inventiveness because, using canvas panels for the roof, without knowing it, Wright had constructed a drumhead vibrating when little air-pressure differences announced so called desert-devils, little tornados wandering through the desert. Desert music!

Lighter will certainly mean reducing our ecological footprint, pushing Earth-overshoot day beyond the year, building reserves for future generations off all species. In this sense light will mean lightweight and low-energy, using existing structures, as we are already learning to do, and transforming them with ultra-thin and renewable materials: "I believe we pay too slight attention to making slight buildings beautiful or beautiful buildings slight. Lightness and strength may now be synonymous."⁶⁷⁸ Wright's tentlike building will conquer architecture. The new tents will be set up inside buildings, around and on top of them. Christo and Jean Claude⁶⁷⁹ have already prepared us for a new textile and plastic foil age. The most beautiful cathedrals of the last 20 years have been their textile *templa* framing trees, isles, valleys, and indeed buildings. The Big Air Package, their putting up of a tent in the Gasometer in Oberhausen in 2012–2013, was a true cathedral of light, a sublime *templum* of a misty, but completely serene sky. At the other side of the spectrum, Gordon Matta-Clark,⁶⁸⁰ the artist taking the built city as a geological domain, has already taught us to see existing urban structures as the new landscapes, cutting out new *templa* of the earth and new *templa* of the sky in their material realities.

Lighter: Architects should make the part signed by the human lighter and accept that they only co-sign a building. Buildings are *of* the weather, *of* nature, or as Wright put in the case of Taliesin North, "*of* the hill." Crustaceans and gravity built the limestone; grains of sand, the tides and weight built sandstone'; tectonic forces, animals and plants as much as the weather built the landscape, and all these forces and voices may have their signature in architecture.

⁶⁷⁸ FLW, *AB*, p.335.

⁶⁷⁹ Christo Vladimirov Javacheff (1935–2020) and Jean-Claude Denat de Guillebon (1935–2009), known as Christo and Jeanne-Claude, were artists noted for their large-scale, site-specific environmental installations.
https://en.wikipedia.org/wiki/Christo_and_Jeanne-Claude

⁶⁸⁰ Gordon Mata Clark, 1943-1978, American artist famous for his in situ works he made in the 70s., among them so called splittings (splittings of buildings) and cutings (existing buildings cut open).
https://en.wikipedia.org/wiki/Gordon_Matta-Clark

This was Wright's idea of a geology of architecture. Quite recently the question of authorship in architecture has been posed again by Jonathan Hill, arguing that many realities co-sign architecture, among them the weather.⁶⁸¹ Weathering is one of the signatures of time in architecture, just like the billowing curtains of Petra Blaise and Shigure Ban.⁶⁸²

6.3.5 Geography or how to define a place

Wright posed the question what the specificity of place means for architecture. He heavily criticized the universalist pretensions of the modern movement erasing the *genius loci*. Wright saw geographic specificity as the ground for an architecture of difference. Contrary to the moderns, who saw globalisation, international communication, and speed ending up in a universal architecture—a new International Style—, he saw the same conditions as a chance to root locally. He never forgot that the near reflects itself in the far [§ 4.4.1] and he managed to recombine the native and the foreign (both in space and in time) in surprising hybrids. I described Taliesin North as a patchwork of sandstone textures, the planar views of Japanese art, the sandy shores of the Wisconsin river rubbed into the stucco surfaces, some old oaks nearby, and a 'seismographic' carpet gathering the echoes of events in deep time, shortly a collection of spatio-temporal fragments, a multi-voiced, multi-signed but local architecture.

Looking at our own conditions today, we must pose Wright's question once again: how should we define a *locus* now that globalisation has been accomplished; now that "*totale Mobilmachung*"⁶⁸³ has been realized in an economic war without borders and now that streams of energy, resources, goods and people travel around the earth erasing its relief. How to define a locus in what, again, Koolhaas has called the city *ohne Eigenschaften*, the generic city, where global retail chains have made old city centres the grey background for their fluorescent neon signs, everywhere the same; where landscapes have come to be dominated by the same forests of wind turbines and Ruskin's "zoned iris of the earth" disappears behind fields and roofs of solar panels.

⁶⁸¹ Hill, Jonathan, *Weather Architecture*, London/New York: Routledge, 2012. The last issue of architecture-magazine Oase is entirely dedicated to the theme of (co-) authorship in architectural design. Oase 113, *Authorship*, Rotterdam: Oase Foundation, 2022.

⁶⁸² Mostafavi, Mosen & Leatherbarrow, David, *On Weathering, the Life of Buildings in Time*. Cambridge (MA)/ London (England), The MIT Press, 1993.

⁶⁸³ *Total Mobilization* is the name of a famous essay by Ernst Jünger in which he describes the mobilization of all possible forces in war, changing modern industrialized states into "Vulcanic forges."
https://www.wikiwand.com/de/Die_totale_Mobilmachung

There may be all reason, but there is no need to be pessimistic. Entropy, the erasure of local or regional difference by the forces of progress, is of all times. The strategies to ward them off too. Remember Wright's disappearing prairie eternalized in the Prairie House as a song of the prairie. It was written in the key of the horizontal, loading the prairie with a new verse, the verse of a vehicle heading for the horizon, "the extended horizontal line (being) the true earth-line of human life, indicative of freedom."⁶⁸⁴

Place is nothing that exists. It only exists as the virtuality of an event. Place takes place. "*Rien n'aura eu lieu, que le lieu,*" writes the French poet Mallarmé. Nothing will have taken place, but the place. Place is a still unknown event seeking embodiment, seeking a "romance." Architects should "divine," architecture should frame such an event. When it does, it will add difference, parry entropy by energizing place. Taliesin West: a meeting of humans with the desert as the "place where God is but man is not," as Wright quoted Victor Hugo.

Wright already defined place in a multifarious way, thinking of it as an event taking place. One locus was America as the striving to become a united people, a people having an own art and architecture. Another locus was nature, a possibility to bond with all its creatures and its creativity. Still another locus was the cosmos as the kitchen of materials [§ 4.4.4], an opportunity to bond with 'vibrant matter.' All these events condensed in the geological reality of a landscape in transformation, architecture framing these multiple events by framing them in their singular gathering. One honours difference by adding difference. Yes, entropic forces tear down a multi-coloured universe, but the creative negentropic forces of architecture cannot but add difference framing new events.

Certainly the weight of all these components or ingredients of a definition of *locus* will change. The next generation, backpacking and exchanging experiences in international events more than ever before, doesn't seem to weight a concept as *nation* in the same way as the old one.⁶⁸⁵ They have already fully embraced a cosmopolitan condition, they are the inhabitants of the celestial city. It means their true home has become the cosmos, indeed as we put it before, the tent of the heavens of the nomads. They will root in the sky deeper and deeper. Wright's last building, the Guggenheim, already found its centre of gravity in the air, and its horizon widened when spiralling upward.

⁶⁸⁴ FLW, AB, p. 374.

⁶⁸⁵ The old and the next generation are of all times, the former contracting on a past and deeply mistrusting change, the latter ready to 'romance' with the new conditions seeing them as a possibility for the enlargement of life. In this sense the "old en the new" generation are independent of age.



FIG. 6.4 Sou Fujimoto, Inhabitable Nomadic Structure for the Parisian art fair [Photo: Sou Fujimoto]

The new “Gothic spirit” will build upwardly more and more.⁶⁸⁶ If ever an architect has shown us this ecstatic, upward future of architecture, inaugurating a new Gothic, it has been Sou Fujimoto. The roof of the house of Music in Budapest is a multiply perforated shell, a forest roof, remembering Wright’s efforts to light a building with a shimmering forest light.⁶⁸⁷ In many of Fujimoto’s projects trees and humans climb up to the sky communally, transcending city life, growing into the light. Our glance is constantly torn upward, up to the sky. Architecture frames the meeting of trees, humans and clouds. The house in Kumamoto (2016) frames a meeting of humans with a pile of wood beams. Like in Wright’s work, the names say it all: living in an *Arbre Blanc* (Montpellier, 2019); *Omotosando Branches*. (Tokyo, 2015). Meetings of humans with nature. In times in which trees disappear rapidly, architecture sings the song of the tree-invasion. [FIG. 6.4]

When we speak of adding difference we should also think of the house itself as a place of individuation. “No two homes or gardens, no farm units or markets may be alike,” Wright says in *The Living City*.⁶⁸⁸ For Wright the problem of mass housing did not result in the idea of a mass produced unit of dwelling, an *Unité d’habitation*.

⁶⁸⁶ It has been Lars Spuybroek who, throughout his career as an architect and philosopher, has asked our attention for a new Gothic condition. Most explicitly in *The Sympathy of things, Ruskin and the ecology of design*.

⁶⁸⁷ Hoffmann, *Frank Lloyd Wright, Architecture and Nature*, New York: Dover Publications, 1986, pp. 50–59.

⁶⁸⁸ FLW, *LC*, 132.

Yet Wright did believe in industrial production and indeed saw it as a solution to large scale housing. He believed the individual house could be reconciled with industrial production on the level of the elements of the house. The textile block house and the Usonian automatic series demonstrate so. Making use of individualized patterns in the blocks and trying to further attune the style by using local sands or granites as part of the aggregate, he sought to make buildings proper “to the place and to the man,” human becoming a priest of the place. Self-building could be part of the strategy both in the Usonian and the Usonian automatic series. Standardization was a condition for variation, and place—no two places being alike—would do the rest. He saw the individual house as the expression of “free individual life that would enrich the communal life by the very changing quality of its own fresh individuality.”⁶⁸⁹

During the last 30 years we have seen numerous projects in which variation became the prime issue of housing-design. In Fukuoka OMA/Rem Koolhaas designed a patio-project with a roof with a curved serpentine contour, giving every patio-dwelling another orientation on the sky, another part of the moon. The curves are natural, we may find them among those nature uses in Ruskin’s little tableau of the lines of nature.⁶⁹⁰ Nox architects designed a ‘soft home,’ customized to individualized users by using certain algorithms. The mass-housing project was landscaped by a moiré pattern being the translation of the sounds of a neighbouring highway. A better example of native to the place (the highway), native to the man (customized) and native to the time (sold and individualized on the internet, modulated by computer steered technical devices) can hardly be found.⁶⁹¹

Although today, due to economic problems and the housing shortage, we face a serious regression in the development of the individualized home, it is exactly the ‘proper to the time’ of the digitalized world that will eventually conquer mass housing. Humans do not see themselves as serial products and will ask for houses attuned to their needs and desires. In the Netherlands, the experiments with large printed building components, possibly leading to completely printed houses, unambiguously point into the direction of individually ‘styled’ homes.⁶⁹² “Styles no longer be fashionable, style would flourish everywhere.”

⁶⁸⁹ Ibid., p. 149

⁶⁹⁰ Ruskin, *Stones of Venice*, Edited by J.G. Links, New York, Da Capo press, 1960, p. 104

⁶⁹¹ Nox, *Off the Road_5speed in Machining Architecture*. London: Thames and Hudson. 2004, pp. 114-127.

⁶⁹² I am thinking here of the project for the first printed canal-house of Dus architects.
<https://houseofdus.com/#project-3d-print-canal-house>

6.3.6 Beauty

I spoke of becoming lighter in all the meanings of that word. Light-weight structures, using less resources; a lighter human signature, co-signing with other entities; more enlightened, really using the intelligence of nature to make better buildings. I postponed the last and most important meaning, lighter in the sense of more spiritual: *of the light*. Lighter in the Schellingian sense: more beautiful. Following Schelling, beauty implies grace, grace implies goodness, “the remembrance of the original unity of the being (*Wesen*) of nature with the being (*Wesen*) of the soul. In essence all is said here. Architecture must become a technique of association again, celebrating that bond, romantically dancing with nature, taking distance when necessary, approaching when invited.

Wright believed in beauty, wanting most in the twentieth century, the century of the washed and erased surfaces and of modern *bruto gusto*. He strove for a revival, “not of the Gothic style, but of the Gothic spirit” as the “spirit of beauty.”⁶⁹³ He sought that beauty in nature, trying to understand its basic lines and figures, its patterns and its types, refining his geometries to truly associate with its forces: earth, light, wind, the sun.

I spoke of the fractalized geometries of Wrights architecture, negotiating with the surroundings. The fractalized geometry or the simply broken contour, the big-pixel cascading silhouette, seems to have become a general character of contemporary architecture. In the work of MVRDV and Sou Fujimoto this character seems to take on almost hyperbolic, indeed mannerist qualities, making buildings organisms, hesitatingly groping their way into the surroundings and as such fully opening up the city to the environments.

More and more however, the lines of beauty will be the lines of the weather, the fluid lines of nature, the lines of isobars, cold or warm fronts, jet streams and all other possible meteorological figures. We have entered the age of meteorology. Already the first cloud has made its imprint on a building in the silhouette of the Elbphilharmonie of Herzog and the Meuron. Misty skins and hazy filters creep into our facades. New city maps will show the lines of weather charts, inoculating their geometrical reality on the fluid lines describing areas of high or low pressure, as is indeed already the case in Jürgen Mayer’s Sevilla Metropoli⁶⁹⁴ [FIG. 6.5] and in the “wavy

⁶⁹³ FLW, *Ausgeführte Bauten und Entwürfe von Frank Lloyd Wright, CW1*, p.101.

⁶⁹⁴ Jürgen Mayer H. has intensely studied the possibilities of making architecture a ‘weather-profession.’ Cf. Jürgen Mayer H. and Neeraj Bhatia, *-Arium, Weather + Architecture*, Ostfildern: Hatje Cantz, 2010.

canopies” of the floors of Sou Fujimoto in the Joia Meridia project.⁶⁹⁵ These are the new Semperian transfigurations in which one material system—the weather—comes to express itself in another—in architecture. The new lines of beauty will be facilitated by the computer, as already happened in the projects of Nox Architects and ONL with Ilona Lénárd, inaugurating a true, three-dimensional fluid architecture.



FIG. 6.5 Jürgen Mayer Architects, Metropol Parasol, Sevilla, Spain, 2011. [Photos: Fernando Alda]

Beauty also implies “becoming friends with matter” as Emerson phrased it, or to use Wright’s words: to see the “spirit of matter.” We characterized Wright’s ultra-material interiors as grottos. As I argued in chapter 3, in the ultra-material interior we no longer take matter as the foil of our own dreams, we take matter as showing its own spirit, matter as ‘talking back.’

The late twentieth century has seen an explosion of ultra-material interiors in which we get the feeling of finding ourselves in the belly of the earth as the kitchen of materials. A Japanese architect like Kengo Kuma, working in the Japanese tradition of wooden and bamboo constructions and often using locally produced woods, again and again tests the tectonic range of wood. He thus discovers new structural techniques in the “finer properties of wood, emancipated by the machine!”⁶⁹⁶ and refines them to ornamental rhythms, absorbing light in all its grades. His glass house, a glass box on a water pool which joins the ocean, realizes Wright’s ideal of a prism, working with “light diffused, light refracted, light reflected, (...)—light for its own sake—shadows aside, (...) delighting and fascinating man.”⁶⁹⁷

⁶⁹⁵ Sou Fujimoto, Laisné Roussel, and Cino Zucchi formed part of a team led by Lambert Lénack architects.

⁶⁹⁶ FLW, *CW1*, p.282.

⁶⁹⁷ FLW, *CW1*, p.292.

The tent is the necessary complement of the grotto. It is the 'grotto' of the skies. It celebrates atmospheric conditions. Where the grotto-room transports us into the belly of the earth, the tent makes us soar into the sky, it is always the double of the tent of the heavens. If the 'meteors' have entered the urban stage, such a condition must be romanticized. It will reflect itself in new fabrics capturing the light and the wind, in new ultrathin translucent and flexible materials fusing matter and light, light in all of its meteorological nuances. In general the 'tectonic turn' of the early 21st century coincides with an interest in both the structural and cladding qualities of materials. Its best examples have brought us nearer to an architecture of the tent. The architecture of Shigure Ban points in such a direction. He designs new forests in which wooden colonettes fluidly transform to ribs shaping new translucent net-vaults clad with polymer skins.

It may be significant that, after the twentieth century, talking of beauty has become a difficult thing in relation to art. What once went without saying, that art is the domain of beauty, has lost its meaning completely. In a conversation on beauty, questions like "why beauty, what beauty, whose beauty?" usually prevail. Beauty has become a debatable subject, art a doubtful thing. In chapter 5 we saw that for the Greek, in their notion of cosmos as the beautiful whole, it was natural that wherever they erected their buildings, they did so to contribute to that whole. Let us end with a quote of Transcendentalist Ralph Waldo Emerson to see how such a conception started to glow again in what Lewis Mumford has called "The Golden day" of American culture.⁶⁹⁸ "For the world is not painted, or adorned, but is from the beginning beautiful; and God has not made beautiful things, but Beauty is the creator of the universe."⁶⁹⁹ Just like Wright, we may draw strength from such an unconditioned belief in beauty.

⁶⁹⁸ Lewis Mumford, *The Golden day, A Study in American Experience and Culture* New York, Horace Liveright Publisher, 1926

⁶⁹⁹ Ralph Waldo Emerson, *The Poet*, Essays, second series. Web Study Text by Ellen Moore, 1999 and Ann Woodlief, 2002, Virginia Commonwealth University.
<https://archive.vcu.edu/english/engweb/transcendentalism/authors/emerson/essays/poet.html>

Literature

Primary sources

- Frank Lloyd Wright, *Monographs 1-12*, Text by Bruce Brooks Pfeiffer, edited and photographed by Yukio Futagawa, Tokyo: Adata Publishers, 1986
- Frank Lloyd Wright, *Collected Writings 1-5*, edited by Bruce Brooks Pfeiffer, New York: Rizzoli publishers, 1994
- Frank Lloyd Wright, *Selected Houses 1-8*, Text by Bruce Brooks Pfeiffer, edited and photographed by Yukio Futagawa, Tokyo: Adata Publishers, 1991
- Frank Lloyd Wright, Complete works, Vol. 1:1885-1916; Vol. 2:1917-1942; Vol. 3 1943-1959, Bruce Brooks Pfeiffer, Köln: Taschen, 2011-2016,
- Frank Lloyd Wright, *Gli Anni della Formazione* or *The Wasmuth portfolio*, With an introduction by Vincent Scully, Milan: Jaca Books, 1986
- Frank Lloyd Wright, *An Autobiography*, New- York, Horizon Press, New-York: Horizon Press, 1977 [1932]
- Frank Lloyd Wright, *The Living city*, New York Horizon Press, 1958.
- Frank Lloyd Wright, *Broadacre city: a new community plan*, Architectural record, 1935, pp.345-349.
- Frank Lloyd Wright, *Ungebaute Architektur*, Bruce Brooks Pfeiffer, Stuttgart, Deutsche Verlags-Anstalt, 1987

All other sources

- Ackerman, James S., *The villa, Form and Ideology of Country Houses*, London: Thames and Hudson, 1990
- Agamben, Giorgio, *The coming community*, Minneapolis (MN): University of Minnesota Press, 1993
- Agamben, Giorgio, *Profanazioni*, Rome, Nottetempo, 2005. Dutch translation Ype de Boer, Boom, Amsterdam, 2016
- AMO/Rem Koolhaas, *Countryside: A Report*, Cologne: Taschen, 1922
- Argan, Giulio Carlo: *Introduzione a Frank Lloyd Wright*. In: Metron, N°18 Rome, Ed. Sandron, 1947
- Baudrillard, Jean, *Sideraal Amerika*, Amsterdam: uitgeverij Duizend & Een, Dutch translation Ernie Tee & Maurice Nio, 1988 [1986].
- Benevolo, Leonardo, *History of Modern architecture*, Cambridge (MA): The M.I.T. Press, 1977
- Bergdoll, Barry, & Gray, Jennifer, *Frank Lloyd Wright, Unpacking the Archive*, New York: MOMA, 2017
- Bergdoll, Barry, *Reading Mile-High, the Chicago skyline and the stakes of fame*. In: Barry Bergdoll, Jennifer Gray (ed.) *Frank Lloyd Wright, Unpacking the Archive*, New York, MOMA, 2017, pp. 208-225
- Bergson, Henri, *L'Évolution Créatrice*, Paris, Presses Universitaires de France, 1986 [1941]
- Betsky, Aaron & Fink Shapiro, Gideon & Pielage, Andrew (photographs), *50 Lessons to Learn from Frank Lloyd Wright*, New York: Rizzoli, 2021
- Boetticher, Karl, *Tektonik der Hellenen*, Berlin, Ernst & Korn, 1874
- Brooks, H. Allen, Editor, *Writings on Wright*, Cambridge (MA), M.I.T. Press, 1981, [1983]
- Cacciari, Massimo, *Metropolis*, Rome: Officina, 1973
- Cohen, Jeffrey Jerome, *Stone, an Ecology of the Inhuman*, Minneapolis/London: University of Minnesota Press, 2015
- Dal Co, Francesco, *Notes concerning the Phenomenology of the Limit in Architecture*, *Oppositions* 23, 1981, pp. 36-51
- Deleuze, Gilles, *Whitman*, in: *Essays critical and clinical*, translated by Daniel W. Smith and Michael E. Greco, London/New York: Verso, 1998, pp. 56-60

- Deleuze, Gilles, *Différence et Répétition*, Paris: PUF, 1986 [1968]
- Deleuze, Gilles & Guattari, Felix, *Mille Plateaux*, Paris: Minuit, 1982
- Deleuze, Gilles, *Cinéma 2, l'Image Temps*, Paris: Minuit, 1985
- Deleuze, Gilles & Guattari, *Qu'est-ce que la philosophie?* Paris: Minuit, 1991
- Desmond, Michael, *A clearing in the woods, Self & City in Frank Lloyd Wright's Organic Communities*, Cambridge (MA), M.I.T. Press, 1996.
- Desmond, Michael, *Abstracting the landscape. Galesburg, above and below the surface*. In: Barry Bergdoll, Jennifer Gray (ed.) *Frank Lloyd Wright, Unpacking the Archive*, New York, Moma, 2017, pp.132-147
- Eliade, Mircea, *The Sacred and the Profane, the Nature of Religion*. Translated from the French by Willard R. Trask, New York, Harcourt, Brace & World Inc., 1987 [1957]
- Emerson, Ralph, Waldo, *Nature*, Boston: James Munroe and Company, 1836
- Endell, August, *Die Schönheit der großen Stadt*, Stuttgart, Verlag von Schreder und Schröder, 1908.
Translated from the German by Zeynep Çelik Alexander as *The beauty of the Metropolis*
- D'Arcy Thompson, Wentworth, *On Growth and Form*, Cambridge: Cambridge University Press, 1917
- Dougherty, James, *Broadacre city: Frank Lloyd Wright's Utopia, The Centennial review, vol. 25, summer 1981*, pp 239-256. Michigan State University Press, 1981
- Flusser, Vilém, *Taking Up Residence in Homelessness*, in: *Vilhem Flusser, Writings*, translated by Erik Eisel, Minneapolis/London, University of Minnesota Press, 2002, pp. 91-103
- Flusser, Vilém, *Nackte Wände*, in *Vom Stand der Dinge, Eine Kleine Philosophie des Designs*. Herausgegeben von Fabian Wurm. Göttingen: Steidl, 1993, p. 76-78.
English translation as *Bare Walls*. In: *The shape of things, a philosophy of design*. Translated by Anthony Mathews, London, Reaktion books Ltd, 2007 [1993] digital edition, no page numbers
- Flusser, Vilém, *The tent*. In: *The shape of things, a philosophy of design*. London, Reaktion books Ltd, 2007 [1993], digital edition, no page numbers
- Flusser, Vilém, *Taking Up Residence in Homelessness*, in: *Vilhem Flusser, Writings*, translated by Erik Eisel, Minneapolis/London, University of Minnesota Press, 2002, pp. 91-103
- Flusser, Vilém, *Nackte Wände*, in *Vom Stand der Dinge, Eine Kleine Philosophie des Designs*. Herausgegeben von Fabian Wurm. Göttingen: Steidl, 1993, p. 76-78
English translation as *Bare Walls*. In: *The shape of things, a philosophy of design*. Translated by Anthony Mathews, London, Reaktion books Ltd, 2007 [1993]. digital edition, no page numbers
- Flusser, Vilém, *The tent*. In: *The shape of things, a philosophy of design*. London, Reaktion books Ltd, 2007 [1993], digital edition, no page numbers
- Flusser, Vilém, *Durchlöchert wie ein Emmentaler*, in *Vom Stand der Dinge, Eine Kleine Philosophie des Designs*. Herausgegeben von Fabian Wurm. Göttingen: Steidl, 1993, p. 79-82
English translation as *With as many holes in it as a Swiss Cheese* In: *The shape of things, a philosophy of design*. Translated by Anthony Mathews, London, Reaktion books Ltd, 2007 [1999], digital edition, no page numbers.
- Frampton, Kenneth, *Studies in Tectonic Culture*, Cambridge (MA)/London, The M.I.T. Press, 1995
- Frampton, Kenneth: *Towards a Critical Regionalism, Six points for an Architecture of Resistance*. In: *The Anti-Aesthetic, Essays on Postmodern Culture*. Edited by Hal Foster. Port Townsend (WA): Bay Press, 1983, pp. 16-30.
- Fustel de Coulanges, Numa Denis, *The Ancient city, A Study on the Religion, Laws, and Institutions of Greece and Rome*, Kitchener (Ontario, Canada): Batoche Books, 2001 [1864]
- Giedion, Siegfried, *Space Time and architecture. The growth of a new tradition*. Cambridge(MA): Harvard University Press. 1982 [1941]
- Gill, Brendan; *Many Masks, A Life of Frank Lloyd Wright*, New York: Ballantine Book, 1988 [1987]
- Grant, Iain Hamilton, *Philosophies of nature after Schelling*, London/New York: Continuum Books, 2008 [2006]
- Havik Klaske, and Tielens, Gus, *Atmosphere, Compassion and Embodied experience. A conversation about Atmosphere with Juhani Palasmaa*, Oase 91, Rotterdam: NAI/010 Publishers, 2013, pp. 33-52
- Heidegger, Martin, *Feldweggespräche 1944/45*, Frankfurt am Main (Klostermann), GSA 77, 1995
- Heidegger, Martin, *Bauen, Wohnen, Denken*. In: *Vorträge und Aufsätze*, Pfullingen: Neske, 1954, pp. 139-156
- Heidegger, Martin, *Das Ding*. In: *Vorträge und Aufsätze*, Pfullingen: Neske, 1954, pp. 157-181
- Heidegger, Martin, *Der Ursprung des Kunstwerkes*. 1935 In: *Holzwege*, Frankfurt am Main: Vittorio Klostermann Editor 1980 [1950]

- Heidegger, Martin, *Die Kunst und der Raum*, 1969 GSA 13, pp. 203-210
- Heidegger, Martin, *Sein und Zeit*, Tübingen: Max Niemeyer Verlag, 1979 [1926]
- Heidegger, Martin, *A translation of Being and Time*, translated by Joan Stambaugh, New York, State University of New York Press, 1996.
- Heidegger, Martin, *Schellings Abhandlung über das Wesen der Freiheit*. Tübingen: Max Niemeyer Verlag, 1971
- Heidegger, Martin, *Vom Wesen und begriff der Physis, Aristoteles, Physik B, 1*, in *Wegmarken*, Frankfurt am Main: Klostermann, 1978 [1967], pp.237-299
- Heinz, Thomas A. *Frank Lloyd Wright, Interiors and Furniture*: London/Berlin Academy editions & Ernst & Sohn, 1994
- Hildebrand, Grant, *The Wright Space, Pattern & Meaning in Frank Lloyd Wright's Houses*, Seattle, Washington University Press, 1997 [1991]
- Hildebrand, Grant + K. Eaton, Ann & Leonard, *Frank Lloyd Wright's Palmer house*. Seattle/London, University of Washington Press, 2007
- Hill, Jonathan, *Weather Architecture*, London/New York: Routledge, 2012
- Hitchcock, Henry-Russell, *In the nature of materials, The Buildings of Frank Lloyd Wright*, New-York: Hawthorn Books, 1942
- Hoffmann, Donald; *Frank Lloyd Wright's Fallingwater, The House and its History*, New York: Dover, 1978
- Hoffmann, Donald; *Frank Lloyd Wright, Architecture and nature*, New York: Dover, 1986
- Hoffmann, Donald, *Frank Lloyd Wright's Robie House. The Illustrated Story of an Architectural Masterpiece*, New York: Dover Publications, 1984
- Hoffmann, Donald, *Understanding Wright*, New York, Dover Publications, 1995
- Hoffmann, Donald, *The House on Kentuck Knob*, Pittsburgh, University of Pittsburgh Press, 2000
- Huxtable, Ada Louise, *Frank Lloyd Wright*, New York: Viking, 2004
- Jackson Turner, Frederick, *The significance of the Frontier in American history*, 1893. <https://www.gutenberg.org/ebooks/22994>
- Johnson, Donald Leslie, *Frank Lloyd Wright versus America*, Cambridge (MA): M.I.T. Press, 1990
- Johnson, Donald Leslie, *Broadacre's Geometry: 1934-1935*. The journal of architectural and planning research, 5, No.2, Summer 1988
<http://www.jstor.org/stable/43028877>.
- Lapoujade, David, *Powers of time*, Minneapolis-London, University of Minnesota Press, 2018
- Lemaire Ton, *Filosofie van het landschap*, Baarn: Ambo, 1970
- Levine, Neil, *The architecture of Frank Lloyd Wright*, Princeton: Princeton University Press, 1996
- Levine, Neil, *The urbanism of Frank Lloyd Wright*, Princeton & Oxford 2016: Princeton: Princeton University Press 2016
- Levine, Neil, *The temporal dimension of Fallingwater*, In *Wright studies two, Pittsburgh and Fallingwater*. Carbondale and Edwardsville, Southern Illinois University Press, 2000 (Narciso G. Menocal editor)
- Lipman, Jonathan, *Frank Lloyd Wright and the Johnson Wax company building*, Rizzoli New York, 1986
- Long, David G. De, *Auldbrass, Frank Lloyd Wright's southern plantation*. New York: Rizzoli, 2003
- Loos, Adolf, *Trotzdem*, Wien, Prachner, 1988 [1931]
- Lyell, Charles, *The principles of geology, Being an Attempt to Explain the Former Changes of the Earth's Surface, by Reference to Causes Now in Operation*, London, John Murray publisher, 1830-1833.
- Melville, Herman, *I and my Chimney (1856)*, in *Billy Bud, Sailor and selected tales*, Oxford: Oxford University Press, 1998.
- Morton, Timothy, *Dark Ecology*, New York: Columbia University Press, 2016.
- Norberg Schulz, Christian, *Genius Loci, Towards a Phenomenology of Architecture*.
- Norberg Schulz, Christian, *Meaning and Place, Selected Essays*, New York: Electa/Rizzoli, 1988 [1986].
- OMA, Rem Koolhaas and Bruce Mau, *S,M,L,XL*, Rotterdam, 010 publishers, 1995
- Palasmaa, Juhani, *The Eyes of the Skin, Architecture and the Senses*, with a preface by Steven Holl, Southern Gate, Chichester: John Wiley & Sons, 2005 [1996]
- Palasmaa, Juhani, *Orchestrating Architecture, Atmosphere in Frank Lloyd Wright's buildings*, Oase 91, Rotterdam: NAI/010 Publishers, 2013, p. 53-58

- Palasmaa, *Atmosphere, Compassion and Embodied experience. A conversation about Atmosphere with Juhani Palasmaa, Klaske Havik and Gus Tielens*, Oase 91, Rotterdam: NAI/010 Publishers, 2013, pp. 33-52
- Perez Gomez, Alberto, *Attunement, Architectural Meaning after the Crisis of Science*. Cambridge (MA)/ London, The M.I.T. Press, 2016 (Kobo-E-Book)
- Reisley, Roland / Timpane, John, *Usonia, New York. Building a Community with Frank Lloyd Wright*. Princeton Architectural Press, 2001
- Rossi, Aldo, *The architecture of the city*, Introduction by Peter Eisenman, translation by Diane Ghirardo and Joan Ockman, Cambridge (MA) and London (England): The M.I.T. Press, 1982
- Rossi, Aldo, *A Scientific Autobiography*, Cambridge (MA): The M.I.T. Press, 1981.
- Ruskin, John, *The Seven Lamps of architecture*, New York: Dover Publications, 1989 [1880]
- Ruskin, John *Stones of Venice*, Edited and abridged by J.G. Links, New York: Da Capo Press, 1960 [1853/1877]
- Rykwert, Joseph, *The Idea of a Town, the Anthropology of Urban Form in Rome, Italy and the Ancient World*, Cambridge (MA): The M.I.T. Press, 1988 [1976]
- Safranski, Rüdiger, *Romantiek, een Duitse affaire (Romanticism, a German affair)*, Dutch translation by Mark Wildschut, Amsterdam/Antwerpen: Atlas/Contact, 2009
- Scalbert, Irénée, *Architecture as Nature*, RA. Revista de Arquitectura Núm. 20 – 2018, pp. 12–21
- Schelling, Friedrich Wilhelm Joseph von, *Von der Weltseele*, 1798, Altenmünster: Jazzybee Verlag Jürgen Beck, 2018 (Kobo e-book).
- Schelling, Friedrich Wilhelm Joseph von.: *Untersuchungen über das Wesen der Menschlichen Freiheit und die damit zusammenhängende Gegenstände*, 1809. Jazzybee Verlag Jürgen Beck, Altenmünster, 2018 (Kobo e-book)
- Dutch translation by Frans Ruiter and Paul Ziche: *Filosofische onderzoeken over het wezen van de menselijke vrijheid en daarmee samenhangende zaken*, Amsterdam: Boom, 2022
- Schelling, Friedrich Wilhelm Joseph von, *Filosofie van de kunst*, Amsterdam/Meppel: Boom, 1996
- Schelling, Friedrich Wilhelm Joseph von, *On the relationship of the plastic Arts to Nature*. 1807, translated by Jason M. Wirth, Kabiri, the official journal of the North American Schelling society, Vol. 3, 2021, pp. 132- 158
- Schelling, Friedrich Wilhelm Joseph von, *The philosophy of Art; an oration on the relation between the plastic Arts and Nature*, 1807, translated from the German by A. Johnson, London: John Chapman. 1845
- Schelling, Friedrich Wilhelm Joseph von, *Ages of the World* (second draft, 1813). With an introduction by Slavoj Žižek, Ann Arbor: The University of Michigan Press, 2009 [1997].
- Scully, Vincent, *Frank Lloyd Wright*, New York: George Braziller, 1960
- Scully, Vincent, *Modern architecture and other essays*, Selected and with an introduction by Neil Levine, Princeton/Oxford: Princeton University Press, 2003
- Semper, Gottfried, *The four elements of architecture*. In: *The four elements of architecture and other writings*. Translated by Harry Francis Mallgrave & Wolfgang Herrmann, Cambridge (Cambridge University Press) 1989
- Semper, Gottfried, *Style in the Technical and tectonic art, or Practical Aesthetics* Translation by Harry Francis Mallgrave and Michael Robinson, Los Angeles (CA): Getty publications, 2004 [1863]
- Sergeant, John, *Frank Lloyd Wright's Usonian Houses*. New York, Whitney Library of design, 1976
- Serres, Michel, *The natural contract*, Translated by Elizabeth MacArthur and William Paulson , Ann Arbor: The University of Michigan Press, 1998 [1995].
- Serres, Michel, *Angels, a Modern Myth*, translated from the French by Francis Cowper, Paris/New York: Flammarion, 1995
- Serres, Michel, *Geometry, The Third Book of Foundations*, translated by Randolph Burks, New York: Bloomsbury, E-book
- Serres, Michel, *Biogea*, Minneapolis: Univocal publishing, 2012 (Kobo E-book)
- Sloterdijk, Peter *Sferen I,II, Bellen, Globes*, Vertaling Hans Driessen, Amsterdam: Boom/SUN, 2009 [1998/1999]
- Sloterdijk, Peter *Sferen III, Schuim*, Vertaling Hans Driessen, Amsterdam: Boom/SUN2009 [2004]
- Sloterdijk, Peter *Het Kristalpaleis, Een filosofie van de Globalisering*. Vertaling Hans Driessen, Amsterdam: Boom/SUN, 2006 [2004]

- Smith, Norris Kelly, *Frank Lloyd Wright, a Study in Architectural Content*, Englewood Cliffs (NJ): Prentice-Hall, 1966
- Spuybroek, Lars, *The sympathy of things, Ruskin and the ecology of design*, Rotterdam: V2/NAI, 2011
- Spuybroek, Lars, *Grace and Gravity*. New York: Bloomsbury, 2020
- Spuybroek, Lars, *Textile Tectonics, In conversation with Ludovica Tramontin*, In: *The Architecture of continuity*, Rotterdam: V2 Publishing, 2008, pp.226-243
- Storrer, William Allin, *The Frank Lloyd Wright Companion*, Chicago/London: The University of Chicago Press, 1993
- Storrer, William Allin, Ph.D., *The architecture of Frank Lloyd Wright, A Guide to Extant Structures*, New York, WAS Productions, 1993
- Sturkenboom, Frans, *De Gestiek van de Architectuur, Een Leerboek Hedendaags Maniërisme*, Arnhem: Artez Press, 2017
- Sturkenboom, Frans, *Het Dierenhol, Wright's Huis boven de waterval*. In: *Oase34*, 1992, pp. 10-20
- Sturkenboom, Frans, *De Aardrijkskunde van de Architectuur*. In *Oase 42*, 1995, pp. 42-59
- Sturkenboom, Frans, *Time in the work of Frank Lloyd Wright*. In: *Apria 2, Time Matters*, March 2021
<https://apria.artez.nl/time-in-the-work-of-frank-lloyd-wright/>
- Tafari, Manfredo & Dal Co, Francesco, *Modern architecture*, Translated from the Italian by Robert Erich Wolf, London, Academy Editions, 1980
- Tafari, Manfredo, *Theories and Histories of Architecture*, London: Granada Publishing, 1980
- Thoreau, Henri, David, *Walking*. Digital version: The Project Gutenberg eBook of Walking. 1997 [1862] <https://www.gutenberg.org/files/1022/1022-h/1022-h.htm>
- Thoreau, Henri, David, *Wandelen, Op zoek naar de verloren natuur*, Dutch translation by Edzard Krol, with an introduction by Norbert Peeters and a commentary by Jelle Reumer, Groningen: Historische Uitgeverij, 2018
- Thoreau, Henri David, *Walden, or life in the woods*, Boston: Ticknor and Fields, 1854.
Digital version: The Project Gutenberg eBook of Walden, by Henry David Thoreau:
<https://www.gutenberg.org/files/205/205-h/205-h.htm>
- Tuinen (van), Sjoerd, *Elasticity and Plasticity, Immunology and the Crisis of Repetition*, in: *Critical and Clinical Cartographies*, A.Radman, H. Sohn (editors), Edinburgh University Press, 2017, pp. 243-268, 2017, pp.145-163.
- Tuinen (van), Sjoerd, *The late and the New, Mannerism and Style in Art History and Philosophy*, in: *Art History after Deleuze and Guattari*, Leuven University Press 2017, pp.145-163
- Twombly, Robert C., *Frank Lloyd Wright, An interpretive biography*, New York, Harper & Row, publishers, 1973
- Hermann Usener, *Götternamen, Versuch einer Lehre von der Religiösen Begriffsbildung*, Bonn: Cohen, 1896
- Veblen, Thorstein, *The Theory of the Leisure Class*. New York: MacMillan, 1899
- Veire, Frank de, *Als in een donkere Spiegel, De kunst in de modern filosofie*, Nijmegen: SUN, 2007 [2002]
- Verhoeven, Cornelis, *Zijn en Staan; Metaforen van Aanwezigheid*, Budel: Damon, 1999.
- Villa, Riccardo M., *The Umwelt as a project. Designs of the Urban Milieu in the Age of Bio-power*. *Oase 104*, Rotterdam: nai-010, 2019, pp. 103-112
- Virilio, Paul, *Het Horizon Negatief*, Amsterdam: Duizend en Een, 1989 [1984].
- Vitruvius, *The ten books on architecture*, Translation Morris Hicky Morgan, New York, Dover publications, 1960 [1914].
- Wallis de Vries, Gijs, *Archescape, on the tracks of Piranesi*, Amsterdam: Duizend en één, 2014
- Whistler, Daniel & Ramey, Joshua, Bruno, Schelling, Deleuze, In: E. Kazarian et al (eds), *Gilles Deleuze and Metaphysics*, Washington DC, Lexington Books, 2017
- Whistler, Daniel, *Language after Philosophy of Nature: Schelling's Geology of Divine Names*, In: *Smith and Whistler: After the Postsecular and the Postmodern*, Newcastle: Cambridge Scholars' Press, 2010
- Walt Whitman, *Leaves of Grass*, Harmondsworth: Penguin, 1986 [1855]
- Wright Green, Allen, *Building the Pauson House, The Letters of Frank Lloyd Wright and Rose Pauson*, Petaluma: Pomegranate, 2011
- Wright, John Lloyd, *My father, Frank Lloyd Wright*, New York: Dover Publications, 1992 [1946]

- Wulf, Andrea (2015), *The invention of Nature. The adventures of Alexander von Humboldt, The Lost Hero of Science*. London: John Murray Publishers, 2015
- Wulf, Andrea, *Magnificent Rebels, The first Romantics and the Invention of the Self*, New York, Alfred A. Knopf Publisher, 2022, Kobo E-book
- Zevi, Bruno, *Frank Lloyd Wright*, Bologna: Zanichelli, 1985 [1979]
- Zevi, Bruno, *Architecture as space, How to look at architecture*. Translated by Milton Gendel, Edited by Joseph A. Barry, New York, Horizon Press, 1957
- Žižek Slavoj, Event, *Filosofie van de gebeurtenis*, translated by Huub Stegeman, Amsterdam, Boom, 2015 [2014]
- Žižek Slavoj, *The indivisible remainder, On Schelling and related matters*, London/NewYork, 2007 [1996]
- Žižek Slavoj, *The Abyss of Freedom*, Introduction to F.W.J. von Schelling, *Ages of the World* (second draft, 1813). Ann Arbor: The University of Michigan Press, 2009 [1997]

Glossary

Axis mundi

In 20th century comparative mythology, the term *axis mundi*—also called the cosmic axis, world axis, world pillar, centre of the world, or world tree—has been greatly extended to refer to any mythological concept representing «the connection between Heaven and Earth” or the “higher and lower realms.” Mircea Eliade introduced the concept in the 1950s.

Source: https://en.wikipedia.org/wiki/Axis_mundi

Cella

The *cella* was a small room meant to store food; later the notion more generally denoted a closed room; finally it became the closed central space of the temple in which the godhead hides. F. Muller/E.H. Renkema, *Beknopt Latijn-Nederlands woordenboek*, Groningen: Wolters, 1958.

Source: <https://en.wikipedia.org/wiki/Cella>

Effatum et liberatum

“A templum was the sacred space defined by an augur for ritual purposes, a place “cut off as sacred: compare Greek *temenos*, from *temnein*, to cut.” It could be created as temporary (as in the case of the *templum in caelo*) or permanent (*templum in terra*.) The *templum* was always aligned with the cardinal points. When it was drawn and confirmed by the augur in order to take the auspices, the *templum* was “defined and freed,” *effatum et liberatum*.

See also: <http://www.artandpopularculture.com/Templum>

Entasis

Entasis is the application of a convex curve to a surface for aesthetic purposes.

Source: <https://en.wikipedia.org/wiki/Entasis>

Genius

The genius is a particular manifestation of a universal divine essence that permeates each and every person, location, and object.

Source: <https://weirditaly.com/2022/10/10/the-roman-deities/>

Often the genius is associated with the guardian spirit. In the case of people a genius is assigned to someone on the day of birth. In Italian this association with birth is still clearly recognizable in the etymological affiliation of *genio* (genius) and *generare* (to generate). Cf. Giorgio Agamben, *Profanazioni*, Roma: Nottetempo, 2005, pp. 9-18

Genius loci

In classical Roman religion, a *genius loci* was the protective spirit of a place.

Source: https://en.wikipedia.org/wiki/Genius_loci

The concept was reintroduced in architecture by Aldo Rossi in his book *The Architecture of the City*, and later used by Christian Norberg Schulz in *Genius Loci, towards a Phenomenology of Architecture*.

Eternity or the eternal past (Schelling)

“Eternity or the eternal past is simply the atemporal existence of the whole of what is; time is but the successive appearance of the severed part, a dispersion of organic totality into externality.”

Source: Michael Vater in his introduction to Schelling, *Bruno, or On the natural and divine principle of things*. 1802, p. 19.

Gesta

The time of the creation of the world by the gods.

See *Illud tempus*.

Grotto

When I say “grotto” I mean the artificial type of cave we often find in Renaissance and Mannerist gardens. Although the grotto room is an invariable in the history of (landscape)architecture —we already find versions of it in Roman villas, in the English landscape garden and even in the refined shell-rooms of Baroque palaces, it finds its cultural summit in the Mannerist garden. The idea of the grotto is that one stumbles upon a secret nature-made subterranean space in which one may

see creative nature producing all kind of wonderful natural artefacts even before it gave birth to the human. Although nature gods and all kind of mythical beings such as fauns and nymphs may be part of the scene, if the human appears, it is usually only in a sort of premature state, either half-animal as in the grotto of the animals in the villa Castello in Sesto Fiorentino of Niccolo Tribolò, or still partly stuck in the stone, as in the pastoral group in the grotto of Buontalenti in the Boboli gardens in Florence. In the Mannerist grotto it is often as if inorganic nature takes an advance on organic life, dreaming of its wonderful styles. FS

Haecceity

Haecceity (From the Latin *haecceitas*, which translates as “thisness”) is a term from medieval scholastic philosophy, first coined by followers of Duns Scotus to denote a concept that he seems to have originated: the irreducible determination of a thing that makes it *this particular* thing. Haecceity is a person's or object's *thisness*, the individualising difference.

Source: <https://en.wikipedia.org/wiki/Haecceity>

Deleuze and Guattari revitalized the concept to describe a non-subjective, non-personal individualisation: “*Une saison, un hiver, un été, une heure, une date ont une individualité parfaite et qui ne manque de rien, bien qu' elle ne se confonde pas avec celle d'une chose ou d'un sujet.*” *Mille Plateaux*, p. 318 “A season, a winter, a summer, an hour, a date, have a perfect individuality lacking nothing, even though this individuality is different from that of a thing or a subject.” (translation Brian Massumi)

Hypaethral

In classical architecture, *hypaethral* describes an ancient temple with no roof.

Source: <https://en.wikipedia.org/wiki/Hypaethral>

Illud tempus/in illo tempore

In those times: meant are the mythical times of origins, of the creation of a world.

In *The Sacred and the Profane* (pp.69-60) Mircea Eliade writes that *Illud tempus* refers to “the time that was created and sanctified by the gods at the period of their *gesta*, of which the festival is precisely a reactualization. In other words, the participants in the festival meet in it the first appearance of sacred time as it appeared ab origine, *in illo tempore*.”

Lares

“Lares served as protective deities. They may have been guardians of the hearth, fields, boundaries or fruitfulness.”

Source: <https://weirditaly.com/2022/10/10/the-roman-deities/>

Manerie(s)

“It is probable, then, that the term *maneries* derives neither from *manere* (to express the dwelling place of being in itself, Plotinus’s *mone*, or the *manentia* or *mansio* of the medieval philosophers) nor from *manus* or hand (as the modern philologists would have it), but rather from *manare*, and thus it refers to being in its rising forth. This is not, in terms of the division that dominates Western ontology, either an essence or an existence, but a *manner of rising forth*; not a being that is *in* this or that mode, but a being that is *its* mode of being, and thus, while remaining singular and not indifferent, is multiple and valid for all.” Giorgio Agamben, *The coming community*,

Source: <https://theanarchistlibrary.org/library/giorgio-agamben-the-coming-community#toc7>

Manes

“The *Manes* or *Di Manes* are chthonic deities in ancient Roman religion who are often supposed to symbolize the spirits of departed loved ones. They were connected to the Lares, Lemures, Genii, and Di Penates as domestic, local, and personal worship deities.”

Source: <https://weirditaly.com/2022/10/10/the-roman-deities/>

Natura naturans & natura naturata.

The distinction is expressed in Spinoza’s Ethics as follows: By *Natura naturans* we must understand what is in itself and is conceived through itself, or such attributes of substance as express an eternal and infinite essence, that is ... God, insofar as he is considered as a free cause. But by *Natura naturata* I understand whatever follows from the necessity of God’s nature, or from God’s attributes, that is, all the modes of God’s attributes insofar as they are considered as things which are in God, and can neither be nor be conceived without God.

Source: https://dbpedia.org/page/Natura_naturans

Negotium

Business and daily affairs, often used in contrast with *otium*: leisure time

Megaron

The *megaron* was the great hall in very early Mycenaean and ancient Greek palace complexes. Architecturally, it was an almost closed rectangular hall that was surrounded by four columns, fronted by an open, two-columned portico. It had a central, open hearth that vented through an oculus in the roof.

Source: <https://en.wikipedia.org/wiki/Megaron>

Non-finito

Artistic category in Mannerism. Michelangelo believed that the sculpture was already there in the block of marble. Sculptures were left unfinished because the block of marble stopped suggesting the lines and forms of a further elaboration, as we can see in 'the slaves' of Michelangelo. In art such an unfinished character is called the *non-finito*.

Nymphaeum

Originally a nymphaeum is a shrine or a grotto dedicated to nymphs and water gods. From Roman times onward it is usually a semi-circular garden element with a fountain, a grotto and/or a pond, devoted to a nymph or nymphs. In Renaissance gardens it is often the same element as the grotto.

Cf. <https://en.wikipedia.org/wiki/Nymphaeum>

Munire (munio)

To build walls, to fortify; to protect, to shelter, to shield.

Oecumene

Oecumene (also ecumene): in Christian religion oecumene means the striving for unity and cooperation in the divided Christian Church. The word has a Greek origin: oikoumène, the whole of the inhabited world. Inhabited here means inhabited by humans, as distinguished from the uninhabited world. I will use the term as a crossing of the Greek and Christian meaning: a human striving to inhabit the earth with all other organic and inorganic life on a basis of respect and equality, a striving to be a non-dominant part of the environment.

Orbis terrarum

For the Romans the circumference of the whole known world.

Source: <https://www.roangelo.net/valente/terrarum.html>

Otium

Leisure time. Originally otium meant the time the soldiers were not busy waging war, it was their spare time, often ultimate boredom.

Peristylum/Peristyle

“In ancient Greek and Roman architecture, a peristylum (from Greek περίστυλον) is a continuous porch formed by a row of columns surrounding the perimeter of a building or a courtyard.”

Source: <https://en.wikipedia.org/wiki/Peristyle>

Quadrata (urbs quadrata)

The origin of the term remains obscure but probably it is the town sectioned by the Kardo and Decumanus, thus already orientated according to the regions of the sky. The four resulting quarters were dedicated to specific gods.

Sol-ipse

Only me, only myself.

Stylobate

Originally the upper stair of the stepped base of the Greek temple, the *crepidoma*, the part on which the styles (columns) of the peristylum rested, to be distinguished from the stereobate, the lower stairs of the *crepidoma*. In the 19th century this concept would gradually expand to designate any base on which a building or more buildings are erected, shortly the entire *crepidoma*. See also: <https://en.wikipedia.org/wiki/Stylobate>

Wright used the notion to designate such a base or platform. The Cheney House and part of the Unity temple complex are posed on a stylobate, but also later houses such as the Hagan estate, indeed strongly remembering the Greek *crepidoma*, evening the terrain. Wright, in his prairie-years, also used the term to refer to the arrangement of the wall up to the sill of the band of casement-windows. This part

of the wall could vary in height according to the conditions of the terrain, thus it felt logical to use the same word for it as the stylobate-platform because it took over that function. Thus he used it to designate the “simple, unbroken wall-surface from floor to level of the second story sill.” FLW, *CW1*, pp. 94.

Temenos

A **temenos** (Greek: τέμενος; plural: τεμένη, *temenē*) is a piece of land cut off and assigned as an official domain, especially to kings and chiefs, or a piece of land marked off from common uses and dedicated to a god, a sanctuary, holy grove or holy precinct. See also Rykwert. p. 46.

Source: <https://en.wikipedia.org/wiki/Temenos>

Temno

“I cut.” From Greek infinitive *temnein*, to cut, to sever.

Templum

A templum was the sacred space defined by an augur for ritual purposes, a place “cut off as sacred: compare Greek *temenos*, from *temnein* to cut.

Source: https://en.wikipedia.org/wiki/Glossary_of_ancient_Roman_religion#templum

It could be created as temporary (as in the case of the templum in caelo, or permanent (templum in terra.) The templum was always aligned with the cardinal points.

Templum in terra & templum in caelo

When beginning the ritual of the taking of the auspices, with his staff the augur inscribed a small sign in the soil. The sign consisted of a cross inscribed in a circle, the small *templum in terra*. [FIG. 2.4] The cross had to be aligned to the cardinal points and—when approved by the gods—gave birth to the *kardo* and *decumanus*, the axes organizing the roman town and the ager Romanum. [FIG. 2.6]

The *templum in caelo* had its own sign [FIG. 2.]. As a sign it had to be aligned with the four *templa*, the four regions of the sky. As the window of divination it could be practically constructed by assigning some reference points in the environment and by thus defining the window in which the signs of the gods had to be awaited. When the signs were found favourable by the augur, the area of a larger *templum in terra*

—the sacred area to build a city or temple—could be defined. For all these aspects and their references, see § 2.2.2.

Cf. Rykwert, Joseph, *The Idea of a Town, the Anthropology of Urban Form in Rome, Italy and the Ancient World*.

Terraferma

The Terraferma was the hinterland territories of the Republic of Venice beyond the Adriatic coast in Northeast Italy.

Source: https://en.wikipedia.org/wiki/Domini_di_Terraferma

Umbilicus mundi

(Also called mundus) The navel of the world. Usually a pit in which some clods of the native earth were thrown by the Roman settlers. The *mundus* was thus supposedly the place of the manes, the deified ancestors and as such it became the umbilicus, the navel (umbilicus) of their new world.

Cf. Rykwert, Joseph, *The Idea of a Town, the Anthropology of Urban Form in Rome, Italy and the Ancient World*, p. 59.

Usonia

Wright associated this name with a truly democratic and truly united America. He thought it was a name invented by Novelist and writer Samuel Butler, but there is no proof of this. FLW, CW3, p. 319.

Usonian

Of Usonia.

Usonian Home/ Usonian House

In the 1930s, Wright—who had built a reputation for building expensive houses—was challenged to design moderate cost houses. He stood up to that challenge by designing a construction system without deep foundations (the heated floor slab would keep the frost on a distance and make the deep foundation superfluous), and with walls of wooden sandwich-panels and light wooden roofs easily supported by those panels. Only a few walls, the hearth and the chimney were built with brick masonry. The panels consisted of a plywood kernel and (batten and) boards as a

cladding, with bitumen paper on one side of the kernel making them wind-proof. Part of their structural rigidity was the result of using horizontal wooden shelves at the inside, making practical use (book storing etc.) coincide with structural rigidity, thus accomplishing another feature of economy.

“Usonian” remained Wright’s name for achievable houses. Wright’s desire to build economic homes also gave birth to the so called “Usonian Automatic,” a system of concrete blocks for self-builders.

Eventually , at the end of his life, the title tended to comprehend all Wright’s efforts to build “in an American spirit.”

Vesta

In Roman mythology, *Vesta* was the virgin goddess of hearth, home, and family.

Watertable

A **watertable** is a projection of lower masonry on the outside of a wall slightly above the ground. It is both a functional and architectural feature that consists of a projection that deflects water running down the face of a building away from lower courses or the foundation. Wright: *An Autobiography*, p. 165.

Source: [https://en.wikipedia.org/wiki/Water_table_\(architecture\)](https://en.wikipedia.org/wiki/Water_table_(architecture))

List of Figures

The abbreviation FLLWA (MOMA/AA&FALCU) refers to: The Frank Lloyd Wright Foundation Archives (Museum of Modern Art/Avery Architectural & Fine Arts Library, Columbia University)

- 1.1 The Larkin building, Buffalo (NY), 1906. The building recedes between its huge and massive towers. [Photo: Clarence Fuermann and Henry Fuermann and Sons, Chicago] 52
- 1.2 Unity Temple, Oak Park, Chicago (IL), 1908. Interior with skylights and clerestory windows [Photo: Frans Sturkenboom] 54
- 1.3 Unity Temple. Clerestory windows with moss green 'tassels' [Photo: Frans Sturkenboom] 54
- 1.4 Unity Temple, skylights. Pattern of the leaded glass in one coffer and in a series of coffers. [Photo: Frans Sturkenboom] 55
- 1.5 Unity Temple. Play of contraction and expansion (ressault) at the place of the slot. [Photo: Frans Sturkenboom] 56
- 1.6 Unity Temple. Slot and 'ladder window' cutting open the shield of the wall. [Photo: Frans Sturkenboom] 56
- 1.7 Photograph of the disappearing city in *The Disappearing City* [Source: FLW, *The Disappearing City*, New York, William Farquhar Payson, 1932. Courtesy of FLLWFA (MOMA | AA&FALCU)] 58
- 1.8 Photograph in the disappearing city with its caption "find the citizen." [Source: FLW, *The Disappearing City*, New York, William Farquhar Payson, 1932. Courtesy of FLLWFA (MOMA | AA&FALCU)] 58
- 1.9 Unity Temple. Exterior: the blank façade. [Photo: Frans Sturkenboom] 59
- 1.10 The Baroque city, the Rome of Sixtus the fifth. Long distance attractors. [Drawing left: Giovan Francesco Bordini, *De rebus praeclaris gestis a Sixtus V*, p.m. 1588 | Drawing right, Siegfried Giedion; source: Giedion, Siegfried, *Space, Time and Architecture, The Growth of a new tradition*, Cambridge (MA), Harvard University Press, 1982 (1941)] 64
- 1.11 The Baroque city: long distance attractors. Obelisk in Piazza del Popolo, Rome. [Gaspar van Wittel, 1678] 64
- 1.12 Short distance seductors: Francesco Borromini, facade of the San Carlo alle Quattro Fontane, Rome, 1666. [Photo: Nicolas Hartmann; CC BY-SA 4.0] 65
- 1.13 The Baroque city: streets converging to the palace in Karlsruhe. [Photo: unknown] 65
- 1.14 Borromini, Oratory of St. Philippi Neri, façade, Rome, 1650. [Photo: Matthias A. Peterseim; CC BY-SA 4.0] 66
- 1.15 Bernini, St. Peters Colonnade, Rome, Italy, 1667. [Photo: David Iliff, CC BY-SA-3.0] 66
- 1.16 SC Johnson Administration Building, Racine (WI), 1936. [Photo: Carol M. Highsmith; Library of Congress] 66
- 1.17 SC Johnson Administration Building and Research Tower, 1955. [Courtesy of SC Johnson] 68

- 1.18 SC Johnson Administration Building and research tower. An era fully consuming speed. [Courtesy of SC Johnson] 68
- 1.19 Johnson Wax Company Building, overview of the great hall. [Photo: Carol M. Highsmith, Library of Congress] 70
- 1.20 SC Johnson Administration Building: play of convex and concave. [Photo: Carol M. Highsmith, Library of Congress] 70
- 1.21 SC Johnson Administration Building, furniture. [Photo left: Sailko, CC BY-3.0; photo right: courtesy of SC Johnson] 70
- 1.22 SC Johnson Administration Building: columns, section. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 71
- 1.23 SC Johnson Administration Building: fountains of matter. [Courtesy of SC Johnson] 71
- 1.24 SC Johnson Administration Building, advertisement department, cupola and screen of Pyrex tubes. [Courtesy of SC Johnson] 72
- 1.25 The Baroque city: nature in the public spaces. [Photo: Cezar Suceveanu, CC-BY-SA 4.0 International] 74
- 1.26 SC Johnson Administration Building, "a massif bloc of earth." [Photo: pasa47] 75
- 1.27 FLW, Broadacre, model, 1936. [Photo: courtesy of FLLWFA (MOMA / AA&FALCU)] 78
- 1.28 Broadacre, divisions. [Colour schemes: Frans Sturkenboom | Urban plan: courtesy of FLLWFA (MOMA / AA&FALCU)] 79
- 1.29 Broadacre, 'land uses.' [Courtesy of FLLWFA (MOMA / AA&FALCU)] 80
- 1.30 Broadacre, 2560 acres. [Drawing: courtesy of FLLWFA (MOMA / AA&FALCU)] 83
- 1.31 Acres and furlong. [Photo: Unitfreak] 83
- 1.32 *Ager Romanum*: confrontation natural artefacts and orthogonal parcelling. [Source: Jeremia Pelgrom, *The Roman rural exceptionalism thesis revisited.*] 85
- 1.33 Broadacre in regional model. Drawing: Donald Leslie Johnson. 87
- 1.34 Broadacre. Central area acres with school strip with little acres to the right and vineyards and orchards to the left. [Photo: courtesy of FLLWFA (MOMA / AA&FALCU)] 90
- 1.35 Roman town; division in central area and acres around. [Source: Jeremia Pelgrom, *The Roman rural exceptionalism thesis revisited.*] 95
- 1.36 Antenna on the Marin County Civic Center. [Photo: User: nandhp, CC-BY-SA 2.5 generic] 96
- 1.37 Aerators flying above Broadacre and antenna on skyscraper. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 98
- 1.38 Broadacre car: "steering by tiller." [Courtesy of FLLWFA (MOMA / AA&FALCU)] 98
- 1.39 Broadacre, cars on the regional roads. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 99
- 1.40 Madison Monona Terrace, Madison (WI), 1938, aerial perspective. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 101
- 1.41 Pittsburgh Point Center, Pittsburgh (PA), 1947, aerial perspective. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 101
- 1.42 Chicago grouped towers, Chicago (IL), 1930. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 105
- 1.43 FLW, Chicago grouped towers project, Chicago (IL), 1930. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 106
- 1.44 Ancient Rome, model. The so called *plastico di Roma Imperiale*. Rome as it was supposed to be in the times of emperor Constantine (AD 306-337). [Photo: unknown] 111

- 1.45 Marin County Civic Centre, St. Raphael (CA), 1962 [Photo: unknown] 111
- 1.46 FLW, Greek Orthodox Church, Milwaukee (WI), 1956. [Photo: Frans Sturkenboom] 112
- 1.47 Galesburg Country Homes, Galesburg (MI), 1947, plan. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 114
- 1.48 Curtis Meyer House, Galesburg (MI), 1948. [Photo: Frans Sturkenboom] 118
- 1.49 The concave side of the Curtis Meyer House. [Photo: Frans Sturkenboom] 118
- 1.50 The convex side of the Curtis Meyer House. [Photo: Frans Sturkenboom] 118
- 2.1 Gnomon and construction of the *decumanus*, parallel to east-west alignment. [Drawing: Michael Ferrar] 126
- 2.2 The gnomon transformed to a windrose. 126
- 2.3 How the city-plan may be turned on the windrose to use the favourable winds and to avoid the unfavourable winds. [According to Vitruvius, book 1, chapter 6] 126
- 2.4 *Templum* of the earth, *Codex Arcerianus*. 129
- 2.5 The *auspicatio* (watching the sky). 129
- 2.6 *Groma* used by the Roman surveyor to align streets or lot-borders. [Drawing: Michael Ferrar] 129
- 2.7 Wright's signature square during first part of his career. 132
- 2.8 *Templum* of the earth with *Kardo Maximus*(KM) and the *Decumanus Maximus* (DM). 132
- 2.9 *Templum* of the sky. Source: Joseph Rykwert, *The idea of a town*, 1976 132
- 2.10 Scheme of the *templa* in the Roman auguration. [Drawing: Frans Sturkenboom] 138
- 2.11 *Effatum et liberatum est*. The establishment of the *Templum in Caelo* as the area of auspication, spatial scheme. [Drawing: Frans Sturkenboom] 138
- 2.12 *Effatum et liberatum est*. The establishment of the *Templum in Caelo* as the area of auspication: vertical and horizontal projection. [Drawing: Frans Sturkenboom] 139
- 2.13 Willits House, Highland Park, Chicago (IL), 1901, plan. Latin cross with hearth at the *decussis*. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 140
- 2.14 Robert Llewellyn Wright House, Bethesda (MA), 1957. Donjon in front facade. [Photo: © Yukio Futagawa] 141
- 2.15 Jacobs II House, "Solar hemicycle", tunnel. [Photo: Frans Sturkenboom] 142
- 2.16 Jacobs II House, 'Solar hemicycle'. Front side. [Photo: unknown] 142
- 2.17 FLW, Robie House, Chicago (IL), 1911. [Photo: David Arpi; CC BY 2.0] 143
- 2.18 Robie House. "The eave now becomes the hand above the eye, scanning the horizon on possible manoeuvres of 'the enemy.'" [Photo: By Teemu08; CC BY-SA 3.0] 143
- 2.19 Heurtley House, Chicago (IL), 1902. Ornamental bastion before the front door. [Photo: Frans Sturkenboom] 144
- 2.20 Robie House, terrace doors with coloured leaded glass. [Photo: © Yukio Futagawa] 147
- 2.21 Robie House. Masonry of 'Roman bricks'; deepened horizontal joints, vertical header joints set flush with the face of the bricks and coloured red. [Photo: Mike Sirotin] 149
- 2.22 Robie House. "The back of the chairs shape a real cathedral." [Courtesy of Frank Lloyd Wright Trust, Photo: James Caulfield] 150

- 2.23 Robie House, Couch, settee with fireplace sunk into the floor, chimneys and double flue. [Courtesy of Frank Lloyd Wright Trust, Photo: James Caulfield] 151
- 2.24 Robie House, rug on the floor of the living Room. [Photo: unknown] 151
- 2.25 Wright's ideal orientation turning 30° from *Kardo Maximus* (South-North). The clerestory is a means of orientating the house in the celestial *templum*. [Drawing: Frans Sturkenboom] 152
- 2.26 Schwarz House, Two Rivers (WI), 1939, clerestory panels. [Photo: unknown] 153
- 2.27 Clerestory panels, overview of all designs, 2018. [Drawing by Tangibit Studios] 153
- 2.28 Loren Pope House, Falls Church (VA), 1939. Clerestory panels and ladder window. [Photo: Lincoln Barbour] 154
- 2.29 Willits House, Highland Park (Illinois), 1901, dining area, with electric *templum*. [Photo: Shortline Garage] 156
- 2.30 Willits House, pattern in the glass of the electric *templum*. 156
- 2.31 Schwarz House, Two Rivers (WI), 1939, fireplace. [Photo: A. Johnson] 157
- 2.32 Lowell Walter House, Cedar Rock, Quasqueton, (IA), 1945 159
- 2.33 Hagan Estate, Kentuck Hill (PA), 1956, perforated eave. [Photo: Klaske Havik] 159
- 2.34 Randall Fawcett House, Los Banos (CA), 1961: perforated eave with cornice. [Photo: Jim Gimmons, courtesy Crosby Doe Associates] 159
- 2.35 Allen Friedman House, Bannockburn (IL), 1956, perforated ornamented eaves. [Photo: chicagogeek] 159
- 2.36 Allen Friedman House, Bannockburn (IL), 1956, perforated ornamented eaves. [Photo: chicagogeek] 159
- 2.37 Ornamented edge of the Greek orthodox church, Wauwatosa, WI, 1961. [Photo: Gillfoto, CC BY-SA 4.0] 159
- 2.38 Weltzheimer House, Oberlin, Ohio, 1948. Perforated eave with cornice. [Photo: Patrick Kilkenny] 159
- 2.39 Pew House, Madison (WI), 1938, 'trellis' above window. [Photo: Huellas de Arquitectura] 159
- 2.40 Arch Oboler House, Malibu (CA), 1940: "Eaglefeather." [Courtesy of FLLWFA (MOMA / AA&FALCU)] 161
- 2.41 Huntington Hartford project. Hollywood Hills (CA), 1947. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 161
- 2.42 Robert Llewellyn Wright House, Bethesda (MA), 1953. Floor plans. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 166
- 2.43 Robert Llewellyn Wright House, interior. [Photo: © Yukio Futagawa] 168
- 2.44 Robert Llewellyn Wright House, interior. [Photo: © Yukio Futagawa] 168
- 2.45 Robert Llewellyn Wright House, terrace. [Photo: © Yukio Futagawa] 169
- 2.46 Robert Llewellyn Wright House. Multiplication of the *umbilicus mundi*. (UM) and thus the axis mundi. [Drawing: Frans Sturkenboom] 169
- 2.47 Robert Llewellyn Wright House, rear facade. [Photo: © Yukio Futagawa] 170
- 2.48 Robert Llewellyn Wright House, 'prow.' [Photo: © Yukio Futagawa] 170
- 2.49 Robert Llewellyn Wright House, sleeping room. [Photo: © Yukio Futagawa] 171
- 2.50 Llewellyn Wright House/ Pauson House: tectonic schemes. [Drawings: Frans Sturkenboom] 172
- 2.51 Pauson House, Phoenix (AZ), 1942. [©The Estate Pedro E. Guerrero] 173

- 2.52 Robert Llewellyn Wright House, first scheme, pedestal terrace & garden. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 173
- 2.53 Robert Llewellyn Wright House. [Drawing: Frans Sturkenboom] 175
- 2.54 Robie House, Chicago, (IL), 1911. Living room with settee and hearth. Courtesy of Frank Lloyd Wright Trust. Photo: James Caulfield]. 176
- 2.55 Robie House, Chicago, (IL), 1910, scheme of the mobility on the plot. [Drawing: Frans Sturkenboom] 176
- 2.56 Robie House, Chicago, (IL), 1911, plan of the upper floor, clearly showing the roofs of Hoffmann's "two vessels." [Courtesy of FLLWFA (MOMA / AA&FALCU)] 183
- 3.1 Buontalenti, grotto in the Boboli Gardens, Florence, 1557-1587. [Photos: Ron Reznick] 188
- 3.2 Palladio, Villa Barbaro, Maser, Italy, 1560, aerial view. [Photo: Google Earth] 190
- 3.3 Palladio, Villa Barbaro, facade, plan, section. [Drawing: Veronica Riavis] 191
- 3.4 Palladio, Villa Barbaro; left: wall painting as a window, right: view from central window in the salone. [Photo left: Oxxo; Photo right: Frans Sturkenboom]. 192
- 3.5 Palladio, Villa Barbaro, nymphaeum with grotto behind the villa. [Photo: Frans Sturkenboom] 193
- 3.6 Taliesin-North, Spring Green(WI), 1911-1925). Band of windows in the living room in the architect's quarters. [Photo: Stilfehler, CC-BY-SA 4.0 international] 194
- 3.7 The Birdwalk, a long balcony projected from the living room of Taliesin, 1953. [Photo: © Yukio Futagawa] 195
- 3.8 'Courtyard' between hill and house or the "Hill garden" at Taliesin North. [Photo: Rick McNees] 196
- 3.9 Taliesin oriented on the hill and packed in trees at the valley side. [Photo: Google Earth] 198
- 3.10 Taliesin in the Jones Valley with Wisconsin River [Courtesy of Topozone] 200
- 3.11 Typical Driftless Area landscape. [Photo: Corey Coyle; CC BY 3.0] 200
- 3.12 Taliesin North. [Photo: Nomadseiffer] 203
- 3.13 Taliesin North, living room. Chimney cut off by the trim. [Photo: © Yukio Futagawa] 205
- 3.14 Taliesin North, guest room. [Photo: © Yukio Futagawa] 206
- 3.15 Pagoda-like small roofs piled up on top of the architect's quarters in Taliesin II. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 208
- 3.16 Katsushika Hokusai, The Minister Toru Daijin standing by a lake beneath a crescent moon, 1835. 209
- 3.17 Katsushika Hokusai, Old View of the eight part bridge in Mikawa Province, c. 1834 209
- 3.18 Aerial perspective of Taliesin North II, 1914. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 210
- 3.19 Living room in Taliesin North, rug with labyrinth and rippling motifs. [Photo: © Yukio Futagawa] 212
- 3.20 Buontalenti, Grotto in the Boboli Gardens. [Photo: Sonofgroucho, CC BY-SA 2.0] 215
- 3.21 Frank Lloyd Wright, sculpture worked into the sandstone wall, Taliesin North. [Photo: Stilfehler, CC BY-SA 4.0] 215
- 3.22 Boynton House, Rochester (NY), 1908. [Photo: Hans Padelt, Library of Congress] 216
- 3.23 Bear Run and Cambrian sandstone masses. [Photo: from a postcard before 1912; Courtesy of The Western Pennsylvania Conservancy] 219

- 3.24 Rock ledges around the house Fallingwater. [Photo: Carol M. Highsmith, Library of Congress] 219
- 3.25 Fallingwater, 'canyon staircase' leading to the plunge pool. [Photo: Apostolo] 222
- 3.26 Fallingwater, staircase leading to the bridge to the guest apartments. [Courtesy of The Western Pennsylvania Conservancy] 222
- 3.27 Fallingwater. Staircase from the living room to the Bear Run. [Photo: © Yukio Futagawa] 222
- 3.28 Fallingwater. Living room with rock in front of the hearth and the spherical kettle in its encasing. [Photo: Jack E Boucher] 226
- 3.29 Fallingwater. Windows like modern Jacob's ladders connecting the "airborne" and the terrestrial city. [Photo: © Yukio Futagawa] 227
- 3.30 Fallingwater. Windows like Jacobs ladders connecting the "airborne" and the terrestrial city. [Photo: Cambridge 2000 Gallery] 227
- 3.31 Fallingwater. Shelves crossing different material surfaces. [Photo: Anny C. Wynn] 228
- 3.32 Fallingwater. "Tree spared by house." [Photo: Daderot, CC0 1.0] 231
- 3.33 Taliesin North III, Chimneys crude and rough. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 234
- 3.34 Henri Hobson Richardson, Ames Gate Lodge, Easton (MA), 1881. [Photo: Daderot, CC BY-SA 3.0] 234
- 3.35 Fallingwater, Master Bedroom. [Photo: © Yukio Futagawa] 236
- 3.36 Phenomenological diagram of Fallingwater. [Drawing: Frans Sturkenboom] 238
- 3.37 Phenomenological diagram of Fallingwater. [Drawing: Frans Sturkenboom] 238
- 4.1 Scheme of temporal layers in geology. [Image: Jonathan R. Hendricks. CC BY-SA 4.0] 246
- 4.2 Drawing of the Arizona Crater Resort, Meteor Crater (AZ), 1948. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 252
- 4.3 Clinton Walker House, Carmel (CA), 1951. [Drawing: courtesy of FLLWFA (MOMA / AA&FALCU) | Photo right: DRN, source: Wright chat/Frank Lloyd Wright Building Conservancy]] 255
- 4.4 Sol Friedman House, Pleasantville (NY), 1948. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 256
- 4.5 Movements in the plan [Drawing: Frans Sturkenboom] 256
- 4.6 The shifting of the two circles is clearly visible in the contours of the House. [Photo: Stilfehler; CC BY-SA 4.0] 257
- 4.7 Sol Friedman House, elevation and roof framing plans. [Drawing: courtesy of FLLWFA (MOMA / AA&FALCU)] 257
- 4.8 Rhythms of horizontals and verticals in the facades. [Drawing: Frans Sturkenboom, background drawing: courtesy of FLLWFA (MOMA / AA&FALCU)] 258
- 4.9 Sol Friedman House. Organizing movements in the plan. [Drawing: Frans Sturkenboom] 259
- 4.10 Sol Friedman House. Organizing axes in the section. [Drawing: Frans Sturkenboom] 259
- 4.11 Sol Friedman House: walls 'moving around and about' on the site. [Photo: Stilfehler; CC BY-SA 4.0] 260
- 4.12 Sol Friedman House: silhouettes in the perspectives 1. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 260
- 4.13 Sol Friedman House: silhouettes in the perspectives 2. [Editing drawing: Frans Sturkenboom] 260

- 4.14 Drawing of the Fir Tree (Arnold Friedman House), Pecos (NM), 1948. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 261
- 4.15 Arnold Friedman House, plan. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 262
- 4.16 Alexander Von Humboldt: Naturgemälde, depicting vegetation zones on the Volcanos Chimborazo en Antisana, 1807. 263
- 4.17 Arnold Friedman House, interior. [Photo: Trevor Tondro] 264
- 4.18 Taliesin West, Scottsdale (AZ), 1937: desert concrete. [Photo: Steven C. Price; CC BY-SA 4.0] 273
- 4.19 Hagan Estate, Chalk Hill, (PA), 1953; stylobate/prow. [Photo: Jeff Kubina, CC BY-SA 2.0] 274
- 4.20 Smith House, Piedmont Pines (CA), 1939 [Courtesy of FLLWFA (MOMA / AA&FALCU)] 277
- 4.21 Wooden oil drilling tower: Drake tower. [Courtesy of Drake Well Museum] 277
- 4.22 Golden Beacon, Apartment Tower for Charles Glore, Chicago (IL), 1956. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 278
- 4.23 Golden beacon, tap root foundation. 278
- 4.24 Ralf and Wellington Cudney House, San Marcos in the Desert, Chandler (AZ), 1928. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 279
- 4.25 Leigh Stevens House, Yemassee, South Carolina, 1939, section and plan. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 281
- 4.26 Kaw bark wigwam. [Photo: Ruth Mohler Collection] 281
- 4.27 Seminole fabrics. 282
- 4.28 Yamasee fabric. 282
- 4.29 Leigh Stevens House, Yemassee (SC), 1939, clerestory panel. 282
- 4.30 Leigh Stevens House, Yemassee (SC), 1939; downspout ornament. [Photo left: © Yukio Futagawa. Photo right: unknown]. 283
- 4.31 Leigh Stevens House. [Photo: Anthony Peres] 283
- 4.32 Robie House, section with the curved, pagoda-like eaves. [Drawing: Mary Reyner Banham for the Historic American Buildings Survey] 285
- 4.33 European settlers in North America: making a home of the wilderness. [Image left: undated print, 1870s: Library of Congress]. Photo to the right: the so called "John Oliver Cabin." [Photo: Jarek Tuszynski, CC-BY-3.0 & GDFL] 286
- 4.34 Pauson House, Phoenix, AZ, 1942, section. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 288
- 4.35 Pauson House: overlapping board technique. [Photo: unknown] 288
- 4.36 Fiberthin Village, late 1950-ties, rendering. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 290
- 4.37 Fiberthin Airhouses at a Kentucky university. Photo originally appeared in November 11, 1957 issue of Life magazine. 290
- 4.38 How to live in the south-west (later to become the David & Gladis Wright House, Phoenix, AZ). [Courtesy of FLLWFA (MOMA / AA&FALCU)] 293
- 4.39 FLW, Windswept, Franklin Watkins Studio, Barnegat, (NJ) 1940. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 293
- 4.40 Leigh Stevens House, Yemassee, South Carolina, 1939. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 296
- 4.41 Sturges House, Los Angeles (CA), 1939. [Photo: Frans Sturkenboom] 296
- 4.42 The 'hang-glider' of the Palmer House, Ann Arbor (MI), 1950. [Photo: Frans Sturkenboom] 296

- 4.43 Morris House, San Francisco (CA), 1945, scheme 1. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 297
- 4.44 Eaglefeather (Arch Oboler House), Malibu, 1940. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 298
- 4.45 Eaglefeather, section. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 299
- 4.46 Eaglefeather, rendering. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 299
- 5.1 A Victorian House. [Photo:Renelibrary, CC BY-SA 4.0 International] 309
- 5.2 The bay windows of the Hanna House, Palo Alto (CA), 1937. [Photo: © Yukio Futagawa] 309
- 5.3 Malcolm Willey House, Minneapolis (MN), 1934. Floor becoming wall continuing in hearth and chimney.. [Photo: Matt Schmitt] 313
- 5.4 Malcolm Willey House. Ceiling folding multiple times and finally becoming wall. [Photo: Matt Schmitt] 313
- 5.5 Hanna House (Honeycomb-House), Palo Alto (CA), 1937, plan. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 314
- 5.6 Hanna House. Left: window sash in the kitchen area. Right: 'virtuoso folds' in the entrance area. [Photos: Regis Vincent] 315
- 5.7 Frank Lloyd Wright nonchalantly conversing in front of the heavily overloaded columns of the SC Johnson Administration Building. [Courtesy SC Johnson]. 316
- 5.8 Buontalenti's grotto: the bas-relief in the grotto and the *spume* stone in the middle. [Photo left: Sonofgroucho CC BY 2.0. Photo right: unknown] 317
- 5.9 Villa Gamberaia, Settignano, Italy, 1600, garden. Left: basin with rock with seeping water. Centre: nymphaeum-grotto. Right: stone 'dreaming' of all kind of formes and faces. [Photos: Frans Sturkenboom] 318
- 5.10 Taliesin West, Hohokam signs: Architecture as an ethnological expedition. [Photos fltr: InSapphoWe Trust, CC-BY-SA 2.0 generic; Steven C. Price, CC-BY-SA 4.0; Courtesy of Andrew Pielage] 321
- 5.11 Daniel Wieland Motor Hotel, Hagerstown (MD), 1955. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 322
- 5.12 Greek Orthodox Church, Wauwatosa (WI), 1961. [Photo: Frans Sturkenboom] 322
- 5.13 Greater Baghdad Project. Baghdad, Iraq, 1957. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 323
- 5.14 Donahoe House, Paradise Valley (AZ), 1959. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 324
- 5.15 Donahoe Triptych, section with the sky-parlour. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 324
- 5.16 Night perspective of the Guggenheim Museum. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 325
- 5.17 German Warehouse, Richland Center (WI), 1921, [Photo: Lowell Boileau, CC BY-SA 3.0,] 327
- 5.18 Gerald Tonkens House, Cincinnati (OH), 1954. [Photo: Factfile8, CC BY-SA 4.0] 332
- 5.19 Cooper House, La Grange (IL), 1890. Example of a more 'additive' geometry. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 336
- 5.20 Wingspread, The Johnson House, Wind Point (WI), 1939. Telescoping gestures. [Photo: Mark Herzberg, courtesy © The Johnson Foundation] 337
- 5.21 Kenneth Laurent House, Rockford (IL), 1951. [Photo: Bluefish815, CC BY-SA 4.0] 338
- 5.22 Kenneth Laurent House, Rockford (IL), 1951, plan. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 338

- 5.23 Example of Wright's use of the polyhedron: Vallet National Bank, Tucson (AZ), 1949. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 339
- 5.24 Palmer House, Ann Arbor, Michigan, 1952. Plan. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 341
- 5.25 Sturges House, Brentwood, (CA), 1939. Mediating 'outgrowth' at the base of the cantilevering balcony. [Drawing left: courtesy of FLLWFA (MOMA / AA&FALCU). Photo Right: Wright chat/Frank Lloyd Wright Building Conservancy] 343
- 5.26 Drawing left: telescoping figure of an overhanging eave, detail. Drawing right: the rounded off pedestal of the Robert Llewelyn Wright House. [Both drawings: courtesy of FLLWFA (MOMA / AA&FALCU)] 343
- 5.27 Baghdad Opera House, Greater Baghdad plan, Iraq, 1957. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 344
- 5.28 The Differential curve: section Butterfly Bridge, San Francisco Bay, CA, 1956. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 345
- 5.29 Manhattan Sports Pavilion, Belmont (N.Y.), 1956. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 345
- 5.30 "The dance with the environment." Norman Lykes House, Phoenix (AZ), 1957. [Drawing: William Allin Storrer] 348
- 5.31 "Broken perimeters of the plan." The too much of form leads to relatively formless contours able to meet the *environ* of the environment. [Drawings: Frans Sturkenboom] 348
- 5.32 Katsushika Hokusai, The Great Wave, 1831. The structuring lines of the waves break to foam. 349
- 5.33 San Marcos in the Desert, Salt River Mountains (AZ), 1928, preliminary sketch of the plan. Observe how the triangular structure refines towards the edges. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 349
- 5.34 San Marcos in the Desert, Salt River Mountains (AZ), 1928, preliminary sketches, plan. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 350
- 5.35 San Marcos in the Desert, drawing of one of the textile blocks. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 350
- 5.36 Fluting of the textile blocks meant for the San Marcos in the Desert project. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 351
- 5.37 The Hagan Estate, Kentuck Knob, Chalk Hill (PA), 1956. [Photo: Klaske Havik] 352
- 5.38 Greek Orthodox Church, Wauwatosa, WI, 1956. [Photo: Kevin S. Hansen, CC BY-SA 3.0 unported] 352
- 5.39 Storer House, Los Angeles, 1923. Canopy on one of the terraces. [Photo: unknown] 353
- 5.40 South elevation of the San Marcos Hotel, Salt River Mountains, Phoenix (AZ), 1928. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 355
- 5.41 Gladney House, Fort Worth, (TE), 1924. [Courtesy of FLLWFA (MOMA / AA&FALCU)] 359
- 6.1 Piet Oudolf, Highline, New York, 2012. [Photo left: Wil Fyfordy; CC BY-SA 4.0 | Photo right: Plagman; CC BY-SA 4.0] 380
- 6.2 OMA/Rem Koolhaas, CCTV, Beijing, China, 2012. [Rendering: OMA] 382
- 6.3 Inside outside/Petra Blaisse: Maison à Bordeaux/Bordeaux revisited. 2011-2012. The villa is a design of OMA/Rem Koolhaas. [Photo: Inside outside] 383
- 6.4 Sou Fujimoto, Inhabitable Nomadic Structure for the Parisian art fair [Photo: Sou Fujimoto] 388
- 6.5 Jürgen Mayer Architects, Metropol Parasol, Sevilla, Spain, 2011. [Photos: Fernando Alda] 391

Curriculum vitae

Frans J.J.M. Sturkenboom

Rietganssingel 75,
6883 DP, The Netherlands
0031-(0)6-25044862
Info@franssturkenboomarchitect.nl
www.franssturkenboomarchitect.nl

Education

Technical University Delft – The Netherlands, Master of Architecture – 1985

Professional Experience

- Own Architectural office 1996-2016
- 1994-1995 B&D Architecten, Oosterbeek
- 1992-1994 Inbo Architecten, Apeldoorn

Teaching Experience (selection)

- Academie van Bouwkunst, Arnhem 1996-2023
- Academie van Bouwkunst Amsterdam, 2014-2021
- TU Eindhoven 1996-1998

Research Focus and Areas of Interest

- Architecture and the weather
- Architectural Theory and Phenomenology
- Gesture, Mannerism, Baroque
- Cellars, roofs, and attics in housing projects

Design Awards (selection)

- competition for the reconstruction of the station area of Wehl, 2004; 1e prize
- Brabantse welstandsprijs 2000: Categorie Individuele woningbouw, 1e prize
- European Housing Competition 1989, 2e prize
- Floriade entrance area, 1989, 3e prize

Publications, books (selection)

- *De Gestiek van de Architectuur, een Leerboek Hedendaags Maniërisme*. Artez press, 2017
- *De Weerwoning*, Research&design-project, Artez, AvB, Arnhem, 2020, (met Twan Verheyen)
- *Architectuur als Weermachine*, Meteorologie als Kader en Inspiratie voor Architectuur, Artez, AvB, Arnhem, 2018, (met Twan Verheyen)
- *Undercover, Over kappen en kelders in de Hedendaagse Woningbouw*, SUN, 1998. (met Ad Habets en Jean-Paul Kerstens)

Seminars

- *Time Matters*, with the Research group *Theory in the Arts*, Artez, University of the Arts, Arnhem, 2021
- *Theorie in de Maak*, with the Research group *Theory in the Arts*, Artez, University of the Arts, Arnhem, 2017

Time in the Work of Frank Lloyd Wright

Geology, Geography and Geometry of Architecture

Frans Sturkenboom

In times desperately in need of a deeper understanding of the relation between architecture and nature, architects may feel the obligation to learn how nature has built the earth and all that grows upon it. When orientating themselves, they will soon come across the name of Frank Lloyd Wright, who was the first modern architect to look at earth as a building (a verb and a substantive) and to explicitly thematise the time of natural history as a dimension of architecture and architectural reasoning. Wright sought a continuity between architecture and nature. In the era of the Anthropocene, in which we can no longer negate the fatal repercussions of human's decision to separate from nature and to subject it, such a thought seems highly pregnant.

Inevitably the coming era will be confronted with the question if we—humans—are able to build *with* nature instead of *on top of* it or *opposing* it. We will be forced to again pose Wright's own questions: what does it mean to strive for "a natural architecture?" What will be the role of technique in such a natural architecture? And: what does it mean to be situated and to make an architecture "proper to the place, the man and the time?" These questions become urgent in a time in which the specificity of place becomes volatile in changing climate regimes, in which globalization tends to efface all locale culture, and in which humans seem more than ever on the move.

A+BE | Architecture and the Built Environment | TU Delft BK