



Kent Academic Repository

Zartaloudis, Thanos (2020) *Lines of Architectural Potency*. *AR/Architecture Research Journal*, 2020 . pp. 147-205. ISSN 1580-5573.

Downloaded from

<https://kar.kent.ac.uk/93861/> The University of Kent's Academic Repository KAR

The version of record is available from

<https://ar.fa.uni-lj.si/2020/lines-of-architectural-potency>

This document version

Publisher pdf

DOI for this version

Licence for this version

CC BY-NC (Attribution-NonCommercial)

Additional information

Versions of research works

Versions of Record

If this version is the version of record, it is the same as the published version available on the publisher's web site. Cite as the published version.

Author Accepted Manuscripts

If this document is identified as the Author Accepted Manuscript it is the version after peer review but before type setting, copy editing or publisher branding. Cite as Surname, Initial. (Year) 'Title of article'. To be published in *Title of Journal* , Volume and issue numbers [peer-reviewed accepted version]. Available at: DOI or URL (Accessed: date).

Enquiries

If you have questions about this document contact ResearchSupport@kent.ac.uk. Please include the URL of the record in KAR. If you believe that your, or a third party's rights have been compromised through this document please see our [Take Down policy](https://www.kent.ac.uk/guides/kar-the-kent-academic-repository#policies) (available from <https://www.kent.ac.uk/guides/kar-the-kent-academic-repository#policies>).



Architecture Research
/ Arhitektura, raziskave

The Line
Notes on Politics
/ Črta
Zapisi o politiki

2020

Architecture Research
/ Arhitektura, raziskave

The Line
Notes on Politics

/ Črta
Zapisi o politiki

	Editor's Foreword
11	Marina Lathouri
	Uvodnik
21	Marina Lathouri
	Selected Works I–VIII
31	Deborah Stratman
	Following Gregory's Line into the Interior
51	Hélène Frichot
	Drawing Time: Making the Rio Meander Map
73	Chris Taylor
	Blowing Dust Off the Trails: An Itinerary Through Trans-Saharan Lines
117	Alvaro Velasco Pérez
	A Stroll on the Line
	Ethel Baraona Pohl & Léopold Lambert in Conversation
	Lines of Architectural Potency
145	Thanos Zartaloudis
	Knowledge Apparatus
	Mariabruna Fabrizi, Fosco Lucarelli

- 207 **A View on Nature:
Leon Battista Alberti's Legacy**
Chiara Toscani
- 241 **Home/Studio: Rosa Bonheur
and The Plein Air Artist**
Elena Palacios Carral
- Party Line/Line of Flight**
Alessandra Ponte
- 269 **Non-Aligned Third Way: A Chronological
Line of Ideological Shifts**
Eliana Sousa Santos
- 287 **Lines of Action and Readymade Stones:
Lev Rudnev's Monument to
the Victims of the Revolution**¹
Markus Lähteenmäki
- 325 **Re-Drawing Javanese
Building Practice**
David Hutama Setiadi
- 351 ***Bus-Aula***
Alejandra Celedón, Francisca Gómez
- 375 **Boundary-Work: Scale, Fragment, and Totality**
William Orr
- 409 **Selected Works IX–XVI**
Deborah Stratman
- 429 **Biographies**

Editor's Foreword

Marina Lathouri

Nothing is more complicated than a line or lines.

Gilles Deleuze and Claire Parnet, *Politics*,
in *On The Line*, 94

1 Tim Ingold, *Lines: A Brief History* (London and New York: Routledge, 2007), 52.

2 Michel Foucault, *Power/Knowledge: Selected Interviews and Other Writings, 1972–1977*, ed. Colin Gordon, trans. C. Gordon, L. Marshall, J. Mepham, and K. Soper (New York: Pantheon Books, 1972), 69.

Lines are everywhere. Physical or imaginary marks, traces – drawn, inscribed, subtracted, written, spoken, limits, thresholds and connections, modes of thinking. The issue, however, lies in “the ways in which they were understood,” which “depended critically on whether the plain surface was compared to a landscape to be travelled or a space to be colonized, or to the skin of the body or the mirror of the mind.”¹

For early builders, the line was the cord (the mason’s line) used for taking measurements and for making things level. Later, in the 16th century it stood for ‘a crease of the face or palm of the hand’ and for the equator, a line notionally drawn on the earth. Land bound by lines was transformed into property, resource, terrain and site of work, contemplation, or battlefield.

The diverse heterogeneous arrangements, transferred into a whole range of registers, are historically and semantically precise, and hence avowedly political. Making the surface or inscribed “both on a material soil and within forms of discourse,” lines reveal but also manipulate, contest and alter deep cultural and political forms.² Shifting borders, zones of occupation, networks of distribution, migratory patterns, prompt the confluence of a multitude of histories, real and imaginary geographies, multi-scalar and multi-dimensional bodies. Bundling and unbundling of territorial rights, boundaries stretched thin and overlapping jurisdictions, shape an economics of exchange as a form of lived politics. Coordinates set on a blank surface or words shuffled around on a sheet of paper, meld the personal and the political, the molecular and the planetary.

Writing has nothing to do with signifying,
but with land surveying and map-making,
even of countries yet to come.

Gilles Deleuze and Félix
Guattari, *Rhizome*

The basic disciplinary and professional boundaries of architecture were signaled in the early treatises (*trattati*). The coalescence of geometry and

- 3 Leon Battista Alberti, *On the Art of Building in Ten Books*, Book IX, trans. Joseph Rykwert, Neil Leach, and Robert Tavernor (Cambridge, Mass.: The MIT Press, 1988), 5.
- 4 Sebastiano Serlio uses the *linee occulte* as a tool in his Book II On Perspective for the construction of the perspectival drawing and an imaginary, or better, 'hidden' geometry fundamental for architects. And he demonstrates its importance by associating it with the human body: "we know we have skeleton but we cannot see it". It also recalls Giordano Bruno's conception of *linne occulte*, which "are implicit in a line of text, the function of which is to connect words to ideas and meaning."
- 5 "Here it is the convergence of lines that constitutes the plane as a picture plane, that is, as a projective surface upon which constructions are not so much assembled—as they would be on a real pavement—as represented." Ingold, *Lines: A Brief History*, 157.
- 6 Manfredo Tafuri, *Interpreting the Renaissance: Princes, Cities, Architects*, trans Daniel Sherer (New Haven and London: Yale University Press, 2006), 25.
- 7 Marco Frascari, *The Drafting Knife and Pen*, in *Implementing Architecture. Exposing the Paradigm Surrounding the Implements and the Implementation of Architecture*, ed. Rob Miller (Nexus Press, 1988).

optics, music, medicine, astronomy, philosophy, and law on the printed pages of the first books about architecture defines and delimits a distinct form of practice, distinct from the manual labor and the actual construction. Convergent lines, numbers and words replace templates and taut threads. The invention and writing of the idea (*disegno*) is depicted as the object of architecture and the surface of the drawing the site *par excellence* of the architect. New procedures, tools, techniques, visual conventions and norms of use as well as histories and epistemological assumptions are introduced. The same instruments are employed to measure the human body, to survey the land and project upon it social visions and civil ideals. Alberti uses the astrolabe, a navigational instrument, to describe the body in *De Statua* and the cipher wheel to form the words. The treatise becomes but a demonstration (*dimonstrazioni*) of the process of construction of 'a picture,' the "form of sympathy, of consonance of the parts."³ From the scale of the letter to the scale of the body and the scale of the building and the city, a mental picture and a territory are being de-scribed with precision, with the aid of the imaginary lines (*linee occulte, vinculi*).⁴ The dense web of invisible lines, extended to the vanishing point of human existence to construe a tradition, mark the limits of a disciplinary field but also the boundaries of a field of action.⁵ They project "shifting forms of political authority and jurisdiction but also of new ideal representations."⁶

Numerous transactions between the imaginary and the visual, the textual and the built, the legal, the political and the institutional, and multiple descriptions of the object of architecture constantly negotiating its limits and purpose, have been debated since. It is precisely within this fluid (and porous) zone of 'hidden geometries' and objects that architecture is invented as a culturally codified knowledge and set of practices.

In the early textbooks, the line of writing, the line in a drawing, and the pulling of a line on a construction site become analogical procedures. Marco Frascari, in his essay *The Drafting Knife and Pen*, suggests architectural drawing and writing as an act of cutting. Having recourse to the textual and visual descriptions of the anatomy of the body by the Roman physician Galenus and the latter's "homology between dissection and writing," Frascari writes: "The knife sections the body and also organizes the knowledge which is then written in treatises by the pen. The pen is a knife, or stiletto—that is the stylus (*grapheion*) which can pierce both a body and a treatise."⁷ The operation of cutting is consonant with the function of line as a break in a surface, a fissure; a rift that mobilises distinctions, that transforms and demonstrates. Cutting the body, cutting the building, cutting the city, cutting the earth, cutting history, lines reconstitute the human, the visual, the social, the geographical, and the historical.

Those who first invented and then named the constellations were storytellers. Tracing an imaginary line between a cluster of stars gave them an image and an identity. The stars threaded on that line were like events threaded on a narrative. Imagining the constellations did not of course change the stars, nor did it change the black emptiness that surrounds them. What it changed was the way people read the night sky.

John Berger, *And Our Faces, My Heart, Brief As Photos*

8 Ingold, *Lines: A Brief History*, 3.

9 Gilles Deleuze and Félix Guattari, *On the Line*, trans. John Johnston (Columbia University: Semiotext(e), 1983), 11.

No longer objective and measurable but variable and ambiguous, plotlines connect and produce meanings, "a manifold woven from the countless threads spun by beings of all sorts, both human and non-human."⁸ What is at stake is the way in which a plurality of stories comes to exist, objects to be constructed and dissolved, *topoi* to be debated—a fragile, yet infinitely real, knowledge that might blow right away leaving no trace. "Collective arrangements of enunciation"⁹ that make us responsible for new relationships, and which intensity and diffusion attributes a special role to the encounter with the residual and the untranslatable.

History is viewed as a 'production; in all senses of the term: the production of meanings, beginning with the 'signifying traces' of events; an analytical construction that is never definite and always provisional; an instrument of deconstruction of ascertainable realities.

Manfredo Tafuri, "The Historical Project," in *The Sphere and the Labyrinth*

The various ways of linking what can be said, what can be seen, what can be occupied, what can be inhabited, produce a historical and political space. This nexus localizes and expresses *in* its objects and standpoints, words and things—an anthropological constitution of the collective.

In the light of pressing issues, growing tensions and the exhaustion of the political will, lines—physical, imaginary, ideological, may allow us to re-organise the language of history in different ways and provide views of territory articulated beyond national, and indeed, administrative boundaries. Today's encounters with the planet have brought the world scale in our daily experiences, and at the core of pressing social concerns. In fact, the complications of what constitutes the very condition of the human in the midst of emerging notions of post-humans, non-humans, a plurality of mediated and virtual experiences, as well as humans whose bodies are perhaps all they have, expand beyond the acknowledgment of the

'other' and forms of subjectivity. Even language often proves inadequate to describe the scalar complexities of environmental and social phenomena. The confusion between the production of the Other and the experience of those who live in its vague borders, between colonial and global conditions has also marked architectural historiography, which has best worked to delineate its own distinct categories. Recent theories have tended to expose the several layers of exclusion from the historiography and from the profession of architecture. Architecture's responsibility and social commitment might be lying in the recognition and formulation of different assumptions about fundamental issues of human existence on Earth. To 'invent and name' new constellations may allow a lingering over the idea of (common) humanity.

The idea behind this publication is to bring together a host of voices, to create a zone of dialogue and proximity. Fluid zones and thresholds traverse places and times, groups and societies as well as individuals. Entangled stories of song lines, trans-Saharan lines, survey lines, lines of colonization of land and most pervasive colonization of knowledge, alternative pedagogies and institutional activism, lines of transmission, cognitive processes and landscapes of memory, continuity of becoming, lines of fundamentally different kinds describe physical and conceptual dispositions, invoke modes of thinking, micro-geographies, and malleable boundaries with unexpected resonances. Distinct, yet intertwined, themes move beyond the context of a specific field presenting methodologies and approaches to the ways in which the writing of history, a more impermanent field than we think, might be fostered and might suggest the connective tissue to political subjectification. "Its subject of inquiry," Ingold foretells, "must consist not of the relations *between* organisms and their external environments but of the relations *along* their severally enmeshed ways of life. Ecology, in short, is the study of the life of lines."¹⁰

10 Ingold, *Lines: A Brief History*, 103.

Uvodnik

Marina Lathouri

Nič ni bolj zapletenega od črte ali črt.

Gilles Deleuze in Claire Parnet, *Politics*, v: *On The Line*, 94

1 Tim Ingold, *Lines: A Brief History* (London in New York: Routledge, 2007), 52.

2 Michel Foucault, *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*, ur. Colin Gordon, prev. C. Gordon, L. Marshall, J. Mepham in K. Soper (New York: Pantheon Books, 1972), 69.

Črte so povsod. Fizična ali namišljena znamenja, sledi – zarisane, vklesane, odvezete, zapisane, izrečene, meje, pragovi in povezave, načini razmišljanja. Bistvo pa je v tem, »kako so bile razumljene«, kar »je bilo odločilno odvisno od tega, ali je bila prazna površina enačena s pokrajino, ki jo je treba prepotovati, prostorom, ki ga je treba kolonizirati, s kožo telesa ali z ogledalom uma«.¹

Za prve graditelje je bila črta zidarska vrstica, ki so jo uporabljali za merjenje in uravnavanje. Pozneje, v 16. stoletju, je pomenila »gubo na obrazu ali črto na dlani« in ekvator – črto, ki jo v mislih zarišemo na zemljo. Svet, zamejen s črtami, je bil spremenjen v lastnino, vir, v površino in mesto za delo ali kontemplacijo ali v bojišče.

Raznolike in raznovrstne ureditve, prenešene v širok razpon registrov, so zgodovinsko in semantično natančne in zato odkrito politične. Najsi ustvarjajo površino ali so zarežane globlje – »tako na snovnih tleh kot znotraj oblik diskurza« –, črte razkrivajo in tudi manipulirajo, zanikajo in spreminjajo globoke kulturne in politične oblike.² Premikajoče se meje, okupacijske cone, distribucijska omrežja in migracijski vzorci spodbujajo stekanje številnih zgodovinskih, stvarnih in namišljenih geografij, teles različnih meril in dimenzij. Združevanje in razdruževanje teritorialnih pravic, oslABLJENE meje in prekrivajoče se jurisdikcije oblikujejo ekonomijo izmenjave kot obliko živete politike. Koordinate, postavljene na prazno površino, ali besede, raztresene po listu papirja, spajajo zasebno s političnim, molekularno s planetarnim.

Pisanje nima nobene zveze z izražanjem pomena, pač pa je povezano z merjenjem ozemelj in izdelovanjem zemljevidov, tudi zemljevidov držav, ki bodo šele nastale.

Gilles Deleuze in Félix Guattari, *Rhizome*

Osnovna zamejitev arhitekture kot discipline in poklica je bila nakazana v zgodnjih razpravah (*trattati*). Spajanje geometrije in optike, glasbe,

- 4 Sebastiano Serlio v delu *Secondo Libro di Perspectiva* (v angl. prevodu *Book II On Perspective*) uporabi *linee occulte* kot orodje za konstrukcijo perspektivne risbe in imaginarne ali bolje »skrite« geometrije, ki je bistvenega pomena za arhitekto. Njen pomen prikaže skozi primerjavo s človeškim telesom: »Vemo, da imamo skelet, a ga ne vidimo.« To nam priključ v spomin tudi *linee occulte*, kot jih pojmuje Giordano Bruno – »sovsebnne v vrstici besedila, v funkciji povezovanja besed z idejami in pomenom«.
- 3 Leon Battista Alberti, *On the Art of Building in Ten Books*, Book IX, prev. Joseph Rykwert, Neil Leach in Robert Tavernor (Cambridge, Mass.: The MIT Press, 1988), 5.
- 5 »Tu stekanje črt tvori ploskev kot ploskev slike, torej kot projekcijsko površino, na kateri se konstrukcije ne sestavljajo – kot bi se na resnični podlagi – pač pa predstavljajo.« Ingold, *Lines: A Brief History*, 157.
- 6 Manfredo Tafuri, *Interpreting the Renaissance: Princes, Cities, Architects*, prev. Daniel Sherer (New Haven in London: Yale University Press, 2006), 25.
- 7 Marco Frascari, »The Drafting Knife and Pen«, v: *Implementing Architecture. Exposing the Paradigm Surrounding the Implements and the Implementation of Architecture*, ur. Rob Miller (Nexus Press, 1988).

medicine, astronomije, filozofije in prava na natisnjenih straneh prvih knjig o arhitekturi opredeljuje in zamejuje posebno obliko prakse, ki je jasno ločena od fizičnega dela in dejanske gradnje. Stekajoče se črte, številke in besede nadomestijo prej uporabljane šablone in napete vrvice. Izum in zapis ideje (*disegno*) sta prikazana kot predmet arhitekture in površina risbe je arhitektovo prizorišče *par excellence*. Uvedeni so novi postopki, orodja, tehnike, vizualne konvencije in pravila uporabe, pa tudi nove zgodovine in epistemološke predpostavke. Isti instrumenti se uporabljajo tako za merjenje človeškega telesa kot za merjenje ozemelj in za projiciranje vizij družbe ter političnih idealov na ta ozemlja. Alberti v delu *De statua* za opis telesa uporabi navigacijski instrument astrolab, za oblikovanje besed pa šifrirno kolo. Razprava postane zgolj prikaz (*dimostrazione*) procesa izgradnje »slike« – »oblike soglasja, skladnosti delov«. ³ Od merila črke do merila telesa, stavbe in mesta se mentalna slika in ozemlje natančno o-pisujeta s pomočjo namišljenih črt (*linee occulte, vinculi*). ⁴ Nevidne črte, prepletene v gosto mrežo, raztegnjene do točke, ko se človeška eksistenca razblini, označujejo robove discipline, pa tudi meje področja delovanja. ⁵ Izražajo »spreminjajoče se oblike politične oblasti in jurisdikcije, pa tudi novih idealnih reprezentacij«. ⁶

Od takrat se vrstijo razprave o številnih transakcijah med imaginarnim in vidnim, tekstualnim in grajenim, pravnim, političnim in institucionalnim, kot tudi o mnogih opisih predmeta arhitekture, ki vedno znova določajo meje in namen discipline. Natančno v tem fluidnem (in prepustnem) območju »skritih geometrij« in predmetov prihaja do zamišljanja arhitekture kot kulturno kodificiranega znanja in skupka praks.

V zgodnjih učbenikih postanejo oblikovanje črte pri pisanju, vlečenje črte pri risanju in poteg črte na gradbišču sorodni postopki. Marco Frascari v svojem eseju z naslovom *The Drafting Knife and Pen* risanje in pisanje v arhitekturi primerja z rezanjem. Opre se na besedni in slikovni opis anatomije človeškega telesa rimskega zdravnika Galena ter na njegovo »homologijo med seciranjem in pisanjem« in zapiše: »Nož secira telo in tudi organizira védenje, ki ga nato pero zapiše v razpravah. Pero je nož ali stilet – pisalo (*grapheion*), ki lahko prebode tako telo kot razpravo.« ⁷ Rezanje se ujema s funkcijo črte kot preloma na površini, kot reže, razpoke, ki aktivira razlikovanja, preoblikuje in prikazuje. Ko režejo telo, zgradbo, mesto, ko režejo zemljo, dogodke, črte na novo sestavljajo človeka, podobe, družbo, geografijo in zgodovino.

Ljudje, ki so si zamislili in nato poimenovali
ozvezdja, so bili pripovedovalci zgodb. Ko so
skupino zvezd povezali z namišljeno črto, so jim

John Berger, *And Our Faces, My
Heart, Brief As Photos*

dali podobo in identiteto. Zvezde, nanizane na črto, so bile kot dogodki, nanizani v zgodbo. Zamišljanje ozvezdij seveda ni spremenilo zvezd niti ni spremenilo črne praznine, ki jih obdaja – spremenilo je način dojemanja nočnega neba.

Linije pripovedi, ki niso več objektivne in izmerljive, pač pa spremenljive in večumne, povezujejo in ustvarjajo pomene, »raznoliko tvorbo, spleteno iz nešteti niti, ki jih predejo raznovrstna bitja, človeška in nečloveška«. ⁸ Gre za to, kako mnogoterost zgodb nastane, gre za predmete, ki jih je treba zgraditi in razgraditi, za topose, ki jih je treba predebatirati – za krhko, a neskončno resnično védenje, ki lahko v hipu izgine brez sledu. »Kolektivne ureditve izrekanja,« ⁹ ki nam nalagajo odgovornost za nova razmerja in v katerih razpršenost podeljuje posebno vlogo srečanju s tem, kar preostane, in z neprevedljivim.

8 Ingold, *Lines: A Brief History*, 3.

9 Gilles Deleuze in Félix Guattari, *On the Line*, prev. John Johnston (Columbia University: Semiotext(e), 1983), 11.

Na zgodovino gledamo kot na »produkcijo«, v vseh smislih besede: produkcija pomenov, začeni z »označujočimi sledovi« dogodkov; analitična tvorba, ki ni nikoli dokončno oblikovana in je vedno začasna; orodje za dekonstrukcijo ugotovljivih resničnosti.

Manfredo Tafuri, »The Historical Project«, v: *The Sphere and the Labyrinth*

Različni načini povezovanja tega, kar lahko povemo, kar lahko vidimo, kar lahko zavzamemo, kar lahko naseljujemo, ustvarjajo zgodovinski in politični prostor. Nekus v njem lokalizira in izrazi predmete in stališča, besede in stvari – antropološko zgradbo kolektivnega.

V času perečih problemov, naraščajočih napetosti in usihajoče politične volje nam lahko črte – fizične, namišljene, ideološke – pomagajo na različne načine preurediti jezik zgodovine in ponudijo poglede na ozemlje, ki presegajo nacionalne in administrativne meje. Dandanašnja soočenja s planetom so svetovno merilo prinesla v naše vsakodnevne izkušnje in v središče perečih družbenih tegob. Pravzaprav se zapletenost samega stanja človeka v času, ko se porajajo ideje o postčloveku, nečloveku, v času množice posredovanih in virtualnih izkušenj kot tudi v času, ko nekateri ljudje morda razen svojih teles nimajo ničesar, širi onkraj priznanja »drugega« in oblik subjektivnosti. Pogosto niti jezik ne more ustrezno izraziti razsežnostne kompleksnosti okoljskih in družbenih pojavov. Zmeda v zvezi s produkcijo »drugega« in izkušnjo tistih, ki živijo znotraj njegovih nejasnih meja, v zvezi s kolonialnostjo in globalnostjo je zaznamovala tudi arhitekturno zgodovino pisje, ki samo najbolje razmejuje svoje ločene

kategorije. Novejše teorije razkrivajo različne plasti izključenosti iz zgodovinskega in iz arhitekturnega poklica. Morda lahko arhitektura najde svojo odgovornost in družbeno obvezo v prepoznavanju in oblikovanju drugačnih predpostavk o osnovnih problemih človeškega obstoja na Zemlji. »Zamišljanje in poimenovanje« novih ozvezdij lahko omogoči, da se pomudimo ob pojmu (skupne) človečnosti.

Pričujočo izdajo revije *Arhitektura, raziskave* vodi hotenje združiti množstvo glasov, da bi ustvarili območje dialoga in bližine. Fluidna območja in pragovi prečijo prostor in čas, skupine in družbe, pa tudi posameznike. Črte čez Saharo, meritvene linije, črte kolonizacije ozemelj in še bolj prodorne kolonizacije védenja, *songlines* avstralskih aboriginov s svojimi prepletenimi zgodbami, alternativni pedagoški pristopi in institucionalni aktivizem, linije prenosa, spoznavni procesi in pokrajine spomina, kontinuiteta postajanja – povsem različne vrste črt opisujejo fizične in konceptualne značilnosti, predočijo načine razmišljanja, mikrogeografije in gnetljive ločnice z nepričakovanimi odzveni. Teme, ki so ločene in vendar prepletene, presežejo kontekst določenega področja in predstavijo metodologije in pristope, ob katerih lahko pisanje zgodovine – to področje je veliko bolj spremenljivo, kot se nam včasih zdi – predstavlja vezno tkivo politične subjektivizacije. Kot napove Ingold, predmet zgodovinskega »ne smejo biti odnosi med organizmi in njihovim zunanjim okoljem, pač pa odnosi vzdolž njihovih prepletenih in vendar ločenih načinov življenja. Ekologija je, skratka, proučevanje življenja črt.«¹⁰

10 Ingold, *Lines: A Brief History*, 103.

Selected Works I-VIII

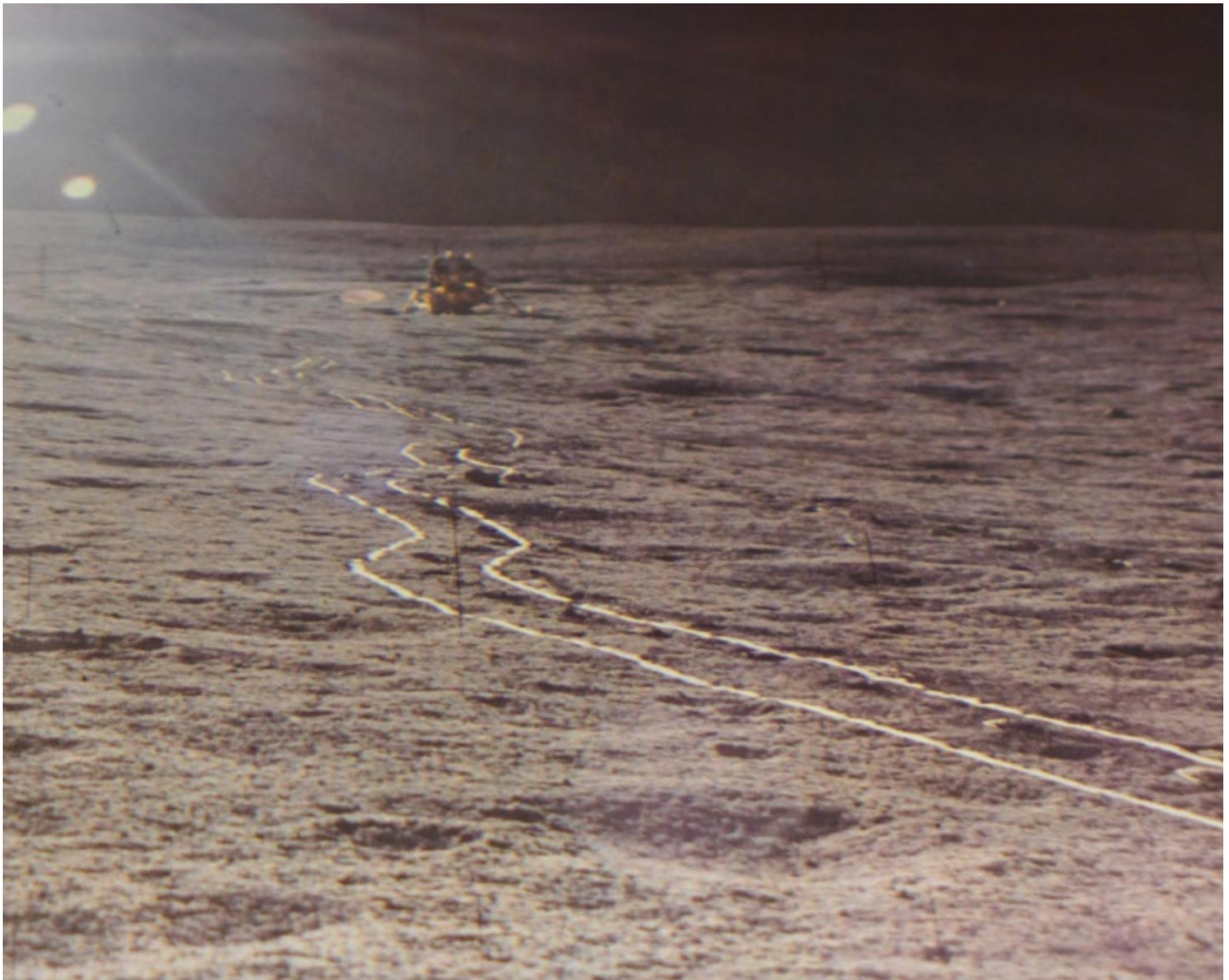
Deborah Stratman

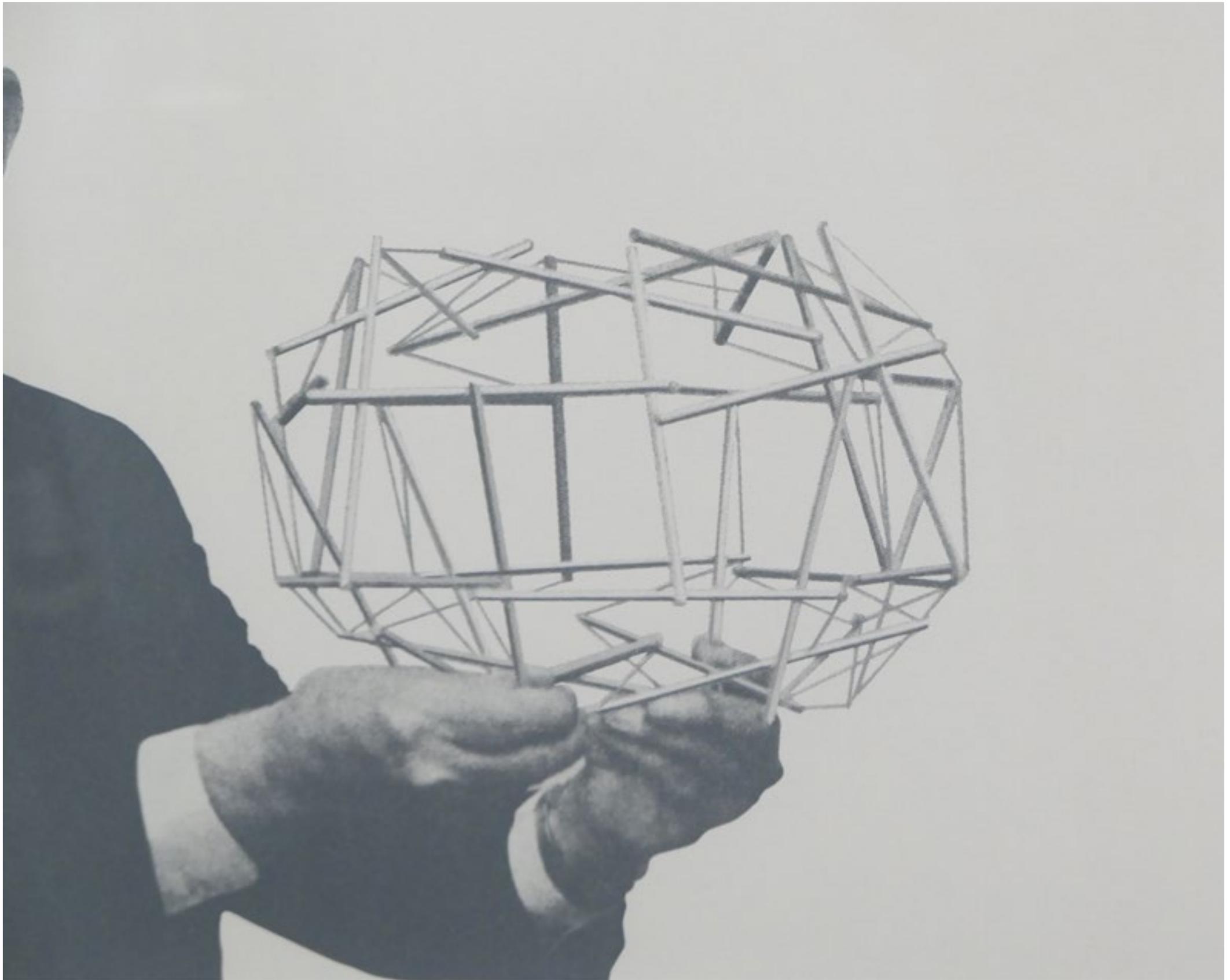


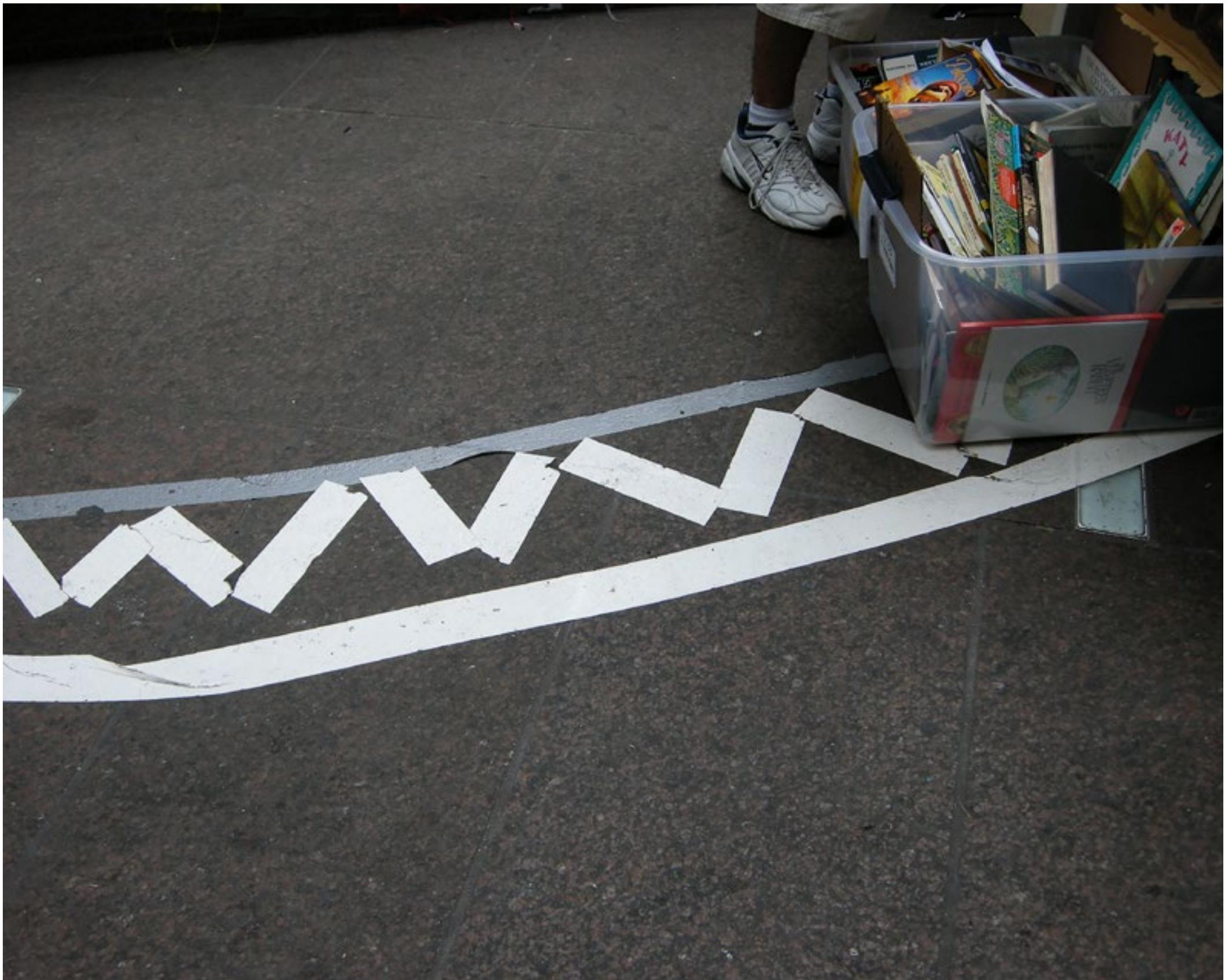














- I Trailhead, Tombstone Territorial Park, Yukon Territory
- II Kaiser Spring Canyon, Arizona
- III Bonneville Salt Flats, Utah
- IV R-2508 Range Complex airspace, as seen from Hinkley, California
- V Detail of photograph included in The Moon exhibition, Naturhistorisches Museum, Vienna
- VI Buckminster Fuller demonstrating one of his tensegrity models
- VII Occupy Wall Street library, Zuccotti Park, New York City
- VIII Tucson Mountain Park, Arizona

Following Gregory's Line into the Interior

Hélène Frichot

The explorer apprehends the horizon line toward which he intrepidly treks. Emerging out of the vast landscape there are many lines that can be drawn around things, rivers never before apprehended by European eyes, mountain ranges and sandy plains, unfamiliar flora and fauna. All seeming to await discovery and documentation. Sometimes the lines are clear, sometimes obscure and shimmering with distance. The explorer trail blazes his and his company's own course, leaving in his wake a territorialising line that can be taken up again by reading the measured documentation of longitude and latitude that he has noted in his prosaic report. This essay looks to retrace the line left behind by the explorer Mr F. T. Gregory in 1861 on his two forays into the Australian interior, proceeding from a sheltered bay on the north-western coast. Funded by the Governor of Western Australia, and by members of the Royal Geographical Society, F. T. Gregory went in search of arable land to colonise, but failed when it came to the greater prize, the verification of the myth of a wondrous inland sea. What is at stake here is the violence embedded in lines of colonisation that in making their mark thereby erase other lines, specifically, the songlines of other forms of inhabitation of Country enacted for millennia by indigenous Australians. Lines of claiming the land as distinct from lines of living with the land are brought into sharp relief when considering the current controversies erupting in the iron ore rich territories F. T. Gregory once "discovered". Today, the interests of the mining giant Rio Tinto have been pitched against the original custodians of the land, the Puutu Kunti Kurrama and Pinikura peoples, a controversy that can be dramatized in reference to the line and its conflicting, entangled stories.

A First Foray

Having anchored the barque *Dolphin* in Nickol Bay on the 10th of May 1861, Mr F. T. Gregory explorer and his party venture a first foray inland.¹ Their aim is to document country between the coast and Lyons River, which the

1 All references to F. T. Gregory's exploration are drawn from: F. T. Gregory, "Northwestern Australia: Gregory's Expedition," *Empire* (Sydney, NSW, 1850–1875), January 3, 1852.

explorer had previously claimed and named on an earlier mission in 1858. In total they will travel 780 geographical miles following a line that they compose as they go in search of arable land and freshwater rivers.

Longitude 116 degrees and 4 minutes East.

Latitude 21 degrees and 18 minutes South.

On the 29th of May 1861 they strike a riverbed. The explorer names it the Fortesque, after the Under Secretary of State for the colonies “under whose auspices the expedition took its origin.” They follow the newly christened Fortescue in an East South East direction from the 30th of May to the 11th of June, covering 180 miles. They travel across hilly country composed of metamorphic sandstone and find water in pools and grass ample for their horses. Then they hit stony ground, less amenable to horses’ hooves, the horses struggle and they lose horseshoes. From stony ground they arrive at loamy earth, luxuriantly grassed, which culminates in sudden hills. The hills will be named by the explorer after one of the supporters of his adventure, and even to this day they go by the name with which he appointed them, the “Hammersley” Range.² At first the expeditionary party is unable to find a pass through the range, and so they continue to follow the river. The fish caught in the river weigh several pounds each, the spring water is plentiful, there are broad leafed melaleuca or cajeput, and palms with wide spreading leaves eight to ten feet long. There are other tropical plants too. It is quite the idyllic oasis.

² Today this land feature is called the Hamersley Range, but in Gregory's report he writes it as Hammersley with two m's.

Longitude 118 degrees and 4 minutes East.

Latitude 22 degrees 15 minutes South.

Elevation approximately 200 feet above the sea.

They finally discover a pass through the Hamersley Range heading southwards. They again find themselves in extensive fertile plains to the westward, until eventually they arrive at an “indifferent stony country.” The horses struggle, there is little water and only some grass.

Longitude 117 degrees and 10 minutes East.

Latitude 22 degrees, 58 minutes and 28 seconds South.

Baffled by several days of stony ground a depot camp is finally settled, and a “flying party”, a break-away group travelling at a greater speed, proceeds toward the Lyons River. This is a river previously discovered and named. They head in a South South West direction continuing across the stony country

and at some 30 miles arrive at a large river heading in an East South East direction the banks of which feature clumps of cane. This will make for good pastureland in the future, Mr F. T. Gregory comments. During the dry season it may only be 100 feet wide, but during the wet season it will expand to 400 to 600 feet and achieve a depth of 40 to 60 feet. He names this fine river the Ashburton, after the noble lord presiding over the Royal Geographical Society, "whose friendly countenance and assistance I am much indebted in carrying out my present undertaking."

From the newly christened Ashburton river, they head southwards and the country becomes rugged and mountainous. He has seen some of these summits on his previous expedition to the Lyons River in 1858, which, as he expresses it, he has "appropriately" named the Capricorn Range. So here he revisits a part of the country he has gazed upon previously from another point of view, thereby cross-referencing his previous "discoveries."

By the 25th of June they finally come over a ridge and set eyes on the Lyons River. Satisfaction is secured and Mr F. T. Gregory sternly celebrates the view he has achieved of a valley spreading out before them, with "Mount Augustus rearing its summit over all surrounding objects...", and there is Mount Samuel and Mount Phillips, and other summits, and the Barlee Range is visible in the west. The capturing of the expansive view is rendered quietly victorious.

Now they must follow their own tracks, retrace their line back to the depot camp, and from there return to Nickol Bay. On the return journey Mr F. T. Gregory is able to ascend several prominent peaks and thereby triangulate his course, secure his line of travel with more surety. He also comes across a most magnificent and solid mountain, some 3800–4000 feet tall, that he decides to name Mount Bruce, "after the gallant commandant of the troops."

Australia Felix, happy or fortunate Australia, but for whom?

9 Days of Rest

For a long while following first contact there persisted a myth of a great inland sea. If only explorers could venture across the seemingly barren lands under a brutal foreign sun to get there. This would be the prize for any intrepid explorer backed by the Crown. To arrive at the inland sea, to know and thereby to claim the territories of the interior in order to determine that arable land might be supported by a great interior freshwater lake. To get there, and to return. Burke and Wills failed to find it. The Prussian explorer Leichhardt, famously fictionalised as the character Voss in the novelist Patrick White's tale, didn't make it either. Phantasmagorical visions, dreamy

3 Patrick White, *Voss* (London: Eyre and Spottiswoode, 1957).

with heat, arid for those not knowing how and where to look. There is a scene in White's *Voss* where, had one of the search parties ventured just a few hundred metres further they would have discovered the long-gone body of the exhausted explorer behind a pile of rocks.³ No doubt those with ancient knowledge of the land, with access to the stories, knew full well where he was to be found.

By all accounts Mr F. T. Gregory was a pragmatic explorer, as was his older brother, August Gregory, who had been charged with leading one of the search parties looking for Leichhardt and his group in 1858. Mr F. T. Gregory makes two forays into the interior off the north west coast of Australia, near present day Karratha, with backing from the Crown and support from the Royal Geographic Society. His account is pragmatic, punctuated with geographical measurements of longitude and latitude so that those who follow after can retrace his trailblazing line and rediscover the landscape resources he has "discovered." Yes, there is privilege expressed here, and the explorer is unable to imagine that present for millennia before him there has existed a deep knowledge of Country and how to work with it. He sees the original custodians as mere resource for future mobilisation as labour, unwaged, paid for with damaged biscuit. His historical moment allows him no other point of view.

Though pragmatic, Mr F. T. Gregory nevertheless hints at a greater prize. He concludes his account, written on the 18th November 1861, and published in the broadsheet *Empire*, with an apology that his adventure has fallen short of the expectations of his sponsors and fellow geographers. He writes of his "sanguine hopes with regard to geological discovery" specifically knowledge pertaining to the "object they had in view." What object exactly? There are oblique hints concerning the secrets held close by the interior, the thwarted project of "penetrating far enough to decide the question of the drainage of Central Australia." Even the phantasmagorical inland sea is rendered prosaic under Mr F. T. Gregory's writing hand. The inland sea that early explorers sought out, explorers such as Charles Sturt, after which the brilliant black and red Sturt Pea has been named, involved expeditions doomed to arrive too late. Had there existed intrepid, colonising explorers during the Cretaceous period some 144 to 65 million years ago, then they may have had some luck. Lake Eyre comes closest to the promise of an inland sea, but is mostly dry for years on end.⁴

4 Frank Urban, "Australia's Enigmatic Inland Sea," *Journal of The Australian and New Zealand Map Society Inc. The Globe*, no. 70 (2012).

A Second Foray

Mr F. T. Gregory will spend his time between the two inland forays making a running survey of Nickol Bay where they are anchored in the barque

Dolphin. He will rest by undertaking further cursory exploration. When the group arrived back from their first foray into the interior they were surprised to discover a “party of natives mending their nets.” The natives, so called, had helped those men left minding the barque to collect a load of wood, and get the ship’s tanks filled with water. For this labour they were offered “a few pounds of damaged biscuit daily.” The relationship is clearly one of condescension, the fact that the indigenous peoples are duped with damaged biscuit needs to be noted here. Again, the pragmatic explorer sees how what he perceives as local resources might be put to use. These bodies will become so many lines added up toward a measure of amenable labour dedicated to an anticipated future, he thinks to himself.

Better prepared for what they are likely to encounter, Mr F. T. Gregory and party provision themselves with ninety days worth of supplies, and spare shoes for the horses.

They return along tracks of their own making. They follow that preordained line until they get to the Sherlock river and from there venture into unknown territory. Again Mr F. T. Gregory is baffled by the stony land they encounter after covering plains with “a few patches of good food.” They set up a depot camp.

Latitude 21 degrees, 11 minutes and 28 seconds South.

Longitude 118 degrees, 3 minutes and 30 seconds East.

They set up a depot camp on the 5th of August. With a smaller number of the party, carrying a lightened load, they go in search of a pass through the inhospitable stony range. A few false leads and eventually they discover a way through, and beyond that an impressive stream bed, coming from the South South East. There is an abundance of water and waterfowl, which means they can bring forward the main party that had been left behind at the depot camp. A line drawn, and redrawn, advance, retreat, fleet footed parties sent into the wilderness for the purposes of reconnaissance. It is a remarkable river, more than half a mile from bank to bank. The river is named the Yule, he names it so.

Longitude 119 degrees 23 minutes East.

Heading eastwards, a hilly region, many springs. It was named the Strelley, the explorer names it so. Leaving the Strelley behind and continuing to head east, they come upon a “romantic glen, hemmed in by cliffs 150 feet high, under which were pools of water containing fish resembling herrings, from which it received the name of Glen Herring.” It is an idyllic spot. Heading

eastwards it joins a “fine river”, wide, running through grassy plains. This would be the place to venture further into the interior, if only they had been able and better prepared. The explorer calls it the De Grey in honour of the noble lord presiding over the Royal Geographical Society. There is a great amount of valuable arable land, just waiting there for European colonisation. Heading eastwards they encounter yet another river. Here the explorer begins to wax lyrical, having restrained himself for the most part so far. Here he speaks of “the rich umbrageous foliage of which afforded us a most agreeable shade during the many days afterwards following the picturesque windings of this fertilising stream...” He confers on this picturesque place the name Oakover.

Longitude 121 degrees, 3 minutes and 30 seconds East.

Latitude 21 degrees, 23 minutes, and 19 seconds South.

They continue to follow the Oakover, until it turns too much toward the South West for their purposes.

It is the 2nd of September and they arrive at vast stretches of red sand blown into ridges. Then, by the 6th of September they have entered a wasteland of sands. They penetrate it for over 30 miles, and suffer a want of water, and the horses become dehydrated. They must leave behind some of their equipment, and two horses, which will not be recovered. They find that they can head no further eastwards toward the interior, though the explorer feels sure that all signs indicate that they would have eventually come across a body of water. The great inland sea? Another fine river? What they observe, despite the sand blowing in their faces, despite the sure death of some of their horses, is what they believe to be a general decline of the lay of the land. This sign surely indicates that had they been able to head further eastwards they would have come across the hypothesized body of water “the discovery of which would solve one of the most important questions that now remains unanswered in connection with the physical geography of this continent.” Here Mr F. T. Gregory finally admits that this had been one of the great incentives of the current exploration.

In great disappointment, having weighed up likely losses, Mr F. T. Gregory explains, “I eventually decided upon falling back and attempting to fill up as much as possible of the blank that remained between this and Nickol Bay,” fill it up with lines, plot it according to cartographic reference points. He feels compelled to fill up the empty spaces as quickly and neatly as possible, leave no space for others’ horses to prance in. He will no doubt lose sleep over the fact that there persist some places less amenable to the drawing up of lines. The sand itself carries the lines away.

I've always wondered why the expression "drawing a line in the sand" is supposed to be so definitive, when the sand inevitably promises to erase the line, much as a face drawn in advance of the incoming tide is subsequently washed away.

Longitude and Latitude are lines that we draw for the purposes of orientation. In his long meditation on the line Timothy Ingold offers a distinction between guidelines and plotlines, the former emerging with weaving, the latter with land measurement. Geo-graphy, drawing abstract lines to map with. Earth writing, Ingold says. Material and abstract, both. And yet, for cartography, Ingold nevertheless holds to his guidelines: "It is rather the same with a cartographic map" he explains. "Here the ruled lines of latitude and longitude are guidelines that enable the navigator to plot a course from one location to another."⁵ For a while navigators had determined how to measure one, but not the other, which resulted in a great many voyagers lost at sea. The line unravels, and always threatens to do so.

In his account of the Dutch 17th Century lens grinder and philosopher Baruch Spinoza, Gilles Deleuze describes longitude and latitude as the best means of describing a body: "A body can be anything; it can be an animal, a body of sounds, a mind or an idea; it can be a linguistic corpus, a social body, a collectivity."⁶ A body, the body of an explorer, a body of water, a body of damaged biscuits, the body of a horse left behind in the desert, these should not be defined as forms, organs, functions, substances. Instead the body is defined according to its movements and rests, and according to the affects that inflate and deflate it as it moves from one place to the next, suffering and then enjoying one encounter after the next. "We call longitude of a body the set of relations of speed and slowness, of motion and rest, between particles that compose it from this point of view, that is, between unformed elements. We call latitude the set of affects that occupy a body at each moment, that is, the intensive states of an anonymous force (force for existing, capacity for being affected)."⁷ This, explains Deleuze, is how we construct a map of the body. Though a problem persists here. Who is composing the map and what or who can be seen and can't be seen? There are power relations running up and down, back and forth along these lines of longitude and latitude. Some bodies will end up doing better than other bodies.

There is a sense in which Mr F. T. Gregory can neither see nor hear the custodians who offer help to his sailors. Though when coming across a band of bold "natives" he will not hesitate to judge them for their "inveterate habits of thieving." He reads revenge into their acts of burning the grasses in the vicinity of his camp. Perhaps they were merely going about their own activities of land management, which the explorer is unable to see. The explorer notices the "natives" chewing tobacco, though they do not smoke it,

5 Timothy Ingold, *Lines: A Brief History* (Abingdon, Oxon: Routledge, 2007), 156.

6 Gilles Deleuze, *Spinoza: Practical Philosophy*, trans. Robert Hurley (San Francisco: City Lights, 1988), 127.

7 Deleuze, *Spinoza*, 127.

8 Donna Haraway, "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin," *Environmental Humanities* 6 (2016): 162.

9 Ingold, *Lines*, 161.

10 Ingold, *Lines*, 152.

11 Bruce Pasco, *Dark Emu* (Broome, Western Australia: Magabala Books, 2014).

this observation, on the other hand is important to the explorer as it suggests that the land lends itself to tobacco plantations. The plantationocene, as Donna Haraway remarks, is what happens when we scale up an expedition such as Mr F. T. Gregory's, and press the fast forward button, and see where we get.⁸ The plantation is land measured and managed, marked with lines in the earth, lines on the skin, lines on the body of Country that speak to deep inequities. The ruler is a ruler, that is to say, a sovereign who rules territorial lines, and the ruler is an indispensable "part of the toolkit for the navigator or surveyor," Ingold reminds us.⁹

A line of flight is one down which escape is sought. It is a dribbling line letting things leak out. It goes here and there and refuses to be straightened out. "In Western societies," Ingold explains "straight lines are ubiquitous. We see them everywhere, even when they do not really exist. Indeed the straight line has emerged as a virtual icon of modernity, an index of the triumph of rational, purposeful design over the vicissitudes of the natural world."¹⁰ Nature and culture, human and animal, the line drawn again and again in attempts toward classification. Things will not be so easily tamed. The explorer's lines, though he represents the colonising ambitions of modernity, are not straight lines, they are purposeful and confident, even perfunctory, and yet they are also wandering lines. Reading between the lines of Mr F. T. Gregory's story, reading between the lines of the landscape stories left behind in diaries and accounts of other intrepid explorers, as the Aboriginal Australian writer Bruce Pascoe recommends, becomes something of an obligation.¹¹

In the summary of his account to the Western Australian Governor, Mr F. T. Gregory notes: "Of minerals I was unable to discover any traces except iron." He was not to know that, having enjoyed the drama of the Hamersley Range, which he took it upon himself to name, that 160 years hence there would be a massive mining effort taking place in the vicinity. The landscape is now pockmarked. On the weekend of the 23–24th May 2020 sacred sites of indigenous heritage with signs of continuous use extending back over 46,000 years where obliterated by dynamite that had been wedged into the red earth. The apologies that followed were carefully worded to avoid culpability, but the mining giant grossly miscalculated the public mood, and the CEO was eventually fired. The mining giant that manages vast tracts of this land today is called Rio Tinto. It is a massive infrastructural enterprise, overseeing 16 mines across the region, and four independent port terminals. Automated, computer monitored, heavy-haul driverless trains carry away over 100 million tons of ore every year, most of it headed toward a resource hungry China. The loss to the Puutu Kinti Kurrama and Pinikura peoples is irrevocable, still, they speak of finding the courage to heal the wounds left

- 12 Calla Wahlquist, "Rio Tinto's evidence condemned by Juukan Gorge traditional owners after revelation it could have avoided blowing up sacred sites," *The Guardian*, August 8, 2020, <https://www.theguardian.com/business/2020/aug/08/rio-tintos-evidencecondemned-by-aboriginal-owners-afterrevelation-it-could-have-avoided-blowing-upsacred-sites>.
- 13 Deleuze, *Spinoza*, 127.

behind.¹² A body is a human body, a body of land, a body of lore, each vulnerable to being wounded.

I am acutely aware—though I am not sure what the answer to this problem is—that by attempting to set out a storyline here, I am at risk of removing the stories from their rightful custodians. It matters what stories tell stories, for sure, and it matters who claims the telling of the story, and toward what ends. Storylines are always variable, and constantly being altered, they are composed and recomposed by individuals and collectivities.¹³ The line commences its own journeys, and it becomes a question of listening more closely to what it reports on its return.

Bibliography

Deleuze, Gilles. *Spinoza: Practical Philosophy*. Translated by Robert Hurley. San Francisco: City Lights, 1988.

Deleuze, Gilles. "Spinoza and the Three 'Ethics.'" In *Essays Critical and Clinical*. Translated by Daniel W. Smith and Michael A. Greco. London: Verso, 1998.

Gammage, Bill. *The Biggest Estate on Earth*. Crows Nest, NSW: Allen and Unwin, 2011.

Gregory, F. T. "Northwestern Australia: Gregory's Expedition." *Empire* (Sydney, NSW, 1850-1875), January 3, 1852.

Haraway, Donna. "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin." *Environmental Humanities* 6 (2015).

Ingold, Timothy. *Lines: A Brief History*. Abingdon, Oxon: Routledge, 2007.

Memmott, Paul. "Aboriginal Signs and Architectural Meanings. Part 1." *ATR (Architectural Theory Review)* 1, no. 2 (1996): 79-100.

Memmott, Paul. "Aboriginal Signs and Architectural Meanings. Part 2." *ATR (Architectural Theory Review)* 2, no. 1 (1997): 38-64.

Memmott, Paul. *Gunyah, Goondie & Wurley: The Aboriginal Architecture of Australia*. Brisbane: University of Queensland Press, 2007.

Pascoe, Bruce. *Dark Emu*. Broome, Western Australia: Magabala Books, 2014.

Urban, Frank. "Australia's Enigmatic Inland Sea." *Journal of The Australian and New Zealand Map Society Inc. The Globe*, no. 70 (2012).

White, Patrick. *Voss*. London: Eyre and Spottiswoode, 1957.

Drawing Time: Making the Rio Meander Map

Chris Taylor

3000.
Water remembers everything it travels over and through.
If you have been in water, part of you remains there still.
It is a memoir of an indissoluble relationship with the world.
But where is water now? Where is the world?¹

1 Natalie Diaz, "exhibits from The American Water Museum," in *Postcolonial Love Poem* (Minneapolis: Graywolf Press, 2020), 71–72.

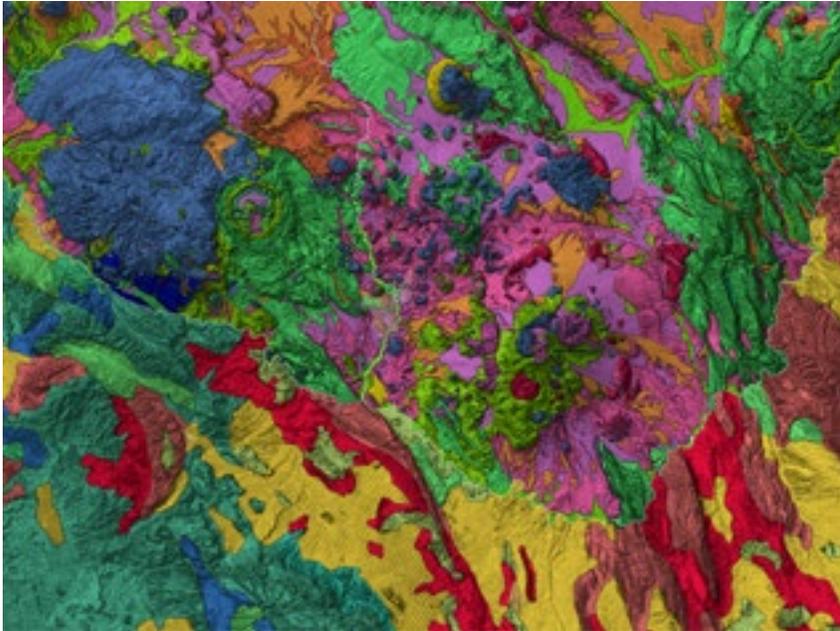
2 Calling forth "the DNA of the human being—my bone, flesh, and blood is literally made up of the metals, minerals, and liquids of the Earth. We are literally shapes and forms of the Earth. That's who we are. And we have being," John Trudell, "What it Means To Be A Human Being" (spoken word event at The Women's Building, San Francisco, California, March 15, 2001).

3 Ingrid Schaffner and Liz Park, *Carnegie International: Dispatch* (Pittsburgh: Carnegie Museum of Art and DAP Artbooks, 2018).

4 Ingrid Schaffner, *The Guide: Carnegie International, 57th edition* (Pittsburgh: Carnegie Museum of Art, 2018), 74.

Some say all of this launched about 4.5 billion years ago when Earth coalesced from particles, minerals and liquids² radiating from a big event 9.3 billion years prior. Others say somewhere between thirty-five and twenty-eight million years ago a rift began forming in Earth's stretching lithosphere opening conditions for water to gather. Yet, not until eight to six hundred-thousand years ago did the watershed form a connection to open ocean at what we now call the Gulf of Mexico. Evidence of human activity along the rio has been noted as early as five thousand years ago, while certainly peoples have lived along and across the rio for perhaps two or three times as long. Rio Bravo/Rio Grande is part of a deep time cycle preceding and facilitating biomes of plant and animal/human evolution.

In 2016, artist Zoe Leonard began an epic photographic work focusing on Rio Bravo/Rio Grande as it serves as a border between Mexico and the United States from Ciudad Juarez/El Paso to the Gulf of Mexico. Approaching the project as "multifaceted leitmotif" Leonard articulates how "the shifting nature of a river—which floods periodically, changes course, and carves new channels—is as odds with the political task it is asked to perform." The ambition to examine present complexities, existing in plain sight, permeates an effort that stems from the duration of its making, the density of pictures made (thousands), distances traversed, and situations encountered. A prologue, exhibited in the *Carnegie International, 57th Edition, 2018*³ revealed that the "turbulent forces at work in Leonard's photographs, however, are far more opaque, complex, and interbedded than anything we can see. Colored dun by earth and sediment, the Rio Grande sculpts a shifting terrain."⁴ The culmination, approximately five-hundred photographs operating together as an art work, will be exhibited as *Al Rio/To The River* in 2021 at MUDAM: The Contemporary Art Museum of Luxembourg, before traveling to the Musée d'Art Moderne de Paris and on to venues in Mexico, the United States, and elsewhere. A two-volume publication will accompany the exhibition—edited by Tim Johnson, poet, writer, editor and project collaborator—to include the photographs and an assemblage of essays, conversations and material to activate the wide range of histories and relationships immersed within the rio.



1

*Quick question regarding research.
How far back are we looking to go?*

Andres Armendariz and
Chris Taylor, 26 Aug 2020

*From the beginning. And, it would seem
the beginning starts with the Big Bang
and goes forward.*

Within the College of Architecture at Texas Tech University in Lubbock is a transdisciplinary field program called Land Arts of the American West dedicated to expanding awareness of the intersection of human construction and the evolving nature of our planet. Using Land art, or Earth art, generatively as gestures emerging from ground and extending through complex social and ecological processes, the program examines gestures small and grand directing attention towards potsherds, trash, tracks, settlements, artworks, and military-industrial installations. Land Arts creates opportunities to work in relation to the complex forces that shape the American West by situating this work within a continuous tradition of land-based operations that is thousands of years old. As a semester long field program that usually camps for over fifty days while traveling nearly 9,700 kilometers (6,000 miles) over land throughout the American West, Land Arts hinges on the primacy of first-person experience and the realization that human/land relationships are rarely singular.

*The historical narratives we're taught, like maps
and images, are often two-dimensional reflecting
the present times' politics. We have an opportunity
and responsibility to adjust scale and attention
to possibly affect new narratives about our
place in nature.*

Caitlin Ford, 31 Aug 2020

In the Spring of 2020, after the Land Arts admission of ten wonderfully diverse and qualified participants, we began asking: *How does a field program adapt to a pandemic?* Science fiction scenarios came to mind of bio-hazard-suited researchers, roaming the desert, examining the residue of humanity's engagement with the natural world. Yet it was eminently clear such approaches would not adequately protect participants from covid-19 uncertainty, nor would they shield the vulnerable communities and lands—disadvantaged by systemic economic injustice and limited health infrastructure—that we routinely encounter. Rather than magnify the mounting risks of travel in this time, Land Arts 2020 needed to adapt. The opportunity for adaptation arrived through an invitation from Zoe Leonard and Tim



2

5 For a robust and expansive starting point for information about Native Peoples and Lands, see <https://native-land.ca>.

Johnson to construct a meander map describing the ever-changing trajectories of the rio they were examining.

*This story is from a long time ago;
when animals could talk.*

Juanita Pahdopony-Mithlo
(1947–2020) and Harry Mithlo,
16 Apr 2015.

While vigorous debate and research continue, it is commonly understood that ancestral peoples inhabited the Americas as early as fifteen-thousand years ago. Evidence in the Lower Pecos region mark that activity between four and five-thousand years ago. Also along the Rio Meander Map upriver are the ancestral lands of the Tampachoa (Mansos), Tigua, Pescado, Sumas, Yoli (Concho), La Juntas, Chisos, Jumanos, Eastern Pueblos, and the Chiricahua Apache, Mescalero Apache, and Lipan Apache Nde Nations. Downriver the Kiikaapoi (Kickapoo), Tap Pilam Coahuiltecan Nation, Alazapas, Rayados (Borrados), Somi Se'k (Sto'k Gna) (Carrizo/Comacruz), and Tamaulipeco. The Numunuu (Comanche Nation) also crossed the rio at several points during their activities south into Mexico in the 1800s.⁵

*To have an understanding of history going beyond
the immediate frame of content presented in
textbooks, when we start to question the authenticity
of the information we have been given, we are
invited to look beyond the mainstream publications,
presented as a way to push ideals justifying progress
that only benefits the people with the means to
further their own agendas.*

Andres Armendariz, 1 Sep 2020

6 Harold N. Fisk, *Geological Investigations of the Alluvial Valley of the Lower Mississippi River: Conducted for the Mississippi River Commission* (Vicksburg, Miss.: M.R.C., 1945) and <http://www.radicalcartography.net/index.html?fisk>.

2 Native Lands.

Land Arts 2020 ADAPTATION conducted a transdisciplinary deep research, non-traveling, studio and seminar to construct the Rio Meander Map of the Rio Bravo/Rio Grande, as it marks the international border from Ciudad Juarez/El Paso to the Gulf of Mexico, revealing the undulating and shifting course of the river over time. Inspired by meander maps produced by Harold Fisk and team in the 1930s and 1940s of *The Alluvial Valley of the Lower Mississippi*,⁶ this map required extensive binational and multilingual research into the history of river geometry and mapping as a manifestation of dynamic ecosystems modified over time by wide ranges of human and nonhuman construction. To complete the rio meander map, participants and affiliated guests divided across primary working groups of RESEARCHERS, with subgroups for Spanish and English languages, and MAPPERS with subgroups for GeoSpatial Synthesis and Graphic Production. The groups facilitated independent research actions and collective production that was aggregated



3

7 Charles Bowden, *Killing the Hidden Waters* (Austin: University of Texas Press, 2003), 7.

8 Jose Villanueva, oral history, 2020.

and managed through digital communication and file sharing. Weekly activity was logged through production posting and feedback cycles supported by common discussion sections. Guest sessions with project advisors also expanded the range of dialog and production.

Water is energy, and in arid lands it rearranges humans and human ways and human appetites around its flow. Groundwater is a nonrenewable source of such energy. These facts are the core of the impact when groundwater is developed in such places. Humans build their societies around consumption of fossil water long buried in the earth, and these societies, being based on a temporary resource, face the problem of being temporary themselves.⁷

The Rio Meander Map is a living map of a living river; a dynamic portrait of persistently shifting geographic, social, and political conditions.

The earliest childhood memories that I still hold with me are of water. The first was in the backyard of my childhood home. I had a fascination with it and would turn the faucet on just to watch it wiggle its way down the slope of the yard between the fruit trees and past the outhouse. Eventually, the neighbor downhill would complain and my grandmother would come out chasing after me. On this day however, she wasn't angry. She had told me over the past year I'd be seeing my parents again soon and my day had finally come. At the time, my parents had already left for Texas. They were both migrant farmers and had been coming back and forth to Mexico since they were 14. They followed certain crops. Sometimes that took them to orange orchards in Florida, tobacco in the Carolinas and once my dad said he got a job planting pines along highway 10 through Mississippi, Alabama, and Florida. They left my brother, my two sisters and I in the care of my grandmother while they figured things out here in the states. The intention was never to stay but we were poor and eventually had no choice. That day, she walked me around the neighborhood to say goodbye to my family. I bragged about coming to America and asked them what they wanted once I made it to the north and was swimming in dollars. The adults asked for guitars, a Harley Davidson, a new pick-up and the children asked for toys. I'd be leaving the next day.⁸



4

Ciudad Juarez / El Paso

2,028–1,897 kilómetros (1,260–1,179 miles) from and

1,160–1,076 metros (3,807–3,531 feet) above the Gulf of México

Average Rainfall: 24.7cm (9.71in)

Average Temperatures: 34.6C (94.2F) high, 18.1C (64.6F) mean, 1.1C (34F) low

Currently, as the rio enters Ciudad Juarez/El Paso cutting between Las Sierrras de los Mansos (Franklin Mountains) and Cerro Bola—the mountain pass that El Paso del Norte was named for in 1659—nearly all of its waters are diverted. First at the American Diversion Dam and then at a bend a few miles on at the International Diversion Dam. The water, allocated by 1906 treaty, flows from the former into the American Canal and from the later into Acequia Madre where it feeds an elaborate mirrored yet unequal network of canals, ditches and drains that support the agricultural valley running for nearly 140 kilometers (90 miles). To combat irregular flows, silting and flooding, caused by upriver dams, another treaty in 1933 laid the legal framework for a massive rectification project—straightening, shortening, and channelizing the rio throughout the length of this valley. Since 1938 the rio channel has remained mostly an infrequent hydrological ghost within a nearly six-hundred-foot-wide floodway containing parallel levees and the international border running down the center. Within the urban heart of the twinned cities the central channel is lined with concrete. For the majority of its distance, it is a colossal homogenized earthwork. Walking or traveling across any of the international bridges reveal the barren void reinforcing incomplete or defective notions about the dryness of the region. While it certainly is arid, annually receiving less than 25 centimeters (10 inches) of precipitation, more resonate soundings come from the expansive system of channels that enable an irrigated green patchwork to run from the populated zone below Loma Blanca/San Elizario down to Fort Quitman and Banderas. The portrait of the rio here is complex, interwoven and co-evolved within an irrigated belt crafted by geology, hydrography, agriculture.

*A map is quasi drawing, quasi political document
that is worth the lives of others. In its most purity,
it is not the GPS directional quality, but the question
at the end of the reading Rabasa has made:
what extent can one write about violence without
perpetuating it?*

Ana Garcia Merino, 21 Sep 2020

4 Rio meander detail at Tornilla-Guadalupe International Bridge, Southeast of Ciudad Juarez/El Paso.

Soon after word spread publicly of the Land Arts 2020 ADAPTATION, interest participating or connecting to the project quickly materialized. The opportunity struck a chord with people across a wide disciplinary and

geographic swath, radiating throughout Texas, from Lubbock to the border, then eastward through New York to Seville, Warsaw and Stockholm, westward through Utah and California to Hanno, Japan, and southward to Peru and Chile, spanning an eighteen-hour time zone differential. In total nearly fifty people were involved. Contributing participants consisted of twenty-three enrolled undergraduate and graduate students and independent scholars, which were supported by a core group of primary production voices, contributing advisors, and distant witness observers. The commitment and diversity of the group was humbling and vital for the construction of a collective portrait of this living and dynamic line.

When we enter the landscape to learn something, we are obligated, I think, to pay attention rather than constantly to pose questions. To approach the land as we would a person, by opening an intelligent conversation. And to stay in one place, to make of that one, long observation a fully dilated experience. We will always be rewarded if we give the land credit for more than we imagine, and if we imagine it as being more complex even than language.⁹

9 Barry H. Lopez, *The Rediscovery of North America* (New York: Vintage Books, 1992), 36-37.

10 See shooting death of Sergio Adrián Hernández Güereca by U.S. Border Patrol agent Jesus Mesa in 2010: <https://www.elpasotimes.com/story/news/2019/05/28/border-patrol-shooting-mexican-teen-across-el-paso-border-revisited-us-supreme-court/1258254001/>.

11 Henry Spall, "Paleomagnetism of Precambrian rocks from El Paso, Texas," *Physics of the Earth and Planetary Interiors* 4, issue 4 (1971), ISSN 0031-9201: 329-346.

12 Donna Haraway, *Staying with the Trouble: making kin in the Chthulucene* (Durham: Duke University Press, 2016).

Rio Meander Map tells time. Embedded within layered folds and jump cuts of deposition and erosion, time is marked within gestures piling up and scraping away. Such a map considers more than immediate surface conditions and seeks to reveal interbedded geologic structures—the grain of Earth—the rio traverses or carves through. Time signatures extend from gunshot¹⁰ immediacy to Precambrian¹¹ rock matrices. From persistent present to perhaps half Earth's age. The concentration of temporal diversity is greater in higher elevations near El Paso del Norte evidenced in a geologic record that spans from present through the Cenozoic, Mesozoic, Paleozoic to Precambrian Eras. Moving downriver to La Juntas de los Rios the record dissipates at the Devonian period just over four-hundred-million years ago. At Maderas del Carmen in Big Bend the limit is within the Early Cretaceous period one-hundred-forty-five-million years ago. La Presa Amistad marking the edge of canyon country holds steady with that zone, while La Presa Falcon marks a drop in elevation and topography dating only to the Eocene epoch of fifty-six-million years ago. The delta through Matamoros/Brownsville to Boca Chica are made up of sediments from the Holocene epoch, twelve-thousand-years ago to the present Anthropocene where rock records are interwoven with human impact.

The question of the Anthropocene, the aggregation of the geologic record with persistent human activity, is more than scientific tussle.¹²

- 13 Ray Wylie Hubbard, "New Year's Eve at the Gates of Hell," in *The Grifter's Hymnal* (Snake Farm Publishing, 2012).

For architects it is a stark indicator our work is never autonomous. It is always situated. Within streams of material, economic, and social flows. Into expansive networks of resource feeds and waste streams. Examinations of the trajectory of these flows—towards justice¹³ perhaps—must be intertwined in all of our work.

We have become so separated from the source of our sustenance that it is sometimes difficult to even imagine the origin of the water that we take in.

Andres Armendariz,
10 Oct 2020

Nearly half of the territory within the Rio Meander Map exists within the Chihuahuan Desert containing xeric shrublands with lifeforms adapted to extreme conditions of topographic and atmospheric differentials. After La Presa Amistad the land breaks into the arid interior plains of Tamaulipan mezquital with xerophytic shrub, mesquite and oak forests before giving way to the subtropical grass and shrublands of Tamaulipas pastizal.

*From Rediscovering the Endlessness of Time:
"What is overwhelming for you now that wasn't before?"
"And You?"
This is what we should be asking in every email greeting right now rather than "I hope this finds you well..."*

Grace Shanks, 9 Sep 2020

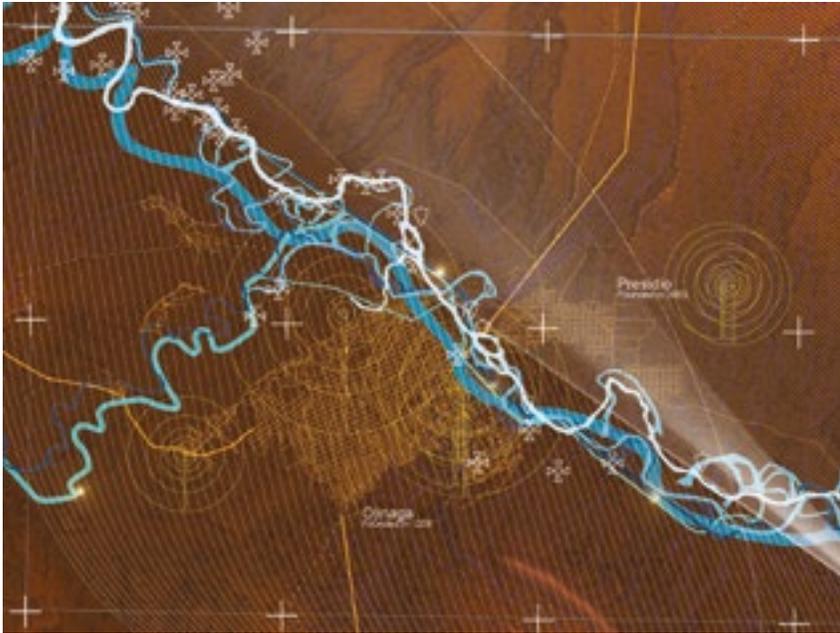
- 14 Our work followed a collection of synchronous and asynchronous activity. Studio sessions were held Monday, Wednesday and Fridays from 1-5pm CST on Zoom. Seminar met Monday and Wednesday from 1-3pm in the same Zoom to create logistical and content through lines within the group. Three participants with schedule conflicts met early Wednesday morning to link Texas, Utah, and Japan time zones. There was also a weekly coordination meeting on Tuesday with the primary production voices. Everything was supported by a digital exchange platform on MicroSoft Teams that gathered and threaded communications, contained working files, and video recordings of all sessions. Attendance was generally consistent, however the backup recordings supported continuity when not possible. Miro was also used as a graphic pin board to facilitate working process and presentation. The dialog and production rhythms pulsed from collective through focused groups to individuals. All contributions were held in common with lateral exchange encouraged.

Central to the production of the Rio Meander Map was developing a structure that leveraged and required a synthetic non-harmonious voice. While the collective effort was deeply inclusive, it did not seek unity or equal representation. The challenges of operating remotely during a global pandemic adapted the pedagogy of equal weight. We began by anticipating there would be times when group members were not able to carry an equal load. Rather than seeing that as problem to overcome with pre-pandemic remediation, here group energy and collective voice rallied to activate the inherent differentials present. Instead of a generalizing approach we sought to open heterogenous manifestations of time, narrative, and geography. This was built into the composition of the group. In to the conditions of our work. And, into the multitudes of voice radiating from the project, the territory, and it's people.¹⁴

The definition of amateur as the repetition of desire rather than the act of the unskilled. Even through amateur processes include everything and everyone

Amber Noyola, 8 Sep 2020

tells their own story with personal curiosities, the stories formed take shape over many lifetimes.



5

After more than a century of Spanish colonial incursion, control, and violent¹⁵ subjugation of indigenous Pueblo people in what remains known as New Mexico, profound risk of culture loss and survival led to the Pueblo Revolt of 1680. The traditionally autonomous Pueblo communities were united into simultaneous action by Po'pay of Ohkay Owingeh to drive Spanish forces and settlers from Santa Fe south along the rio to Paso del Norte. This line of force is widely held as the only successful uprising against a colonizing power in North America and celebrated as vital to the preservation of Native culture, traditions and lands. It is a line of force and time that continues to resonate, three-hundred-forty years later.¹⁶

La Junta de los Rios

1,603–1,530 kilómetros (996–951 miles) from and

820–774 metros (2,690–2,538 feet) above the Gulf of México

Average Rainfall: 24.5cm (9.66in)

Average Temperatures: 38.1C (100.5F) high, 21.8C (71.2F) mean, 2.4C (36.3F) low

From Banderas the rio extends southeast by south picking its way through remote and rough canyons between the Quitman Mountains and Sierra San Martin del Borracho. Fed by drainages such as Arroyo Agua las Vacas and Goat Canyon, Arroyo Paredon and Hog Canyon. Past farms, ejidos, ranchos and communities with place names Guerra, Bramlett, Pilares, Baeza and San Antonio de Bravo. Through crossings—mostly informal—called Bob Love, Paso el Cubano, Lower Los Fresnos, Comedor, San Antonio, Ruidosa, Sparks, La Pressa, and Vado. Through this section, present conditions often pull all waters from its channel, leaving it a massive dry arroyo holding the memory of past water frozen in time. Yet agricultural presence, or its traces, begin to fill the valley between Adobes and El Ramireño with most of it occurring on the rio's right bank, or western side. These fields however are not fed by Rio Bravo/Rio Grande. Instead, irrigation water flows ten miles upstream from the Rio Conchos in the Canal Principal Margen Izquierda set into the top edge of the floodplain. The fertile plain expands widely at La Juntas de los Rios, the confluence of Rio Conchos and Rio Bravo/Rio Grande. For some this is the rebirth of the primary river as often the majority of downstream flow emerges from the Conchos watershed. Overlaying the tangled knots of historic meanders within this section is an earthen rectification effort completed in the 1970s straightening and providing containment volume for flood level flows to course between the linked towns of Ojinaga, Chihuahua and Presidio, Texas. The dynamic rio course turns loose again

15 See Juan de Onate amputating the left foot of every man over 25 after a revolt at Acoma referenced in: Simon Romero, "Statues's Stolen Foot Reflects Divisions Over Symbols of Conquest," *The New York Times*, Sept. 30, 2017, <https://www.nytimes.com/2017/09/30/us/statue-foot-new-mexico.html>.

16 Simon Romero, "Why New Mexico's 1680 Pueblo Revolt is Echoing in 2020 Protests," *The New York Times*, Sept. 27, 2020, <https://www.nytimes.com/2020/09/27/us/pueblo revolt-native-american-protests.html>.

after Fort Leaton and continues through Ejido Monte Marqueño, Palomas, and Redford before cutting into more remote canyon country. The richness of this valley confluence and its history attest to the deep presence of indigenous pueblo cultures thriving here long before first contact¹⁷ with Europeans.



6

17 Alvar Núñez Cabeza De Vaca (Active 16th Century), *Nafragios de Alvar Nuñez Cabeza de Vaca, y Relacion de la jornada, que hizo a la Florida con el adelantado Panfilo de Narvaez* [En Madrid, ano, 1749], Pdf. retrieved from the Library of Congress, www.loc.gov/item/04008076/.

18 Jose Villanueva, oral history, 2020.

19 David Turnbull, *Maps are Territories: science is an atlas* (University of Chicago Press, 1989).

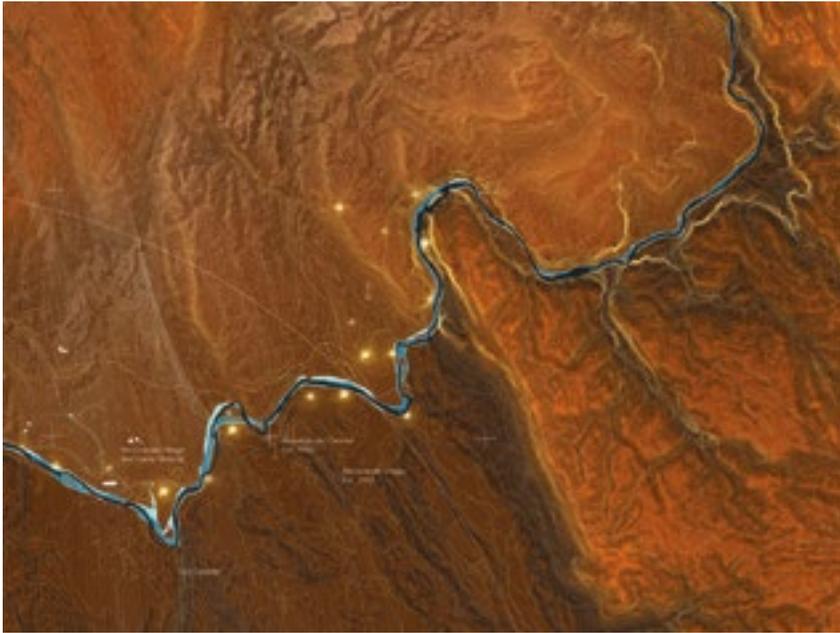
6 High resolution digital elevation model of confluence of Rio Conchos and Rio Bravo/Rio Grande near Ojinaga/Presidio.

*My second memory is of the river. My dad sent my grandfather money to buy us a bus ticket to Nuevo Laredo. My older brother tagged along. Once in Nuevo Laredo my grandfather handed me off to a group of men who I had never met before and he returned back to my hometown with my brother. It all happened really fast. Before I knew we were at the riverbank. The river was muddy and violent. The men begin to remove their clothes and placed them in trash bags. I was used to seeing my older brother naked when we'd bath together as children but never an adult. This was a first. I was in shock. Once their clothes were in trash bags, they tied a knot at the end and flung them across the river to the other side. I didn't have any luggage or a trash bag; just the clothes I wore that day. The tallest man picked me up and sat me on his shoulders and we crossed. I don't know if he stumbled or if he stepped on a soft spot of the riverbed that he submerged lower into the river and dipped my backside into the water. I felt the cold chill crawl up my spine and through the rest of my body as I touched the water. Later, as a kid growing up in Oak Cliff, I would always remember this chill when other children teased me about being a "wet back". It was a matter of fact; it was all that got wet; nothing to get upset about. Once on the other side, the men opened their bags of clothing and began to dress in their dry clothes before we continued on. Once in the city, they left me in a cheap motel and locked the door behind them. They told me not to open the door for anyone before they left. I cried until I fell asleep. When I woke up my father was there. We checked out and hitchhiked to Dallas to reunite with my mother.*¹⁸

Is it possible to create a map that avoids, or acknowledges, the imperial, colonial, and military imperatives they emerge from?¹⁹ How might its story develop? What timelines are held? Are cultivated?

Independent Mexico inherited in 1821 a badly fragmented frontier in its far north, and the fledgling nation failed to put it back together. New Mexico continued its drift toward

20 Pekka K. Hämäläinen, *The Comanche Empire*
(New Haven: Yale University Press, 2009), 182.



7

Comanchería, distancing itself from the rest of Mexico, while Texas, in a doomed attempt at self-preservation, opened its borders to U.S. immigration. The founding of the Republic of Texas posed a grave threat to Comanches, but ironically, it also spurred one of the most dramatic extensions of their regime. While struggling to secure their border with the Long Star Republic through war and diplomacy, romances shifted their market-driven raiding operations south of the Rio Grande, turning much of northern Mexico into a vast hinterland of extractive raiding. That subjugated hinterland was what the United States Army invaded and conquered in 1846–48.²⁰

Early on in the process of building the rio meander map, questions and methods of telling time proved central. In addition to synthesizing information geo-spatially, aggregating research in time was a persistent objective. What appeared as chronological timeline, one beginning with the ages of rock, minerals and Earth itself, traversed broad evolutions and legal treaty minutiae. It persisted as provocation of narrative voice and design language, as singular primary focus points or multi-scalar, multi-dimensional indexical reference.

What if our mapping could serve to disorganize and disorient rather than uphold the rigid boundaries established by surveyors at the turn of the century, a sort of beautiful chaos that better reflects the reality of nature (including human intervention)?

Alden Anderson, 13 Sep 2020.

Maderas del Carmen / Big Bend

1,336–1,313 kilómetros (830–816 miles) from and
581–565 meters (1,905–1,855 feet) above the Gulf of México
Average Rainfall: 32.4cm (12.77in)

Average Temperatures: 38.4C (101.1F) high, 21.2C (70.1F) mean, .33C (32.6F) low

Within the Big Bend the rio's course generally cuts its way through tight topographic canyons that rise and curl alongside, and across, its trajectory. Moments when boundaries and slope ease, braiding reoccurs before gathering. This particularly rugged and harsh territory, being remote from both south and north, has remained relatively isolated for centuries. Perhaps it was the deft equestrian power of the Comanche that made them the only peoples who defined this region as a throughway for larger continental ambitions. Traditional modern ranching and farming in the area has always been stretched thin, further opening the possibility for conservation, yet it was

7 Rio meander detail at Maderas del Carmen/Big Bend.

- 21 Alejandro Escovedo, "Rio Navidad," 2018, on *The Crossing*, Yep Roc Records. See also: Jeff Gage, "Alejandro Escovedo Documents the Immigrant Experience on New Album 'The Crossing,'" *Rolling Stone*, Oct. 13, 2018, <https://www.rollingstone.com/music/music-news/alejandro-escovedo-immigrantexperience-new-album-the-crossing-737341/>.



8

- 22 See "Zuni Map Art Project" started by Jim Enote of the A:shiwí A:wán Museum and Heritage Center at Zuni Pueblo featured in: *Counter mapping*, directed by Adam Loftin and Emmanuel Vaughan-Lee (Go Project Films, 2018), <https://aeon.co/videos/nativecartography-a-bold-mapmaking-project-thatchallenges-western-notions-of-place>.

8 QGIS rio tracing of USGS East Brownsville Quadrangle, 1930.

not until 1944 that the U.S. established Big Bend National Park and 1994 that Mexico created Parque Nacional Cañon de Santa Elena and Natural Protegida Maderas del Carmen. Here the rio is marked by a ribbon of riparian vegetation holding to the bottom of drainages such as Tornillo Creek, Arroyo Temporal and Arroyo Avispas. Archaeological traces also dot this segment evidencing zones of distribution and layers of occupation interweaving biologic/human and geologic time scales.

*it's a name you can never change
in a way it's just as American as yours
you probably don't even know about
the Treaty of Guadalupe Hidalgo
you know, come to think of it
the border crossed me, I didn't cross it
if you really want to think about it
you're the wetback
coming across the Atlantic²¹*

Spoken language within border culture is as interwoven as rio meanderings. Predominately Spanish, yet not singular, switching freely as necessary. Responding to frictions and alliances. Behind each Spanish or English name lies indigenous understandings for places, features and forces that have been overtaken, displaced, or unseen.²² Given the poly-lingual nature of the subject and the group of researchers the emerging language of the map is voiced in a similarly fused amalgam.

Our lives are a metamorphosis to understanding our individual relationship with our environment.

Amber Noyola, 19 Sep 2020

To create the work, the collective producers also needed to craft the processes necessary to bring all the voices, content, and material together. Constantly testing and refining research and development methods as the rio meander map came into view.

We have all started to see how man has shaped the river, but one of the things I often wonder about is how it's shaped the lives of the plants and animals that have depended on it for so long.

Andres Armendariz,
28 Sep 2020

Rio as international boundary spawned a legacy of surveying and diplomatic challenges requiring extensive agreements and adjustments over time.

This space is intentionally blank to acknowledge the missing, disappeared, lost to time, weather, violence; what is yet to be known, and/or remembered.

Translation can be a border, since it is a bridge between two languages. Yet, a border also describes opposites such as truth and fiction, since there is a border or huge difference between them. How is it that border can mean a bridge connecting different things, while also meaning a divide between two things that will never be connected?

Daniel Rios, 26 Oct 2020



9

²³ C. J. Alvarez, *Border Land, Border Water: A History of Construction on the U.S.-Mexico Divide* (Austin: University of Texas Press, 2019).

²⁴ Patrick O'Shea was vital to developing this skillset and workflow.

Creating the Rio Meander Map required its makers to identify and create geospatial continuities where fractures and disconnection existed before. While the binational International Boundary and Water Commission was created by treaty to adjudicate management issues through subsequent treaties and agreements, their records tend towards resolution of specific inconsistencies to border configurations. They seek to simplify, codify and fortify a single line. Records of their actions, in earthworks and legal documents, demonstrate their quest for efficiency. Our charge, to create a living portrait of a living river, sought to understand the complex interwoven conditions of hydrology, geology, culture, and language evolving with time. The effort to reveal matrices of dynamic character was also limited by our time within an academic semester and our remote mode of operating. Through all we sought to complicate rather than essentialize. To describe the myriad manifestations of rio meander in time as sets of dynamic, transitory and evolving conditions. Not a fixed line, or symbol, or mathematical puzzle to be solved. Within the lines of this rio, and this land, are interbedded histories knitting and stitching together border culture, border land, border water.²³

Making these efforts possible began with geospatially digitizing the rio in over two-hundred historic maps dating from the 1800s to present. This occurred within QGIS, a free and open-source geographic information system that also allowed for the aggregation and synthesis of an abundance of other public source data from a wide spectrum of archives, organizations, and agencies. This was our primary agent of geospatial synthesis.²⁴

The border is a result of the meanders but the meanders are not a result of the border.

Adrian Reyna, 2 Nov 2020



10

La Presa Amistad

1,038–909 kilómetros (645–565 miles) from and
 342–252 metros (1,123–826 feet) above the Gulf of México
 Average Rainfall: 47.8cm (18.81in)
 Average Temperatures: 35.9C (96.7F) high, 21.2C (70.2F) mean, 5.3C (41.6F) low

Prior to exiting the deep canyons of Big Bend, the rio enters La Presa Amistad, or Amistad Reservoir. Long before the water body is visible or legible, a slight shift in current and growing horizontality in the surface can be registered. Instead of continuing downward flow, the water's surface levels charting a line independent of the ancient trajectory of land below. The datum is controlled at the nearly ten-kilometer (six mile) embankment dam bridging the states of Coahuila and Texas just below the confluence with the Devils River and over forty-eight kilometers (thirty miles) downriver. Built and commissioned between 1963 and 1969 for the "control of floods and conservation and regulation of waters."²⁵

Archeological resources within the area were known long before the impounding of waters in the reservoir. Excavations of the Fate Bell Shelter in Seminole Canyon began in 1932.²⁶ With approval for the dam the Amistad Archeological Salvage Program evolved between 1958 and 1969 in an attempt to witness and record sites to be impacted. Subsequent research has revealed sites within the Lower Pecos region to have profound continental importance containing records of human activity dating from four to five-thousand years before the common era.²⁷ While powerful examples remain above the crest of the dam at 351 meters (1,152 feet) above sea level hundreds were lost under the water body. Controlled release generates hydroelectric power for each country, from parallel independent plants, before flowing past Arroyo El Buey and McKees Creek, under Acuña/Del Rio International Bridge, and further downriver.

All the people who begin to cross the border and attempt to do so, in a sense, are beginning to create a stitch between two nations.

Adrian Reyna, 26 Oct 2020

What matters is how the gridded Euclidean space of the US military created a new kind of global and installed the new rationality as an intrinsic feature of geographic space. Unlike latitude and longitude, this is a rationality that puts the needs of everyday users above any overarching interest in the earth itself. It is a rationality of calculability, regional consciousness, and a retreat from the cleanly delimited space of the territorial state.²⁸

25 International Boundary and Water Commission, United States and Mexico, *Minute 207*, June 19, 1958, <https://www.ibwc.gov/Files/Minutes/Min207.pdf>.

26 James Edwin Pearce and A. T. Jackson, "A Prehistoric Rockshelter in Val Verde County, Texas," *University of Texas Bulletin* 3327, *Anthropological Papers* 1.3, Bureau of Research in the Social Sciences, July 15, 1933.

27 Carolyn E. Boyd and Kim Cox, *The White Shaman Mural: an Enduring Creation Narrative in the Rock Art of the Lower Pecos* (Austin: University of Texas Press, 2016).

28 William Rankin, *After the Map: Cartography, Navigation, and the Transformation of Territory in the Twentieth Century* (Chicago: The University of Chicago Press, 2018), 166.



11

The advancement of map making is intertwined with the history of military empires, global commodity trade, colonialism, and human exploitation. The map as evidence of power, narratively and operationally, extends from the first cartographic gestures through the evolution of the Universal Transverse Mercator coordinate system to the World Geodetic System (WGS). Currently U.S. Defense Department created WGS 1984 EPSG:4326 enables everything from mobile Global Positioning Systems to remote military map firing and drone navigation. It is a coordinate projection system of uniform squares and parallel grids distorting Earth geometry to facilitate rapid mathematical position calculations. Earlier projections were based on equal subdivisions of longitudinal lines at the equator converging at the poles. North-south lines in these systems are not parallel and reflect planetary curvature. Hence, the coordinate reference system projection for the Rio Meander Map is set to Mexico ITRF2008 EPSG:6372 to evidence the dynamic and relational shifting of cartographic north.

The confidence indicator, how much do we trust the source, not only that the person actually has the information (have they been to the place), but how else could the information be transformed before it gets to the viewer.

Frances Erlandson,
15 Sep 2020.

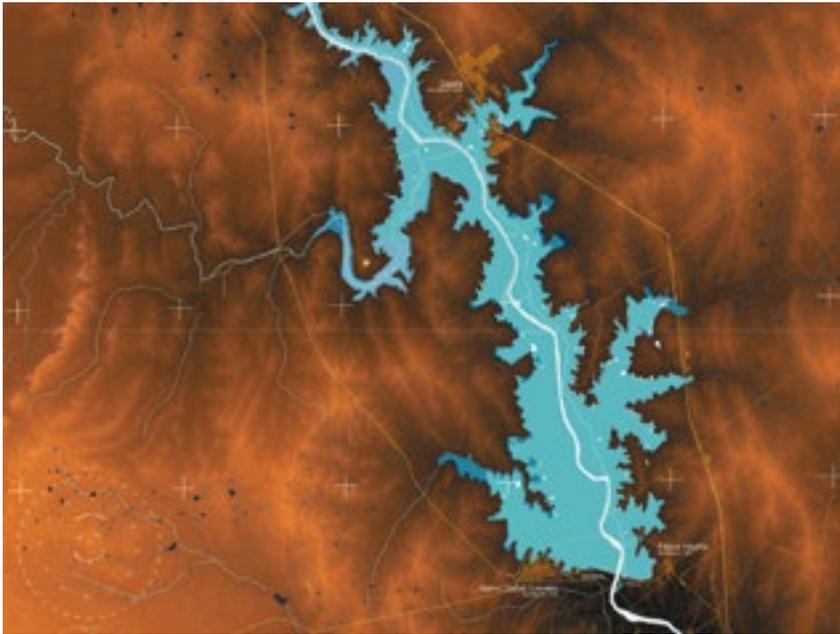
Amplifying the multiple geographic datasets that were folded into this dynamic and living portrait, it was also vital for the map to include multiple points of view, temporalities, and subjectivities in graphic and narrative form.

My last memory is of rain. By this time, we were all reunited. My parents brought us on by one from youngest to oldest. After they brought me, they saved up for a year to bring my brother and did the same for my sisters until we were all together. I don't know how long after I arrived but in this memory my sister was carrying me. We were standing in the balcony of a two-story apartment building where my parents found a place they could afford. We lived above a trap house, a one stop shop for hookers and crack. It was the early 90s. I'm sure I must have experience rain before, even back in Mexico, but this felt like a first. I was in awe. To me, at the time, it was inexplicable sorcery.²⁹

²⁹ Jose Villanueva, oral history, 2020.

11 Magnetic declination at map details revealing multiple norths at 7°51'E, 6°47'E, 6°7'E, 5°16'E, 4°17'E, and 3°26'E, changing by 0°7'W per year.

- 30 Where Wolfman Jack became a sensation on the border blaster radio of XERF-AM. Hear: Terry Allen, "Wolfman of Del Rio," 1979/2016, on *Lubbock (on Everything)*, Fate Records / Paradise of Bachelors.



12

- 31 Guerrero Viejo was abandoned to the water and moved or reconstituted at Neuvo Ciudad Guerrero. Recent years of drought have allowed the memory of the town to emerge causing it to appear on the roster of the World Monuments Fund. <https://www.wmf.org/project/antigua-ciudad-guerrero-guerrero-viejo>.
- 32 International Boundary and Water Commission, "Falcon Dam Proves Itself," 1954, https://texasarchive.org/2013_00973.
- 33 John Wesley Powell, *Report of the Lands of the Arid Region of the United States, with a more detailed account of the lands of Utah, with maps* (Washington: Government Printing Office, 1879).

12 Rio meander detail at La Presa Falcon.

"American clean" is as much a cultural construct as our water projects are tools of homogenization and cultural imperialism.

Caitlin Ford, 18 Oct 2020

La Presa Falcón

538–428 kilómetros (334–266 miles) from and 94–49 meters (307–160 feet) above the Gulf of México
Average Rainfall: 52.3cm (20.6in)
Average Temperatures: 37.8C (100.1F) high, 23.8C (74.8F) mean, 9.1C (48.4F) low

From Del Rio and Acuña³⁰ the rio trends heavily south by slightly east as it passes through Piedras Negras and Eagle Pass, Laredo and Nuevo Laredo, dropping only 158 meters (519 feet) in elevation in just over 300 kilometers (under 200 miles) before starting to level out again at San Ygnacio, 60 kilometers (37 miles) upriver from La Presa Falcón. The distances of travel and impoundment compressing and expanding. Falcon Dam was authorized by International Boundary and Water Commission treaty in 1944 and was constructed between 1950 and 1954. Flood control was a central justification, and cause for subsequent relocations, displacements, and submersions.³¹ As it was completed Hurricane Alice struck creating major upriver flooding that was stopped by the new reservoir sparing downstream disaster and "proving" its necessity.³² That event became vital to the planning and authorization for La Presa Amistad the following decade. Where Amistad marks the dissipation of canyon topography and a north-eastward turn of Balcones Fault, Falcón is the last vertical threshold of the rio before the coastal plain. Meander impoundment here is for agricultural consistency and yet another attempt of human control over hydrologic systems. Falcón also lands just east of the 100th Meridian, the so-called dry line John Wesley Powell used to mark the limit of aridity defining the American West.³³ It is climatological threshold registered in the ability of vegetation to shift the territorial color palette from yellow-brown towards green.

Hate speech is pervasive, indeed, constitutive of colonial situations, but the implantation of colonial rule and the subordination of colonial subjects cannot be reduced to a modality of hate speech. "Love speech" is as central to colonization as spurting offensive yet injurious stereotypes. The challenge is to understand love speech as a powerful mode of subjection and effective violence. The most evident example is the declaration of love "We bring you the gift of Christ's blood," which is bound by the implicit obligation to accept the offering. This interpellation constitutes a form of

- 34 José Rabasa, *Writing Violence on the Northern Frontier: The Historiography of Sixteenth Century New Mexico and Florida and the Legacy of Conquest* (Durham: Duke University Press, 2000), 6.



13

*love speech in which threat on the Indians' life and freedom (even when not explicit) always remains a possibility within the historical horizon if the summoning is not heeded.*³⁴

Production of the Rio Meander Map gravitated around central questions of color palettes and the legibility to reveal transformations over time. While this began with the geometry and synthesis of rio channel boundaries, it grew to include larger contexts. With access to low- and high-resolution digital elevation model (DEM) datasets, a central question became how to utilize and activate landform information within the map. When first loaded DEM files appear as deep space weather impressions, vague and nebulous. Yet, as display settings and details are tuned the weight and geometric specificity these raster files contain is astounding. In addition to topographic geometry the data layers have the opportunity to be color coded by elevation to more strikingly reveal topographic definition. This prompted an extended period of exploration and testing to draw out questions such as, should the map color palette approach verisimilitude to respond to the shifting terrestrial hues of reds and yellows in the west through browns and grays into green and ultimately blue of the sea? While there was didactic potential for such distributions, inverse propositions also opened. Rather than seek to match or emulate the visible spectrum of “true-color,” how might presentations in “false” or “pseudo color” enable intensified focus, legibility, and character? Moving through a wide range of options, the group homed in on a palette of dark to metallic copper that allows a spectrum of blue meander to pop. The opportunity became one of reducing variables to heighten legibility.

Every new creation has a context. To try to erase that context and start over with a blank page is a form of violence.

Alden Anderson, 9 Nov 2020

Throughout the semester, weekly reading responses were posted asynchronously to a message board promoting reflection and exchange. This activity also had the benefit of becoming testament to the evolution of our collective understandings. In the final phases of development, a question reappeared about the necessity of not revealing too much, of holding something back, of what is impossible to know. In ubiquitous map technologies common in our contemporary connected world, clouds rarely appear in satellite imagery. This is not because there are lucky satellite pilots avoiding weather events. Great labor, and algorithmic processing, conspire to subtract these aqueous vapor features from desired, and constructed, views. What clouds will this map contain? Instead of simulating or caricaturing weather, we were

able to access pre-processed image data revealing not only clouds across our study area, but typological distinctions between those in the arid western and coastal eastern extents of the project. Shortly thereafter, the reflective reading responses operating as journal entries were cast into the clouds to provide a temporal index of dialogue around the themes and questions intertwined within the making of the map.³⁵

Including our experience before we write, our life experience, which is linguistic, which is social, which is....everything we come in contact with, and that influences how we write, or in terms of translation, what choices I make when I choose to translate tierra as ground or earth, or land, or planet, or soil.

Curtis Bauer, 14 Oct 2020

*Time isn't holding us; time isn't after us*³⁶

Matamoros / Brownsville

171–27 kilómetros (106–17 miles) from and

15–2 meters (48–8 feet) above the Gulf of México

Average Rainfall: 69.7cm (27.44in)

Average Temperatures: 34.1C (93.4F) high, 23.6C (74.5F) mean, 11.6C (52.9F) low

After Falcón, the rio turns eastward in its quest to reach the Gulf of Mexico. Snaking through Ciudad Miguel Alemán and Roma, through wide fertile plains. Past ancient banco, or oxbow, formations. Many holding vestigial connections to water tables from below, and patterns of ancient topographic drainage. These discontinuous meanders also define limits of settlements, infrastructure and cultivated fields. The land-water balance shifting as the rio passes Reynosa and Hidalgo, Progreso and Nuevo Progreso, Ejido La Brigada and the Resaca De La Palma World Birding Center and between Matamoros and Brownsville. The former appearing to hold slightly more purchase on higher ground. The later riddled with canals, ditches and drains that clearly service agricultural lands and attempt dewatering stability. From Southmost the rio path winds through increasing estuaries, water-land-scapes that appear as bas relief carved over millennia. Terra firma gives way to open ocean were connectivity to the planetary water cycle becomes undeniable.



14

³⁵ Those entries also appear in this text as the thread of dated participant voices.

³⁶ Talking Heads, "Once in a lifetime," 1980, on *Remain in Light*, Sire Records.

*Maybe we are just creating a chain of love
for each to conclude their own truth from
our creation because the truth and beau-
ty in the project cannot love us back.*

The Rio Meander Map remains in development as it moves from studio to post-production and final coordination for printing in the *Al Rio/To the River* publication in 2021. In addition to that audience and exposure, the map will live beyond its making to two other ways. In the near-term during Spring 2021 it will be the subject of the 2020 Land Arts ADAPTATION Exhibition at the Museum of Texas Tech University. The annual Land Arts exhibition is designed to bring student work to larger audiences and to require synthesis moving from fieldwork to public legibility. Given the pandemic this may well become an online exhibition, which will further facilitate the map's afterlife. Over the long term Rio Meander Map will live on at the new Border Consortium being established by POST (Project for Operative Spatial Technologies) at the Texas Tech College of Architecture in El Paso. Given that most of the sources within the map come from public assets, the intention is to package and assemble the material in an online format to further its development and make the synthesized GIS data available to others for use in projects and opportunities we cannot begin to anticipate. Continuing persistent evolution of the Rio Meander Map.

*Behind some borders
you can hear the earth moving.³⁷*



15

³⁷ Curtis Bauer, *American Selfie* (New York: Barrow Street Press, 2019), 38..

Rio Meander Map was made by the Land Arts 2020 ADAPTATION from the College of Architecture at Texas Tech University.

Contributing Participants/Students

Undergraduate architecture candidates at Texas Tech

Andres Armendariz Zaragoza from Chihuahua, Mexico and El Paso, **Haley Cooper**, from Poth, **Carissa Perez** (double major in art) from nine Texas towns, and **Grace Shanks** from Amarillo.

Graduate architecture candidates at Texas Tech

Joseph Bondi from Frisco, **Bryan Brummett** from Ft. Worth, **Stephanie Enriquez** from El Paso, **Ana Garcia Merino** from Monterrey, Mexico, **Rebekah King** from San Antonio, **Jonathan Lalinde** from San Antonio **Amber Noyola** from Lubbock, **Adrian Reyna** (Land Arts 2019) alum from Dallas, **Daniel Rios** from El Paso, **Landon Wade** from Silverthorne, Colorado, and **Mia Zaro** from Ft. Worth.

Independent scholars

Maria Amador architect and artist in Seville, Spain, **Alden Anderson** architect in New York, New York, **Frances Erlandson** poet and designer based in Green River, Utah from Los Angeles, California, **Caitlin Ford** environmental designer based in Japan and from Philadelphia, Pennsylvania, **Lia Forslund** Land Arts 2019 alum, writer and artist from Stockholm, Sweden, **Alex Lopez-Iglesias** artist and designer based in Los Angeles, California, from Ciudad Juarez, **Adam Neese** artist and conservator based in Denton, Texas and New York, and **Franek Wardyński**, Land Arts 2019 alum, artist and designer from Warsaw, Poland.

Primary Production Voices

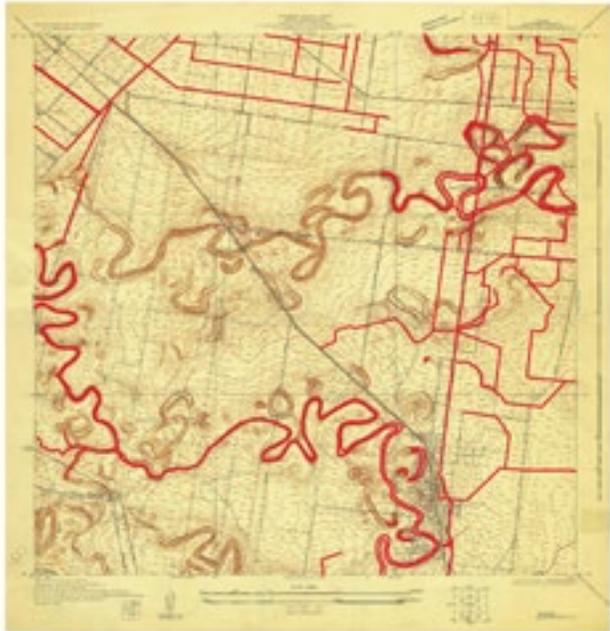
Patrick O'Shea, lead spatial synthesizer, artist and technologist based in Chicago, Illinois; **Cesar Adrian Lopez**, lead graphic producer and Assistant Professor of Architecture, University of New Mexico; **Caleb Lightfoot**, deputy graphic producer, Land Arts 2015 alum and designer based in Berkeley, California; **Rebecca Gates**, musician, artist, curator, and soundworker based in Portland, Oregon; **Tim Johnson**, poet and publication editor based in Marfa, Texas; and **Chris Taylor**, director of Land Arts of the American West at Texas Tech University.

Contributing Advisors

Curtis Bauer, poetry and translation, Professor of Creative Writing at Texas Tech; **Judith Birdsong**, geologic architecture, Lecturer in Architecture at University of Texas at Austin; **John Davis**, landscape history, Assistant Professor of Landscape Architecture at Ohio State University; **Jennifer Terrell**, independent scholar and writer based in El Paso; **Jesse Vogler**, surveyor, landscape architect and Head of Architecture at Free University of Tbilisi; **Kevin Chua**, Associate Professor of Art History at Texas Tech; **Nichole Wiedemann**, Associate Professor of Architecture at University of Texas at Austin.

Sources and Inspiration

Allen, Terry. *Juarez*. Sugar Hill Records / Paradise of Bachelors, 1975 / 2016. Alvarez, C. J. *Border land, border water: a history of construction on the U.S.-Mexico divide*. Austin, TX: University of Texas Press, 2019. Azoulay, Ariella Aisha. "Unlearning Decisive Moments in Photography", Still Searching, 31-Oct-18. Bauer, Curtis. *American Selfie*. New York: Barrow Street Press, 2019. Bitsui, Sherwin. *Floodsong*. Port Townsend, Washington: Copper Canyon Press, 2019. Bowden, Charles. *Killing the hidden waters*. Austin: University of Texas Press, 1977. Boyd, Carolyn E., Kim Cox and Project Muse. *The White Shaman mural an enduring creation narrative in the rock art of the Lower Pecos*. Austin: University of Texas Press, 2016. Deloria, Philip. "What Tecumseh Fought For" *The New Yorker*, 2 Nov 20. Diaz, Natalie. *Postcolonial love poem*. Minneapolis,



16

MN: Graywolf Press, 2020. Diaz, Natalie. "The Picture" *Aperture 240: Native American*, Fall 2020. Douglas, Sam Wainwright (Director). *Through the Repellent Fence*. Big Beard Films, 2017. Ehrenreich, Ben. "Lessons From the Desert: Rediscovering the Endlessness of Time" Dolores Dorantes in Conversation with Ben Ehrenreich, Counterpoint Press, LIT HUB, 9 Jul 20. Franco, Josh T. "There Are No Amateurs in Far West Texas". *Third Text* 34.1, 2020. Hämäläinen, Pekka. *The Comanche Empire*. New Haven: Yale University Press, 2008. Innab, Saba. "Letter to Malevich" *Polycephaly*, Station Point, Berlin, 2018. Jonas, Joan, Karen Kelly, Jason Moran and Dia:Beacon. *Joan Jonas: the shape, the scent, the feel of things*. New York / Paris: Dia Art Foundation / Yvon Lambert, 2006. Kripa, Ersela and Stephen Mueller. *Fronts: military urbanisms and the developing world*. San Francisco: Applied Research + Design Publishing, 2020. Leonard, Zoe. *I Want a President: transcript of a rally*. New York: Zoe Leonard, 2017. Leonard, Zoe and Ann Bremner. *Analogue*. Columbus, Ohio / Cambridge, Mass.; London: Wexner Center for the Arts / MIT Press, 2007. Leonard, Zoe and Roxana Marcoci. "Zoe Leonard's Al Rio / To the River" Artist Project in the *MoMA Magazine*. New York: Museum of Modern Art, 26 Oct 20. Lippard, Lucy R. *Undermining: a wild ride through land use, politics, and art in the changing West*. New York: The New Press, 2014. Lopez, Barry Holstun. *Horizon*. New York: Alfred A. Knopf, 2019. Lopez, Barry Holstun. *The rediscovery of North America*. New York: Vintage Books, 1992. Macfarlane, Robert. *Underland: a deep time journey*. New York, London: Penguin Books, 2019. Masters, Ben (Director). *The River and the Wall*. Fin & Fur Films, 2019. McNelis, Ashley with contributions from Marina Tyquinego and Talia Heiman. "Confidence Indicator: Reconstructing Traven and Research for CI57-2018" in Schaffner, Ingrid, and Liz Park. *Dispatch: CI57—2018*. Pittsburgh: Carnegie Museum of Art, 2019. Rabasa, José. *Writing violence on the northern frontier: the historiography of sixteenth century New Mexico and Florida and the legacy of conquest*. Durham: Duke University Press, 2000. Rankin, William. *After the Map: Cartography, Navigation, and the Transformation of Territory in the Twentieth Century*. Chicago and London: University of Chicago Press, 2016. Reisner, Marc. *Cadillac Desert: the American West and its disappearing water*. New York: Penguin Books, 1986. Schaffner, Ingrid. "Zoe Leonard" in *Carnegie International 58th editions, 2018: The Guide*. Pittsburgh: Carnegie Museum of Art, 2018. Silver, Marc (Director). *Who is Dayani Crystal*. Pulse Films, Canana Films, 2013. Tate, Carolyn. *Reconsidering Olmec Visual Culture, The Unborn, Women, and Creation*. Austin: University of Texas Press, 2014. Taylor, Chris and Bill Gilbert. *Land Arts of the American West*. Austin: University of Texas Press, 2009. Tejada, Roberto. *Still Nowhere in an Empty Vastness: History + Metaphor*. Blacksburgh, VA: Noemi Press, 2019. Vogler, Jesse. "How the Rio Grande Creates Geographical—and Legal—Loopholes" *The Architects Newspaper*, 2 Aug 2018.

Hathi Trust Digital Library, Ann Arbor, Michigan, U.S.A. National Institute of Statistics, Geography and Informatics (INEGI), Aguascalientes, Mexico. Native Land Digital, native-land.ca Canada. U.S. Geological Survey, Reston, Virginia, U.S.A. U.S. Library of Congress, Washington, D.C., U.S.A. QGIS: Free and Open Source Geographic Information System.

Blowing Dust Off the Trails: An Itinerary Through Trans-Saharan Lines

Alvaro Velasco Pérez



Here a water-hole : nomad's outpost (strategy). 106

Here finally "Le Bidon 5," nerve-centre on the imperial highway. The white race goes its conquering way. The filling station is a symbol of white civilization. 107



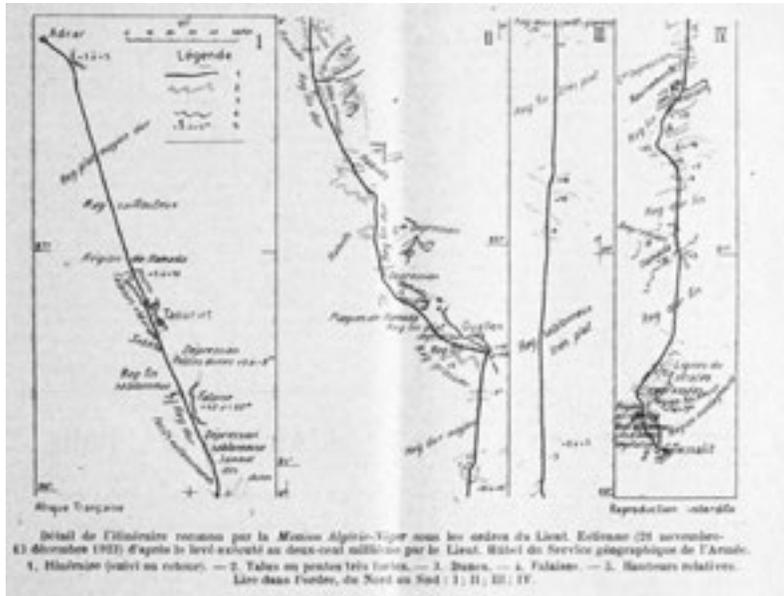
1

1 Though in the 'Details of the illustrations' section of the book it appears as "Native Camp near Acar, French East Africa." Le Corbusier, *Aircraft* (London: The Studio, 1935), 16. The photo was provided by the magazine 'L'Aéronautique' (see *Ibid.*, 4)

2 *Ibid.*, image 107.

3 Georges Estienne, *Naissance de "Bidon V"* (Paris: Publications du Comité de l'Afrique Française, 1937), 2.

It is foolish to build on sandy grounds, says the old truism. Le Corbusier argued there were two spatial strategies across the Sahara at the time of his writing *Aircraft* (1935) [1]; one on top of the other, in the same page, Le Corbusier chose a photo of a waterhole for nomadic caravans and one of a fuelling station for airplanes. Mirroring each other, both refer to a logic of halting along the road. Their complicity is that both are physical points revealing invisible trans-Saharan lines that the camera cannot capture: for the eyes of the nomad and pilot, the desert is traversed by multiple sensorial lines of travel. Le Corbusier selected a cliché image for the nomad—to the point of not even identifying it¹—and a curious one for the pilot. “Nerve-centre on the imperial highway,”² as he footnotes; “Le Bidon 5” symbolised the French project for connecting the colonies to the north with those to the south of the desert. Concluded just some three years before Le Corbusier’s publication, the highway was to join the 1,300 kilometres that separated Reggane, in south-west Algeria, from Gao in the Niger river. Traversing a sea of sand, it was an abstract north-south line that extended the road from Oran, in the Mediterranean, to Sudan. But while this line across the desert was more an axis, the particular point that Le Corbusier highlighted was set following the itinerant line of the nomads. It was lieutenant George Estienne who anchored the point of the Bidon 5. President of the *Compagnie Générale Transsaharienne* at the time, Estienne began a search for the quickest route between north and south. For that he followed the route established by the trans-Saharan trade. The Bidon 5 became significant in that, when in 1926, following the ancient trails through the Oued Namous³, he continued the roads south from Adrar until he decided to take a dramatic turn south off-the-road. Up to then he had been following the waterhole to waterhole itinerary of the nomads to reach Ouallen, the last well in the meridian direction. With the detour he entered a section of the Tanezrouft region in which no water source was to be expected. Of course, the fact that the expedition was formed by four Citroën cars and his own Nieuport-Delage aircraft helped the traversing of the Tanezrouft to



2

4 Ibid., 24.

5 Société Shell d'Algérie, *Guide du Tourisme Automobile et aérien au Sahara*, 1934–35 (Alger: Shell éditeur, 1934), 46.

6 Ibid.

7 Antoine de Saint-Exupéry, *Wind, Sand and Stars* (New York: Reynald & Hitchcock, 1939), 47.8 Louis Castex, "Sahara, Terre Promise," *Revue des Deux Mondes*, July 15, 1953, 205.9 Estienne, *Naissance*, 13.2 Georges Estienne, *L'Afrique française, bulletin mensuel du Comité de l'Afrique française et du Comité du Maroc*. 1937, 151 © BnF

Tessalit—the closest water point in the southward direction—without incidents. Nevertheless, the 500 kilometres of detour required two days, partly through the soft surfaces of the ergs and partly along the rough stony surfaces of the hamada. The expedition spent the night midway—the station—point that became the first iteration of Bidon 5⁴.

The photograph selected by Le Corbusier with its oil pump for cars was anachronistic by the time of the publication, as Bidon 5 was upgraded by the Société Anonyme Française des Pétroles Shell in January 1934 to include a fuelling station for airplanes⁵. Nevertheless, what the photo does include is the characteristic profile of the seemingly derelict bodywork of two twin coaches. In their heyday they were painted white, and reflecting the sun shone while in motion upon the Saharan landscape. Substituting their seats for beds, they were the stark accommodation for the temporary visitors, giving a vivid experience of being “more than 500 kilometres away from any human, animal or vegetal life”—as Shell promoted the place among desert-lovers⁶. It might have caught Le Corbusier’s imagination as a paradigmatic “machine à habiter”. In any case, it presented an interesting mirror image to the nomadic tents of the photo above it. Estienne’s Compagnie Générale Transsaharienne incorporated a logic of the nomadic caravan in its retracing of the Trans-Saharan trails. Estienne, himself a pilot, would have easily made his own words from those of Antoine de Saint Exupéry, who identified himself with the nomads in his famous desert travelogue *Terres des Hommes* (1939). The author of *The Little Prince* might have enjoyed the spartan shelter at the Bidon 5, as he remembered his days flying over the Sahara in the service of the airmail carrier Aéropostale as the austerity of the Trappist⁷. Nevertheless, in their technology of transport becoming habitation, the peripatetic European ushered in a completely different logic to the nomadic lines. While lucid in its coach transformed to couch, it was unlikely that a camel would define a similar conversion for the nomad.

But locating the images in the same page was beyond the act of tracing similarities. Here the imperial line works in a very different way to that of the trans-Saharan nomadic lines. Even though departing from the trail routes, the line was axial, and its dots were defined by conditions other than presence of water. The highway Reggane-Gao was the first European completed project to traverse across the Sahara, before the second line that crossed it from Alger to Zinder through the mountains of Tamanrasset⁸. Bidon 5 was paramount in that it represented a mid-point, an almost Cartesian “mid-distance between the water points of Ouallen and Tessalit and between the inhabit regions of Reggan and Tabankort”⁹—as Estienne described it. A point that was conceptually defined on the charts rather than on the ground. [2]

But it was not only in the abstract logic of French cartography that they differed; in their relationship to borders, they were worlds apart. While for the French empire the question of the line was to establish borders, the nomadic line traced relationships through porous boundaries. Researching the trading caravans that crossed the Sahara, Ghislaine Lydon observed how the nomads connected the north and south edges of the desert. While the itineraries crisscrossed, the trade was operated by clans that not only had members moving through the routes, but also those who settled in various markets. The clans were united by family, financial, commercial and cultural ties that were made cohesive by a shared homeland¹⁰. The tight-knit community of traders scattered through the landscape was not reduced to the extended family, but also encompassed a multiplicity of families and ethnicities, and even various religions—including Muslim and Jews. It was the place of origins, a homeland region that connected them all and formed the most important identity marker¹¹; in a certain sense, a homeland that departed from a centre but dispersed around the markets. This way, Lydon uses Abner Cohen's "trading diaspora" model to analyse the organisation of long-distance trans-Saharan trade¹². She describes the trans-Saharan trails as a series of networks that connected points, but also intersected each other. The trails might have originally connected water sources, but the network had strong components creating a framework for operations. In the context of nineteenth century Western Sahara, where no single state or overarching power ruled supreme, the system was not that of borders, but of networks.

The nomadic network might seem slightly paradoxical in that the lines connecting the markets were ill-defined. The roads were tracks mostly running in the same direction and loosely delimited by dunes, rocks or other non-navigable terrains. This vagueness of the road opens up to consider how space was defined. In his *L'Herbe et le Glaive: de l'Itinerance a l'Errance: La Notion de Territoire Chez les Touarges* [The Grass and the sword: from itinerancy to wandering: the notion of territory among the Tuaregs], André Bourgeot defines how territory is understood by the nomadic people of the Sahara by two key concepts: mobility and flexibility¹³. Mobility refers to the system of displacements that are articulated through the annual cycles due to climatic and ecological conditions. The caravans are organised with regard to the production of trading goods that vary during the year and transhumance displacements according to the presence of grazing ground that varies according to the rainy seasons. Flexibility has to do with the conditions of the members of the network, many times more related to the dots in the network—markets and regions of origin—that make the mobility depend on the political and economic affairs. Thus, the nomadic territory of the Tuareg doesn't depend on the tracing of lines; the network is composed of itinerant

10 Ghislaine Lydon, *On Trans-Saharan Trails* (Cambridge: Cambridge University Press, 2009), 342.

11 *Ibid.*, 344–45.

12 *Ibid.*, 343.

13 André Bourgeot, "L'Herbe et le Glaive: de l'Itinerance a l'Errance: La Notion du Territoire Chez les Touarges," *Bulletin de liaison de l'ORSTOM*, Département H, 8 (1986): 145–162.

14 Tilman Musch, "Teda Drivers on the Road between Agadez and Assheggur," in *The Making of the African Road*, ed. Kurt Beck et al. (Leiden: Brill, 2017), 223.

15 Le Corbusier, 'A Frontispiece to Pictures of the Epic of the Air,' in *Aircraft*, 12. With some minor modifications, the story of his flight over the M'Zab was published again in: Le Corbusier, *Sur les 4 Routes* (Paris: Éditions Gallimard, 1941, text signed in 1939), 122-125.

16 A logic that Le Corbusier titles "the voice of the desert" and "the melody of the oasis" in *The Radiant City*. See: Le Corbusier, *The radiant city: elements of a doctrine of urbanism to be used as the basis of our machine-age civilization* (London: Faber and Faber, 1967), 232.

17 Ibid.

18 Le Corbusier, "Coupe en Travers. Retours... ou L'Enseignement du Voyage," *Plans* (Oct, 1931): 104.

19 Marcel Mercier, *La Civilisation Urbaine au Mزاب* (Alger: Émile Pfister, 1922), 36. Interestingly enough, Le Corbusier mistakes the number of cities in the text of *Aircraft*, when he mentions that "[the Mozabites] made the seven cities of the M'Zab and the seven oases." (see: Le Corbusier, *Aircraft*, 12)

lines. It is not only the nomads that move, but the lines of the networks themselves displace affected by ecological and political conditions and are activated on and off according to cycles. For the nomadic line, the important thing in the desert is to move¹⁴. For the imperial line it was to arrest, being capable of controlling through the drawing of a border. During colonial times, the two lines struggled to appropriate the desert.

In the introduction to *Aircraft*, Le Corbusier also talks about his encounter with a people of the Sahara. It was 1933, "(w)ith my friend Dura-four," the text goes, "I left Algiers one sun-drenched afternoon in winter and we flew above the Atlas towards the towns of the M'Zab (...)." After a time of uneventful desert-crossing:

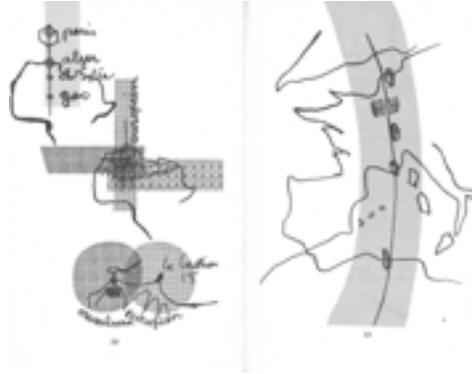
"Durafour, steering his little plane, pointed out two specks on the horizon, "There are the cities! You will see!" Then, like a falcon, he stooped several times upon one of the towns, coming round in a spiral, dived, just clearing the roofs, and went off in a spiral in the other direction (...) Thus I was able to discover the principle of the towns of the M'Zab. The airplane had revealed everything to us."¹⁵

The principle he mentions in the text is that the towns of the M'Zab had a cyclical relationship to climate. Each of the towns in the M'Zab is divided in two: an urban dense conglomeration of houses, and a scattered set of houses in the adjacent palm groves. In the winter, the Mozabites inhabit the towns. When the hot summer arrives they move to the oasis, abandoning their townhouses, defining a perpetual cycle that reflects the climatic dependency of the nomad¹⁶. For Le Corbusier, "[t]he lesson is this: every house in the M'Zab, yes, every house without exception, is a place of happiness, of joy, of a serene existence regulated like an inescapable truth, *in the service of man* and for each. (...) In the M'Zab it is not admitted that any family should be without arcade and garden."¹⁷

But more crucial than the summer/winter logic was the technological lens through which he was looking through at the valley. Two years before, in the summer of 1931, Le Corbusier had visited the M'Zab, that time by car. From the travelogue he published in *Plans* magazine, he only mentions the architecture of Ghardaïa, largest of the oasis/towns in the valley¹⁸. This time, airborne, in an up and down spiral itinerary, Le Corbusier could observe not only the scale of the courtyards, but also the larger scale of the valley. And he discovered that Ghardaïa was not alone; rather, it belonged to a larger system of five towns that compose one ecology. The system has been traditionally called the *pentapole* city¹⁹. Having started in the 11th century,



3



4



5

20 M. Christine Boyer has noted the triggering of the Meridian drawing from Le Corbusier's aerial experience, however, her text doesn't show any connection between the Meridian and the *pentapole* city of the M'Zab. See: M. Christine Boyer, "Aviation and the Aerial View: Le Corbusier's Spatial Transformations in the 1930s and 1940s," *Diacritics* 33, no. 3/4 (Autumn-Winter 2003): 114.

21 "Sur une ligne significative, sur un méridien stimulant, le Havre, Paris, Lyon, Marseille ont besoin de cités d'affaires, centre d'administration destinés à assurer le meilleur exercice d'une fonction indiscutable – les échanges. En ces quatre villes, quatre jalons magnifiques ne sont point pour enlaidir le pays. Non! Il ne s'agit pas d'idées toutes faites sur la laideur ou la beauté." Le Corbusier, *Manière de Penser l'Urbanisme. Soigner la ville malade* (Paris: Gonthier, 1977), 128–129.

3 Le Corbusier, FLC C5 5000b, Fondation Le Corbusier © F.L.C. / VEGAP, 2020

4 Le Corbusier, *Poésie sur Alger*, 1950 (Paris: Falaize), 12–13 © F.L.C. / VEGAP, 2020

5 Le Corbusier, *Manière de Penser l'Urbanisme*, 1977, 127 © F.L.C. / VEGAP, 2020

22 Ibid., 124.

the *pentapole* logic might be similar to the nomadic line in its network connection between towns and cyclical displacement with the seasons. But for Le Corbusier, it was the airplane that enabled the re-discovery of the typology. He jotted that diving-in-diving-out trace of the airplane in his notebook [3]. And, arguably, the next step was to continue that trajectory further out. Incorporating the logic of the *pentapole* city and taking it with him airborne, in his *Poésie sur Alger* [Poem on Algiers] (1950), Le Corbusier presents the drawing of a line that crosses over the outline of Europe and North Africa and threads a connection between five poles in the Meridian Paris–El Golea–Gao [4]. The drawing could be read as an attempt to use the logic of the M'Zab's *pentapole* as a guiding line for a tentative project—a *parti* of a sort. But in any case, the zoom-in-zoom-out process he was developing in the Sahara was finally taken to a transcontinental scale²⁰. The airplane enabled a meridian form of vision. The *pentapole* organisation was borrowed from M'Zab to analyse Franco-Algerian relations.

The poem doesn't indulge much in the project, but *Manière de Penser l'Urbanisme* (1946) had already put name to the poles [5].

“On a significant line, on a stimulating meridian, Le Havre, Paris, Lyon, Marseille need business-cities, centres of administrations designed to ensure the best exercise of an indisputable function: the *exchanges*. In these four cities, magnificent milestones are not to uglify the country. No! It's not about ready-made ideas about ugliness or beauty.”²¹

In the *pentapole* scheme, he was missing the African pole. Le Havre, Paris, Lyon, Marseille; they are the ones organising the line in France. Alger, capital of Algeria, was an appendix, an extension of the project towards the south. It was then thought of as a project for increasing the “grandeur Française.” The concern was with lifting up France from its devastated condition after the war²². Nevertheless, the lines after the war needed to reconsider the previous kind of lines France had attempted to draw over the desert. Alger didn't figure in Le Corbusier's *Manière de Penser* but it was given its own poem. One that was intended to consider colonial relations otherwise. Weary of the constant rejection by the colonial government of his numerous projects for the city, Le Corbusier's final project was to trace a line, one that might have redefined previous meridian lines traced by France across the desert. “Poetry is, at the end of the day, Mr. Governor, Mr. Prefect, Mr. Mayor, the essential nourishment of the people (...) poetry is in Algiers, ready to enter, to materialise in urban and architectural facts” was the closing line of the poem, admitting defeat; the Meridian was the counterproposal. Very

much a colonial project in its intention of perpetuating French presence in the continent, however, not exactly in the same terms in which the French had developed the north-south lines of Bidon-5.

The post-colonial critique has approached Le Corbusier's Meridien in terms of imposition, reading it as a colonial axis. This is the case professor Çelik, who describes the drawing quoting Coterau, an engineer working for the city of Algiers in 1933: "the city must be renovated by means of a sane architecture, following Aryan traditions,' because of 'its position on the axis of France.'"²³

However, Le Corbusier's meridian-pentapole-city shows a subtler form of colonialism that escapes these postcolonial accounts. Le Corbusier was not tracing an Aryan axis. The main paradox is that the line he was tracing was borrowed from the M'Zab. And this is not the typical manner in which colonialist ideologies were appropriating the other. Le Corbusier was not importing cliché Orientalist ideas. His project departs from a discovery in the desert—the *pentapole*—and uses it back home. The poles he proposed were "designed to ensure the best exercise of an indisputable function: the *exchanges*."²⁴ They can arguably be seen as functional nodes of economic and bureaucratic *exchanges*, but also *intercultural* ones, as he saw the meridian in his first journey of 1931:

"The exchanges along a terrestrial parallel are only competition, conflict, struggle for life: industrialism, mechanism, breathless perfection, etc ... = sweat and pain.

The exchanges along a terrestrial meridian are: diversity, complementarity, harmonic evolution. They are products determined by the incidence of solar rays = always entire harmony, symphonic: cause – effect. = Food of curiosity, spiritual wealth, mathematical unity = sensuality and philosophy."²⁵

Arguably, the proposal was already operating an exchange, incorporating the logic of the Mozabite city into the Cartesian axis.

Although Le Corbusier might be seen as challenging the colonial lines through his meridian across the desert, Maghreb, Mediterranean and France, the post-colonial lines developed in a different way. Interestingly, Bourgeot departs from the cliché in order to understand a shift in the notion of territory for the Tuareg in post-colonial relations. His analysis starts with the dromedary. In his argument, the dromedary was crucial for the understanding of Tuareg space-key element in trading, seasonal migrations, war and raids.²⁶ Post-colonial political conditions, as he continues, created a shift in the reading of the dromedary, and as such, a shift in the understanding

23 Zeynep Çelik, "Le Corbusier, Orientalism, Colonialism," *Assemblage* 17 (April 1992): 66.

24 See note 21.

25 "Les échanges au long d'un parallèle terrestre ne sont que concurrence, lutte, struggle for life: industrialisme, mécanisme, perfectionnement haletant, etc ... = sueur et douleur.
Les échanges au long d'un méridien terrestre sont: diversité, complémentaire, évolution harmonique. Il s'agit de produits déterminés par l'incidence des rayons solaires = à chaque fois harmonie entière, symphonique: cause – effet. = Alimentation de la curiosité, richesse spirituelle, unité mathématique = sensualité et philosophie." Le Corbusier, "Coup en Travers," 102.

26 Bourgeot, "L'Herbe," 146.

of Tuareg territory. Looking particularly at the Kel Ahaggar—Tuareg whose territory extends in the south of Algeria—Bourgeot affirms that since the independence of the country, “the dromedary is transformed into a material and living symbol whose signifier becomes a cultural referent: it reactivates, in an illusory way, the past, and constitutes an imagery of identity in which the Kel Ahaggar recognise themselves.”²⁷ The dromedary, before enabler of the Tuareg mobility, has now come to be considered as fixed to the ground, closer to the bodyworks of Bidon-5. Nevertheless, it still re-enacts the struggle of the Tuareg. For Bourgeot, the Kel Ahaggar became primarily a signifier of lines of trade and mobility; and the control over the lines was no longer on the level of the “political space” of war and raids, but part of the politics of identity.

However, further south, the Tuaregs of Kel Adagh—northern Mali region—offer a contemporaneously different movement across the desert. Bourgeot describes it as the shift from *itinerance* [itinerancy] to *errance* [wandering]. The heritage of the colonial rule, including the rebellion and repression at the beginning of the 1960s, has left the Tuareg in the Northern Mali region as an “isolated ethnic”²⁸; a condition that was accentuated by a shift from a “traditional” economic system to a capitalist one, one that is not helped by the lack of professional qualifications. The product is the emergence of what Bourgeot calls “lumpen-nomad” that paradoxically evolves in “nomad land”; a life of “wandering”—of aimlessly searching for a job—“defined by the borders inherited by decolonisation.”²⁹

The conditions described by Bourgeot in 1986 have nothing but intensified. Trapped along the post-colonial borders between Algeria, Libya, Mali and Niger, the Tuareg have struggled for holding their porous conditions with regards to those borders. In June 1990, a group of Tuareg rose in arms against the Malian state. The conflict had its roots in the 1963 insurgency, in which contested meanings of independence and nationalism marked the process of decolonisation in the desert part of the new Malian state³⁰. The early 1990s revolt, foregrounding the two conditions that Bourgeot highlighted—“politics of identity” and “errance”—yielded a dispute that was never fully resolved, and since 2012, re-emerged in an ongoing conflict. This last iteration would be too broad to address in this article, involving international actors beyond the Malian borders in what is perceived as a conflict between “Radical Islam” and “the West”, and whose lines are no longer desert-bound.

However, while the Tuareg insurrection in Mali highlights the unresolved encounter between the nomadic line and shifting colonial borders in the process of decolonisation, the migration lines through the desert “redefine”, as Julien Brachet argues, “a new Saharan geography”³¹. Focusing

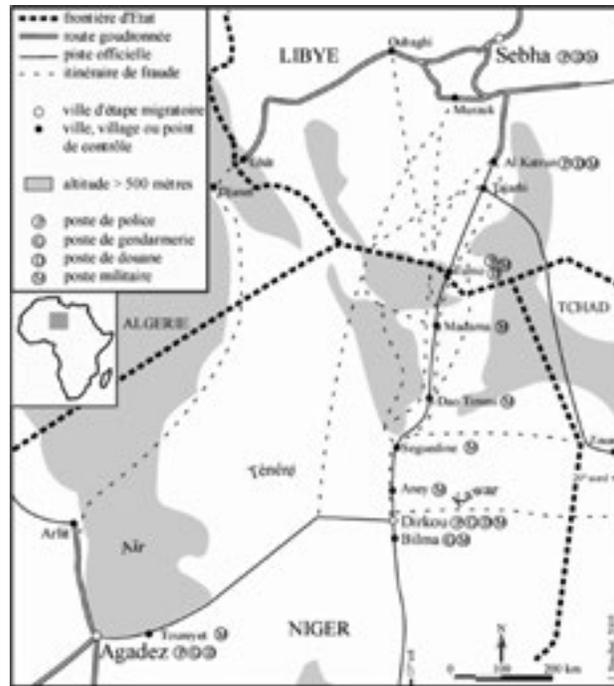
27 Ibid., 155.

28 Ibid., 157–59.

29 Ibid., 159.

30 Jean Sebastian Lecocq, *Disputed Desert Decolonisation, Competing Nationalisms and Tuareg Rebellions in Northern Mali* (Leiden: Brill, 2010).

31 Julien Brachet, *Migrations Transsahariennes: Vers un désert cosmopolite et morcelé (Niger)* (Bellecombe-en-Bauges, France: éditions du Croquant, 2009), 10.



6

32 Julien Brachet, Armelle Choplin, and Olivier Pliez, "Le Sahara entre Espace de Circulation et Frontière Migratoire de l'Europe," *Hérodote: Revue de géopolitique de l'agriculture* 142 (2001): 167-173.

33 *Ibid.*, 168-69.

34 *Ibid.* and: Tilman Musch, "Teda Drivers," 228-232.

35 Julien Brachet, *Migrations Transsahariennes*, 252; as well as: Julien Brachet, "Migrants, transporteurs et agents de l'État: rencontre sur l'axe Agadez-Sebha," *Autrepart - revue de sciences sociales au Sud* 36 (2005): 61.

6 Agadez-Sebha, an itinerary under control, the itineraries without control' in Brachet, Julien, *Migrants, transporteurs et agents de l'État, rencontre sur l'axe Agadez-Sebha, Autrepart-revue de sciences sociales au Sud* 36 (2005), 44.

on the routes that connect Agadez to the north—one of the main routes for the migrant movement, as it is located at the intersection of the routes going to the south of Algeria and the south of Libya—Brachet analyses the increasing number of people moving from one side to the other of the Sahara since the early 1990s. The wandering around the desert is no longer a Tuareg question, but rather one of an expanded international circuit. Economic and political conditions in the Sahel and further south in West Africa, along with Libya welcoming African migration to the country—following the 1992 UN's embargo—and the application of the Schengen Agreement in 1995, influenced the configuration of this "new geography" of the desert, though its routes are deeply rooted in the trans-Saharan trading trails³². The main trajectories used in migration towards Europe make use of the past traces erased by the sand. The Tuareg and Teda caravaners, due to their knowledge of the trails that cross that part of the desert, became guides and transporters of the migrants moving north³³. The camel might have been lost as an emblem of identity; pick-up trucks and lorries that reactivate the ancient tracks have substituted it³⁴. The protagonists configuring the new geography are migrants, transporters, and state agents. Their relationships vary according to time and depending on the legal conditions of the journey. While the trans-Saharan trade tracks delineate a navigational route, the latter varies depending on the status of the migrants and the openness of the borders with Libya and Algeria. Over the outline of a same trans-Saharan trail, the Tuareg and Teda drivers might follow the official route under the protection of the convoys to mitigate the risk of being attacked by armed bandits in the region; or they might re-trace a detour from the main ancient route depending on the "clandestine" condition of its transport. Taking one of Brachet's illustrations, the trail between Agadez (Niger) and Sebha (Libya), the "official" trans-Saharan route unravels in multiple "smuggling lines" [6]. This gives a striated character to the migrant line, or the line's traces—as Brachet defines it—"un espace 'feuilleté'" [a laminated space]³⁵.

For the new geography of trans-Saharan migrations, Europe also has its recourse to holding control over the lines by halting. Perceived from Europe as a "migrant crisis", the European Union is developing a set of measurements for gaining control over the flux of migrants across the Sahara towards the Mediterranean. What is interesting here is the strategy is not that of creating a new axial line in a colonial vein. Neither is it just by enforcing control of borders, but rather new forms of capturing the nomadic line. The city of Agadez is an interesting intersection where to observe how the new geography of migration is giving over to new forms of post-colonial European control in Africa. It is in the knots, rather than along the line, that confrontations are played. The ancient city of Agadez is not only one of the

most important crossroads where the migration flux from West Africa joins the one of Central Africa en route towards Libya and southeast Algeria, but it is furthermore the intersection between the reactivated trans-Saharan trails and the new forms in which the European borders are activated. The Schengen Agreement might well have been a factor in the rise of international migrancy; between 2000 and 2010 it has induced a situation where the southern borders of Europe have been externalised and progressively moved south down the Sahara³⁶. If Bourgeot described the Tuareg space in terms of mobility and flexibility, Brachet proposes two other concepts to understand the European Union's engagement in the Sahara. He quotes the words of Jean-Pierre Guengant at the beginning of the Euro-Mediterranean partnership between the EU and the countries of North Africa, one year after the implementation of the Schengen Agreement: "the two new paradigms on matters of international migration: "control" as means for containment of migration, and "development" as means of stopping, stopping its essential cause: poverty, seem to be based on a simplistic view of the phenomena at work."³⁷ During recent involvements of the EU in Agadez, control and development thread back the Tuareg politics of identity.

Following an increasing concern over the migrant crisis, and having closed a deal with Turkey to shut down the migrant journeys across the Aegean Sea, the EU aimed at containing the migration of the Central Mediterranean in its regions of origin. The 2015 Valletta Agreement became instrumental for this purpose, launching a Partnership Framework to work with the countries of origin. Niger is one of the core framework countries, receiving "financial support and development and neighbourhood policy tools [that] will reinforce local capacity-building, including for border control, asylum procedures, counter-smuggling and reintegration efforts."³⁸ In 2015, the Nigerien state banned activities related to illegal traffic of migrants, and in August 2016 the arrest of smugglers and the seizure of vehicles took place in Agadez. The seizure of the drivers seems a way in which the EU gains "control" over the post of Agadez, the line of mobility crossed by the generation of a static post. However, the way in which the EU generates this, its southernmost border, doesn't remain in the possibility of establishing halts. Rather, its stop is assisted by "development". The *Projet d'Intégration économique et sociale des jeunes: emploi pour le patrimoine d'Agadez* works in unison with the detention of the smugglers. Funded by the EU Emergency Trust Fund for Africa established following the Valletta summit³⁹, the project seeks the social reinsertion of the young people of the Region of Agadez involved in irregular migration. For this, the project teaches traditional building techniques to the former smuggler Teda drivers. The drivers are returned to the local market as masons. However, since the insertion of the

36 Brachet, Choplin, and Pliez, "Le Sahara", 175.

37 Jean-Pierre Guengant, "Migrations internationales et development: les nouveaux paradigmes," *Revue Européenne des Migrations Internationales* 12 (2): 108; as quoted in: Brachet, *Migration Transsahariennes*, 51–52.

38 As quoted from the European Commission press release on the launch of the EU Partnership Framework (November 2016) in: Fransje Molenaar and Floor El Kamouni-Janssen, *Turning the Tide: The politics of irregular migration in the Sahel and Libya* (The Hague: The Clingendael Institute, 2017), 11–12.

39 The Project is part of the *Plan d'Actions à Impact Economique Rapide à Agadez* (PAIERA).



40 Marko Scholze, "Arrested Heritage: The Politics of Inscription into the UNESCO World Heritage List: The Case of Agadez in Niger," *Journal of Material Culture* 13 (2) (July 2008): 215–231.

-a philosophy.
 nd trees have dimension:
 o our thousand year old
 ights of the Atlas, terribly

sejour à Boghari
 in south of Tim: le minaret
 (in A or B, il tombe et
 se recouvre)

122

7

41 Patrice Cressier and Suzanne Bernus, "La Grande Mosquée d'Agadez," *Journal des Africanistes* 54 (1) (1984): 33–36.

old town of Agadez in the UNESCO World Heritage List in 2013, the Tuareg traditional technique necessary for the restoration of the protected city has been in dispute. This was partly due to the tensions generated during the works carried in the Great Mosque and the Sultan's palace, which were not directed by the local Tuareg master masons but by CRATerre, a French consulting firm specialized in clay architecture—who was selected by the French embassy in Niamey that was financing the works⁴⁰.

The former Teda drivers emerge as a human means of alleviating the tensions through architecture. While the programme can be criticised as a short-term solution (precisely the EPPA project belongs to the Plan d'Action à Impact Economique Rapide à Agadez), what is interesting is how traditional techniques are at the centre of the dispute. The local vernacular language is no longer a means of countering colonisation through architecture. Rather, the UNESCO protection portrays a tension between the local and the global. It is the Tuareg that teach their technique to the Teda, holding them fixed in Agadez, suspending the trans-Saharan movement. It is the EU that appropriates the identity struggles of the Tuareg to establish a border to the south. The architecture of the old town in Agadez forms a knot in which the unravelling lines of the "laminated space" of the migrant routes are laced together through halt. Seemingly a small action of putting up mud bricks brings together a number of tensions in crossing the Sahara. The vernacular Tuareg identity struggle is appropriated by the EU as a means for fixing the Teda drivers to the ground, getting hold of the nomadic trails. This case in which the invisible lines of the desert are materialised into hybrid identities synthesises a historical trend cutting through the movements of the desert. The conflicts are not formed by direct colonial struggle between the spatial conception of the nomads and the Europeans. Rather, they can be better perceived as moments when the two merge, one becoming the other.

Joining northern and southern Sahara, the minaret of the Great Mosque in Agadez is arguably one of the few examples in which the peculiar architecture of the M'Zab⁴¹ influenced the southern desert. To the north, the architecture of the M'Zab influenced Le Corbusier. As opposed to the opposition with which we normally see the colonial struggle [nomadic vs. imperial lines] this essay asserts that a sectional line cuts across colonial and post-colonial periods in order to see intersections in the desert. It is not enough to visualize the two lines in a diptych, as Le Corbusier laid them out. Perhaps we can turn through a number of pages in his *Aircraft* to find another line in the desert [7]. It is the sketchy, snaky trace of a watercourse in the desert of Boghari—just at the northern edge of the Sahara. A line that in *Precisions* (1930) gives room to the "law of the meander", with the paradox that the fluidity of water is observed flying over the desert. Seemingly a

7 Le Corbusier, *Aircraft* (London: The Studio, 1935), 122 © F.L.C. / VEGAP, 2020

blank slate, the lines crossing the desert leave constantly eroding fluvial traces. The lines we have observed do not emerge in the virgin surface of a map but are rather built one on top of the enduring palimpsestic vestiges of the other. Lettering the meanderings A and B, Le Corbusier highlights moments in which the waterbed wraps itself to the point of touching. In the line this essay has traced, I have looked at moments in which the trajectories intersect. Like the Bidon 5 inheriting the nomadic trail but moving slightly off its course, or Le Corbusier's meridian borrowing the *pentapole* scheme, and the EU restoration of Agadez incorporating the identity struggle of the Tuareg. These are intersections in which there are not two lines in opposition, but rather liminal moments between difference and identity; crossroads where one becomes the other, generating a hybridised line. While tracing a line in sand might seem a seamless task, the trans-Saharan lines are full of junctions that highlight national and international tensions. That building on sandy ground is foolish is a cliché, in the same way as thinking there is no relevant architecture in the desert. Built through the encounters between mobility and halting, nomadism, sedentarism, migration, post-colonial states and international actors, Brachet uses the oxymoronic "*désert cosmopolite*" [cosmopolitan desert] to evoke its contemporary status⁴². A cosmopolitanism that is sneaking unnoticed to many architects, a potential vast landscape for research on cosmopolitan life. The multiple trans-Saharan lines are a complex landscape within which to research. The Sahara is not empty, but full. The Sahara is, as Bourgeot defined it, a new "*centre périphérique*" [a peripheral centre]⁴³.

42 Brachet, *Migrations Transsahariennes*, 18.

43 André Bourgeot, "Sahara: espace géostratégique et enjeux politiques (Niger)," *Autrepart* 16 (2000): 47.

Bibliography

Bourgeot, André. "L'Herbe et le Glaive: de L'itinérance a l'Errance: La Notion de Territoire Chez les Touarges." *Bulletin de liaison de l'ORSTOM*, département H, 8 (1986): 145-162.

Bourgeot, André. "Sahara: espace géostratégique et enjeux politiques (Niger)." *Autrepart* 16 (2000): 21-48.

Boyer, M. Christine. "Aviation and the Aerial View: Le Corbusier's Spatial Transformations in the 1930s and 1940s." *Diacritics* 33, no. 3/4 (Autumn-Winter 2003): 93-116.

Brachet, Julien. "Migrants, transporteurs et agents de l'État: rencontre sur l'axe Agadez-Sebha." *Autrepart - revue de sciences sociales au Sud* 36 (2005): 43-62.

Brachet, Julien. *Migrations Transsahariennes: Vers un désert cosmopolite et morcelé (Niger)*. Bellecombe-en-Bauges, France: éditions du Croquant, 2009.

Brachet, Julien, Armelle Choplin, and Olivier Pliez. "Le Sahara entre Espace de Circulation et Frontière Migratoire de l'Europe." *Hérodote: Revue de géopolitique de l'agriculture* 142 (2001): 163-182.

Castex, Louis. "Sahara, Terre Promise." *Revue des Deux Mondes*, July 15, 1953.

Çelik, Zeynep. "Le Corbusier, Orientalism, Colonialism." *Assemblage* 17 (April 1992): 58-77.

Cressier, Patrice, and Suzanne Bernus. "La Grande Mosquée d'Agadez." *Journal des Africanistes* 54(1) (1984): 5-40.

Estienne, Georges. *Naissance de "Bidon V."* Paris: Publications du Comité de l'Afrique Française, 1937.

Lecocq, Jean Sebastian. *Disputed Desert Decolonisation, Competing Nationalisms and Tuareg Rebellions in Northern Mali*. Leiden: Brill, 2010.

Le Corbusier. "Coupe en Travers. Retours...ou L'Enseignement du Voyage." *Plans* (Oct. 1931): 92-108.

Le Corbusier. *Aircraft*. London: The Studio, 1935.

Le Corbusier. *The radiant city: elements of a doctrine of urbanism to be used as the basis of our machine-age civilization*. London: Faber and Faber, 1967.

Le Corbusier. *Manière de Penser l'Urbanisme. Soigner la ville malade*. Paris: Gonthier, 1977.

Lydon, Ghislaine. *On Trans-Saharan Trails*. Cambridge: Cambridge University Press, 2009.

Mercier, Marcel. *La Civilisation Urbaine au Mزاب*. Alger: Émile Pfister, 1922.

Molenaar, Fransje, and Floor El Kamouni-Janssen. *Turning the Tide: The politics of irregular migration in the Sahel and Libya*. The Hague: The Clingendael Institute, 2017.

Musch, Tilman. "Teda Drivers on the Road between Agadez and Assheggur." In *The Making of the African Road*, edited by Kurt Beck et al., 220-240. Leiden: Brill, 2017.

Saint-Exupéry, Antoine de. *Wind, Sand and Stars*. New York: Reynald & Hitchcock, 1939.

Scholze, Marko. "Arrested Heritage: The Politics of Inscription into the UNESCO World Heritage List: The Case of Agadez in Niger." *Journal of Material Culture* 13(2) (July 2008): 215–231.

Société Shell d'Algérie. *Guide du Tourisme Automobile et aérien au Sahara, 1934–35*. Alger: Shell éditeur, 1934.

A Stroll on the Line

**Ethel Baraona Pohl & Léopold Lambert
in Conversation**

Ethel

Let's start with the topic of the line, that has been, since I've known you—for a long time—very present in your research and in your mind. And I remember that one of the first things we exchanged when we started working together was the graphic novel "Lost in the Line". At that moment, you were referring to the line in connection with the labyrinth. We're talking about the labyrinth as the representation of a position of power, because you have to see it from above either to draw it (draw the line) or escape from it. So I think it's interesting for the readers who follow your work to know how your thinking has evolved from that moment to now. So I guess we can start talking about that if you feel comfortable.

Léopold

02:15

Interestingly enough, even though what you're talking about was 10 years ago, it hasn't drastically evolved up to this point; my definition of architecture has consisted in seeing it as a discipline that organizes bodies in space. And so my vision of the line is not really what has evolved, instead, what evolved is my understanding of what the line does: the politics of the line, and the politics and the inequality of bodies vis-a-vis the violence of the line. Lines are the main medium through which architects design. And lines ultimately transform into walls. Lines

becoming walls and walls imposing order, the order of space—an organizational scheme spatialized—that they intend to impose on bodies. To put it simply, we have a rectangular line forming a rectangle on a plan; this is what more often than not we would call a room. It's very simple. It's a room and the lines drawn form into walls, and the walls will always have—not always, but almost always—the ability to contain bodies within this order—to say it in a in a very simple way most line-cum-walls that surround us are made in such a way that we cannot cross them. And after that there's many sorts of apparatuses that were invented to make the lines a little more porous; that's what we call doors; and that's what we call windows. But usually doors don't come just as doors, they come with a lock and key. And so I think there's something quite crucial here in who gets to act on the porosity of those walls, on the ferocity of those lines, and that's something perhaps we can talk of a little bit more later, but to go back to the graphic novel you kindly refer to, which was also in the book you published back in 2012.¹ The graphic novel was somehow trying to subvert a little bit the way this vision of the line, meaning this vision of a hard non-porous line. And by asking the question, what happens when we look inside the line, at the thickness of the line, which is, of course, mathematically impossible—as lines have, by definition, no thickness—but lines that become walls have a thickness because walls have a thickness. So I think there's something there, where architecture loses control a bit, because it can-not comprehend some things such as the thickness of the line; that is quite interesting, even though I would not romanticize it. I mean, the graphic novel definitely romanticizes; it's a metaphorical interpretation of it. It asks the questions, what happens if you get lost in the thickness of the line. And in that case, it was some sort of labyrinth, if we

1 Léopold Lambert, *Weaponized Architecture. The Impossibility of Innocence* (dpr-barcelona, 2012).

Ethel

- 2 Ethel Baraona Pohl and César Reyes Nájera, "The Gap in the Map," *The Plant*, no. 9, 'Geranium,' (July 2016), <https://dprbcn.wordpress.com/2017/02/01/the-gap-in-themap/>.

were to imagine the trace of a line. I remember thinking of it this way, like if we trace a line on a piece of paper with a pencil, then we would have like, little particles of graphite all over the paper, but it would not be as continuous and as homogeneous, as you would see it from a human's eyes, if you would really zoom in, you would start seeing some porosity in it. And so as a graphic novel was like, imagining what happens if you get lost in this little graphite porosity. And, yeah, and in that case, it was a sort of literary, poetic, metaphorical investigation of the thickness of the line.

But I also have a more politically aggressive interpretation of the thickness of the wall, because sometimes that's quite the space where one no longer has no more any rights, when you're ... when you're lost in the thickness of the line.

It's okay, because I was thinking now that you mentioned that, on groups like Decolonizing Architecture for example, have researched a lot about this topic.² They explain that it's not only architecture that loses control over this thickness, but also the moment when it becomes a lawless line, because the law doesn't have any action there anymore. Because, as you were saying, it's important to question who has the right to act on this thickness or who has the key to the lock to open it, but in this case you entered the thickness and then how do you get out of it? I think it's a very interesting discussion, and also perhaps one thing that you can elaborate a bit more on, if you have any ideas or examples of what happens in between this thickness, as in borders or in frontiers. I remember from my own experience, when I was living in Guatemala, I traveled very often to El Salvador by car, and the border between the two countries is a river and that river is very thick. So there is a moment when you don't know if you are in Salvadorian territory or in Guatemala.

These are spaces where the dynamics of the people, the social relationships are deeply connected to this idea of non-belonging. I'm here, I'm not in my home, neither in the home of the other. I mean, this is kind of an unknown land. So I wonder if you can tell me your thoughts on inhabiting a territory with no law, a kind of outlaw territory, like an unknown, uncertain territory.

Léopold

10:34

Yeah, I mean, at a philosophical level, I'm not against the notion of borders. At a political level, I'm against the concept of nation state borders, and even more against the embodiment of militarized borders. But going back to a more abstract level, a river separates two banks or more, it's an interesting interstitial space: it's thick and its crossing is a ceremony of sorts; and it even sometimes moves!

Ethel

And just to add to that, at least this is a border not drawn by any human being ...

Léopold

11:32

Well, sometimes, humans manage to create a line border in the middle of a river (or a strait), and there is no respect for the river's thickness; conceptually and politically, they want us to believe that two sovereignties are divided right in the middle of the river, whatever that means. When I say that I'm not against the philosophical concept of the border, I'm particularly thinking of a Édouard Glissant. As a Martiniquean, he thinks of the Caribbean as a geographical place where the borders exist in a very "natural" and serene manner. You might be living in Martinique, and then your neighbors might be from Santa Lucia or Guadeloupe, and so it's a different Island, and you will have exchanges, but it's two different sorts of spaces. I think the same can be said about cities, for example, you know, if you live in one city, and you don't live in the next city, that doesn't mean that we should have any sort of political consequences because of it. But at least it's two different entities. And so, is there something

interesting in the thickness in the sort of ambiguity of things, but then becomes violent political orders, so to speak? And then this ambiguity becomes a very drastic one. And there's the risk to romanticize it, we could say: "oh the thickness of the line embodies a place where there is no law, no government, no authorities, all that." It's not untrue but for the same reason I think the lawlessness is absolutely terrifying as well, because it means rightlessness. So, for example I refer to a group of about 12 Eritrean asylum seekers, who—in 2012—had crossed Egypt wanting to reach Israel and managed to exit across the Sinai and then went to a border point, a border crossing, and managed to exit the territory of Egypt, but never entered the territory of Palestine controlled by Israel and so on. So for one week, they were quite literally stuck within the thickness of the line. And this is a space of absolute rightlessness. And so that's something to be to be very careful about as well in the way that we approach those concepts. What is kept from the law potentially means subversion, but it also potentially means, quite simply, death.

Ethel

Yeah, it's like living in limbo, I guess. But following this idea, it also reminds me of some statements that are very widespread, in the media or whatever, when you think about the line, most people think about the same drawing that from one point of view is useful to separate from the other, it's used to join two points. But more and more I think we are tending to think of it only as a separation device, because of the things that have happened in recent history, you know, Trump and his wall, or the wall in Gaza built by Israel, and many more. In that sense, I can think of the metaphor of the astronomers who draw the sky maps, in this case the line is used to join the points (the stars) and not to separate. Can we think of the line in that way, especially in the architectural practice? So

Léopold 17:15 I think we should talk a little bit about how the notion of 'the line' has changed in the past years, and has become more ideological, a way of thinking?

Ethel Yeah. I'm not sure. Because I have only one, very sort of narrow minded understanding of architecture, which is, of course, not saying that there's not hundreds and hundreds of other approaches to architecture, but mine is strictly physical in the political relationship that it has with bodies. And so even a line that would symbolically establish a relationship, let's say a bridge—like I mean, you talked about that sort of line in the case of El Salvador and Guatemala—but it's also a sort of colonial trace as well, a European invention, like so many others. But you would have this other line that would be the bridge itself, but I never read the bridge as a line, I read the bridge as two lines, but when we build a wall, we don't really think about it as two lines. I mean, when people have to draw a bridge on AutoCAD, they have to trace two lines in the end.

Ethel Here I can also think of a funambulist, for example. She or he is walking the line as a kind of bridge, but it's not two lines. It's just a line and you are going from one building to the other.

Léopold 18:51 Yeah. But it's not just a line. It's a few centimeters thick line!

Ethel But it's not a bridge, let's say.

Léopold 19:00 A bridge is commonly perceived as the architecture that allows a physical connection and a relation between the two sides of a river, no doubt about this. However, a bridge is also by definition in the space of narrowness. Bridge is always longer than wider, by definition. And so, a bridge always maximizes the degree of control one can assert on it because quite simply, one has to only control each side. And then you're able to control what happens in between;

there're many historical examples I can think of the massacre of October 17 1961, of Algerians in Paris, but also examples closer to us, as one of the first actions of Occupy Wall Street where 300 activists were stopped and arrested on the Brooklyn Bridge. But the bridge can be a space also for our victories. I mean, one of the most spectacular victories of the Egyptian revolution in 2011 was the incredible contingent of police attacking protesters, revolutionaries on the bridge, and in the end, the police got their ass kicked, essentially. Once you have control of the bridge as a revolutionary force, it's very, very strong. But so all this to say is that from a strict physical point of view, looking at each architectural invention, a bridge is nothing else than a corridor. And a corridor is, by definition, one of the most controlling spaces that architecture has ever invented. So we should never forget that either.

Going further, now talking about the funambulist, which is another word for tightrope walker. The reason why I love this figure so much is that when I think of the rope, as a tightrope, I'm thinking of the wall. So I'm thinking of someone walking on the wall, someone walking on the border, someone not being free from the wall, because quite literally being dependent on the trace of the wall to walk on it, you know, you might not be able to jump on one side or other, right. And if you jump, then you're back to like being controlled by the wall and everything. But so you're not free from the world. It's not a figure of emancipation, but it's a figure of subversion because you somehow use the line that was traced to keep bodies on one side or the other or have some of those bodies being able to cross but not some others. This figure of subversion is like using the line in another way, in a way that was not sort of accounted for by architects. So it is true that in that case, it is perhaps closer to a dangling line that forms a wall but it has just

the thickness, just enough thickness for one body to be able to walk on it.

Ethel

At this point I'm also thinking about other kinds of lines or borders that are more and more present nowadays with the evolution of technologies, that are these kinds of invisible borders that become real through data. For example, when someone is not allowed to enter a territory, not because of a physical wall but because the data contained on the passport or on the biometric data related to your name. So these kind algorithmic lines that are arising more and more nowadays. And as your practice and your understanding of architecture is very connected with the physical manifestation of architecture, I wonder how do you see this evolution or how has it affected your understanding of the line?

Léopold

24:45

Some of it has nothing to do with the line, but more has to do with national borders and how borders are not, of course, just contained within the line. Or all the sort of detention centers we know in, in Europe and outside Europe, that's the interesting thing as well is that all these things have very little to do with the actual line of the border; it's like the borders are being asked to continue, maybe, in that case using the line as a metaphor. It's like it's maybe less the thickness but the line is able to stretch to another territory and then to include something like concentration camps for people whose only crime is to want to be on the other side of the line. But then perhaps it also touches something that has to do with you know, earlier when I said lines are almost always materialized by walls and that you cannot go through, there's also many times when we would have these kind of lines and we would technically be able to go through, but whether it's a cultural or it's normative there are many reasons that makes us not cross those lines, so to speak.

3 *Dogville*, directed by Lars von Trier (2003).

So there's this extreme form that would be 'the line' you could see for example in the film *Dogville*³, you know, where the entire village is traced on the floor with lines; and everybody will watch the film thinking "of course you could just go over the line and then you would have crossed a wall", but then no actor or character in the film seems to see those lines this way. They all see those lines as walls. So I think quite often we are in situations where lines are traced for us and for better or for worse—and I'm not even politically commenting here, nor I'm saying destroy old alliances or destroy all the walls or anything—I'm just saying there are lines or forms that don't even need to impose their violence on bodies, they their fears, they impose a norm that is strong enough for the bodies to respect them. This is represented very well in a waiting line, for example.

Ethel

The example of *Dogville* makes me think that the drawn line is very powerful, indeed. Because when you were commenting about the film, I was thinking that just this year for example, in Chile, where a group of students were drawing house plans on the streets⁴ as a way to reclaim the right for housing. So, they were using the same kind of powerful representation but in a positive way. So if we think on the many ways of how to use 'the line', I think something that is very interesting to discuss is the ambiguity of the line itself, similar to what you were explaining about the bridge—that it can be used to control you but also as a catalyst, as a place where power by the people is also celebrated. And all this makes me think about how important the architectural and graphical representation of these lines are, also as means of communication.

4 "Por un habitat digno," *Arquine*, October 31, 2019, <https://www.arquine.com/por-un-habitadigno/>

Léopold

29:38

Yeah. And you know, when I was saying like I'm not against all lines I'm not against all walls or something like that. I'm interested in examining the political orders that are contained within those lines

Ethel

5 Léopold Lambert, "Letter to a young architect," *The Architectural Review* (Sept. 2020), <https://www.architectural-review.com/essays/letters-to-a-youngarchitect/leopold-lambert-letterto-a-young-architect>

Léopold

32:18

and within those walls, but also, exactly like you said. I think no architect should be able to trace any of those lines that will materialize into walls that will enforce a political order without being conscious of the political orders that the materialized lines enforce... This should be very clear, and then architects cannot play the dummy, they'll be aware that they are fully complicit with this political order. No one should be able to trace lines without fully comprehending their political power.

And talking about this comprehension of the political power of the line, I read your letter to the students in the *Architectural Review*⁵ and I'm thinking about that now. Because I think it is very interesting to know, from your experience with the students or from the interns that come to work with *The Funambulist*, if you think that the students around the world in general, are aware of that political order? I would love to hear your thoughts because for example, here in Spain, or in Barcelona, academia, it's still very conventional and just slightly deepening the topics on the political agenda of architecture. And I don't think that the main case is that students are aware of the politics behind the power they have when they draw a line. And, you know, it's not the same to...to draw a line to propose a house as to draw a line for a prison; so tell me, what is your experience with students and younger architects? Do we have reasons to be hopeful?

Yes. No, but also it's funny, right? Because I mean, you and I, we go way back. And so we've obviously aged. And so we went from being like the small siblings of maybe a little bit older generations to being the older siblings ourselves. Soon to be the, the parents! But I actually very much enjoy this sort of older sibling role, actually. And mostly because I do think that if you talk about students, I think there's much more than when I was at school myself, for sure.

But also, it has to do, I think it's important to say it, with the demographics of the students themselves. I mean, in the global north, but also all around the world, I think about the gender dimension of architecture, and I think everywhere around the world there are more female architecture students than male architecture students. So even in that very simple sort of gender differentiation, there's already an understanding of the political power contained within the lines that's much stronger. And this is not (only) a representation matter, far from it. I'm gonna use a simplistic example: thinking that most of the things that are designed are calibrated on a standardized male body, it's quite normal that the many people (many of whom are women) who do not fit with this standard understand better what is wrong with it! And gender differentiation is only one of the things that are changing: ableism, racialization, heteronormativity and social class are all fabricating a standardized body and a standardized design, in relation one to another. And so, of course, if design is clearly not made for us, then you already have a sort of a degree of knowledge that something is fucked up, to put it that way. Or it might take a little more time, but then the analytical gets very simple to understand because your own experience relates to this analysis. So this already means that more and more students understand whereas there's a big problem on how architecture is a political weapon. And then, of course, I'm not talking about the majority of people, I think architecture is still a very conservative discipline, and also a conservative discipline that does not recognize itself as a conservative discipline, liberal discipline, because everybody is sort of center left when it comes to put in the box, but then no one is really central left when it comes to the political programs at designing. But within this there are pockets of resistance that are

Ethel
Léopold

38:13

⁶ Léopold Lambert, "On Tactical Optimism," *Avery Shorts* A01S19, <https://us17.campaign-archi-ve.com/?u=0026e8adfb06086a83c6cd300&id=b193b12aac>

Ethel

Léopold

38:46

Ethel

Léopold

40:44

getting bigger and bigger. And I'm actually optimistic.

I'm really glad to hear...

But also, you know, I practice tactical optimism,⁶ which doesn't mean you need to see a glass half full, because the glass is not half full, the glass is probably 10% full. But at least you look at those 10% you don't spend your entire time looking at those 90%

Yeah, I consider myself a tactical optimist as well, you know.

Yes, maybe we can begin a conversation like that, like a conversation between two tactical optimists.

But sometimes also, I think, a big problem for the practice is that we live in these kind of bubbles, that we relate only to the people like us, and so my understanding of young architects or students is very similar to yours, but I wanted to listen to your opinion because I know *The Funambulist* has contributors from everywhere in the world, and I wanted to have another point of view. So I am trying to avoid being trapped in this bubble, and I think it's all connected because it also refers to the way that we talk about architecture and how we communicate these issues to others with our events, publications, and new courses in academia.

I think that the lines we trace around ourselves can sometimes be called bubbles. And I think the bubble of architects is definitely one that exists. I think the whole middle-class-center-left kind of thing is one. But sometimes I think that the lines we trace around ourselves could be more communities than bubbles. And I think that's an important one. Because I don't see a problem with trying to organize politically with people that think the same way. And in the end, we will always realize that we don't all think the exact same way. We all have different approaches, different perspectives, different backgrounds. But I think it's important to trace lines around a community of struggle, which doesn't

mean that the line is a closed one, it can be porous, it can accept more people, it can also allow some people to leave. I think we are in much too drastically violent times to not organize this way.

Ethel

I somehow agree with you. But I think that at the same time one of the main problems of the polarization we're experiencing nowadays is that we don't communicate with "the others". Let's say that, for example, now with the elections in the US, it's a binary representation and there is no porosity, there is no middle point, not a balance in between. So perhaps that was the danger I was referring to, I don't find any problem to relate with, by the way, most of my beloved friends that are part of 'my bubble'. But I am talking about, perhaps more in political terms that are related with architecture also at the same time, because the power you have to draw that line, and it's also related with your own understanding of this word, isn't it? So how can we make a more porous line? Is there a way to do that?

Léopold

43:42

You know, I'm not interested in talking to a white supremacist. However if we talk about ... let's say, let's take an example: extinction rebellion. I don't necessarily find everything they do very appealing politically. And I find them in many ways reproducing a lot of white behaviors and perspectives. Does that mean we should never talk? No, I don't think so. Maybe that's where the dialogue should not be shot. And we should not be like, well, "you don't think you don't think exactly like me and therefore I'm going to shut you." But then it's all it's all a matter of knowing where the line is. Where is the red line? Like what? Like, how different your premises through which you see the world are from mine that I think we actually have nothing to say to each other? I mean, in Europe, many times, this red line is very much present in knowing whether anti-racist

groups should be talking to the white left, for example. And this is only possible if they do not condescend anti-racist activists in telling them that racism is a secondary issue, or that it's only one aspect of a more important anti-capitalist agenda. If there is true respect and some parts of the struggles are shared, then yes, I think that we can talk.

Ethel

Yeah, I get your point now, perfectly. I was thinking that perhaps too. I think we have enough content now. So to close, I was thinking of going back to the first reflection, so we can have a circular narrative.

Léopold
Ethel

46:15

Yes. A circular line.

About a, you know, who has the power to draw the line but also too, to build and open these doors and windows? And I was thinking of examples like the situation that happened on the US Mexican border with the seesaws. People were using the porosity of the line in that moment, so to speak, but you criticize this action on social media and on a statement you posted in your blog.⁷ And so I guess it would be great to close with your thoughts about who has the power to use this porosity or not? And why sometimes these kinds of actions that can be perceived as something good are for you not good enough?

Léopold

7 Dubravka Sekulić, Elise Misao Hunchuck, and Léopold Lambert, "Borderwall as (settler colonial) architecture, or why we prefer bulldozers to seesaws," *The Funambulist*, <https://thefunambulist.net/architecture/borderwall-settler-colonial-architecture-prefer-bulldozers-seesaws>.

47:32

8 See: <https://www.newyorker.com/news/as-told-to/the-artist-jr-lifts-a-mexican-child-over-the-border-wall>.

About that. I mean, to be to be very clear, it's not the actions that I was critical of, because you know, anyone can do anything to that fucking border—it's fine. Like, it's not even JR⁸ doing his whole thing. I mean, whatever he wants I don't care; it's not a problem of the action itself that was a problem; it's on the whole narrative that revolves around around this action and in that case, I mean exactly like you said, who has the power to go on both sides of the line and who doesn't, whoever was on the US side of the wall or not, or whoever has a little dark blue (or maroon) little booklet with stamps in it in their pockets? Which

is a US passport. That person would be able to go on both sides of that seesaw, whereas anyone with just a Mexican passport or any other Central American citizenship would not, and more often than not, we will be talking about indigenous people, indigenous people who've been there before those lines even existed for much would not be able to go on both sides. And I think that anything that sort of constructs a kind of "feel good narrative" about this kind of object—such as the borders, this kind of death object where thousands of people have died because of this border—is really irresponsible as a narrative like that ultimately only reinforces the object.

I think it's a narrative that clearly did not question the validity itself of what is nothing else than a settler colonial line that is being established as an unmovable element? Because we're having so much trouble thinking outside of ourselves, outside of our time, we have sacralized this line as being a legitimate line between two nation states when, actually, it is very much a random settler colonial line on stolen land. This line was then extruded and offset into a deadly militarized architecture. So I think that we must be a little bit more aggressive in our readings of the built environment from the smallest to the largest scales.

Lines of Architectural Potency

Thanos Zartaloudis

In memoriam, Mark Cousins

I. Life-Lines

For human beings the ability to live (living) and the exercise of that ability (living well) are distinct, though intimately interdependent. Each time, in the singular for every human being experience of such an exercise, more possibilities (or, as I shall call them, potentialities) are experienced than can be actualised. We need to, in a relative sense, choose one potentiality each time. Yet this entails risks, given that as a species we are aware that we can choose and could have chosen differently than what is or was actualised. We become aware of this risk in a myriad of ways, frivolous ones as well as more serious, prospectively as well as retrospectively, ranging from our theoretical contemplation as to “what could have been”, to permanent psychosomatic conditions and consequences. Human beings are, furthermore, both within the potentiality-actuality of living, in its relative sensible immediacy and complexity, and at the same time in a state of contemplative indeterminacy: our contemplation or intellect is not predetermined by the immediacy of being alive or living (at least not in an absolute or complete way; and certainly not in a fully expressible or sensed way). Otherwise we would be entirely (pre)determined by our “mere” living and we would have nothing to contemplate as well as nothing “to do”.

The power (in other words, the potency, ability) of the intellect needs to be first “used” by a human being, and thus be mediated (i.e. made one’s “own”); which means that our power of the intellect/contemplation (as far as it is expressed in linguistic being) is not only affected by our own living in its immediacy (non-linguistic being), but gives it a certain form (including the very sense or illusion of “choice” in itself). It is precisely because “our” living is not immediately our “own” from the start (i.e. it is subject to an appropriation), that living well remains a question for us (an objectively unanswerable question in any ultimate sense) to the point that “living well” can be defined as the general horizon of possibilities. Hence, human beings experience an inevitable scission between the so-called immediacy of the “real” and its

contemplative appropriation/mediation in linguistic expression (the subject that *says* “I”). Contemplation is the name for the battleground of this scission and the place where it can be indicated as such. How this scission is to be thought is, then, the essential question of philosophy and ethics, and I would like to argue here that this is so for architecture also when it reflects on what “it can do” (its power to plan and order spatial configurations). Architectural theory is, thus, neither neutral and apolitical, nor a mere side-kick to architectural practice.

This scission, understood as a dual state of being, was observed early on by the Ancient Greeks and it had a number of significant consequences in philosophy, science, politics, the arts and ethics. Philosophically it marks (as it is marked by) the western understanding of power and being (and of human being understood as an existent being-in-power, a being that has a simultaneous existence as a power, i.e. as its other potentialities). An understanding that emerges most clearly, as we shall see below, through Aristotle’s attempt to decipher the science of natural and sensible being. There is, then, I propose a thin, almost invisible, critical *line* of distinction that has defined the western paradigm of what it means to be and, by extension, to act (which, interestingly, was originally signified for the Greeks by the verb to use—*chrēsis*, *chrēsthai*—a power), to create or transform (to become), based on an understanding of being as power (a potentiality *and* an actuality of being).

Aristotle’s philosophy established the distinction between being as potentiality (*dynamis*) and being as actualization (*energeia*, *entelecheia*) (*Metaphysics* 1009a32–36). This is based on the (ontological) observation that sensible beings are beings of both actuality and potentiality. It should be noted that Aristotle’s whole science (*epistēmē*) of physics depended on this and the key question was: how is one to explain the potentiality or capacity of something *in* its coming-to-be? And this was a key question since potentiality when not actualized was thought by some philosophers of his time in terms of actuality only. Potentiality or power was seen as exhausted in reality/realization, and was considered as a “weakness” that could never be shown in its existence as a potency. Realization/reality once “complete,” as the Ancients would have it, had no need to think about potentiality in itself, since it stabilised being in actuality.

This may have led also to the unintended consequence of the way in which reality became conceived in modernity as a modality of deterministic functionalism and efficiency, and ultimately as an identity or representation. In addition, it should be noted that already in Aristotle the understandable philosophical separation (for reasons of logical analysis) of the “having” of a power (i.e. the “mere possession” of a potency or power) and its actual

exercise or enactment (actualisation), may be at the heart of the unintended (and ultimately misleading) separation in modernity between theory and praxis (or thought and reality, form and materiality) that to this day troubles the very sense of what contemplation or theory is in its practice (including that of architectural theory as an activity and discipline). Instead, thinking of action/creation as a *conjunction* between potentiality and actuality means that both potentiality and actuality are actual, existent and that between them is not a relation of withdrawal or weakness, but a constitutive passion of a reality/realization that is always risky, contingent and imperfect. To use an image: to the illusionary identity and solidity of the actual, the real (and the supposed normative disjunction of “really” acting, “purposefully” deciding, designing as “producing the true” etc.) potentiality is the air flow that runs through an actuality that is jagged with exits and entries, porous, incomplete, rendering all claims to mastery, totality, authority and so forth as only temporary figurations of authenticity. The potency of creativity, neither an excess, a weakness or lack in being, is rendered, in part, visible in and to our conscious and unconscious contemplation as the most elusive constitutive element of our being’s existence: the existence of potency, our existence in potency. Rendering the actuality of potency, masterless, useable and spatially compositional is, it seems to me, architecture’s contribution towards living-well.

My core aim in engaging with *dynamis* or power in the dual sense of (being in) potentiality and (being in) actuality, is to show that potential being *participates* in being (and does not lag behind reality or actuality as the negated other of the created). Which means that potential being, as one of the ways in which we and things exist, is paradoxically existent along and within the actualised. Which is another way of saying, more technically, that non-being participates in being, the unthought participates in thought, the undesigned participates in the designed. How to think of this dual sense of being remains a core task of theorising, of “contemplating contemplation” and potentiating it. Participation marks the very nature of contemplation as an experiential activity when understood against the conventional distinction between matter and form (as that of an outside and an inside).¹ In addition, it marks the need of pedagogical contemplation to be made more widely available to architecture students and architects to engage with the lines of architectural potency affirmatively and not confine and stifle its practices to its discipline’s and the built environment’s current present as the only motor of reality.

1 This very distinction between an outside and an inside is presupposed by the dominant paradigm of action in terms of the act of thinking as such. This is also to say however that rendering this distinction indifferent to being does not mean that there is no difference between contemplation or theory as an experience and contemplation in its formal expression, for instance, in writing. On the contrary, the so-called outside, the “multiplicity of the real” and its “flux” to refer to Elizabeth Grosz’s expression in reference to Bergson (*Architecture from the outside - Essays on Virtual and Real Space*, 179), is not outside all possible experience but within it. This is also what I indicate with the short-hand “existent/present-futures”. In this manner, with some differentiation from Grosz’s delimitation of the “intellect,” I will suggest that contemplation or thought is entwined with its outside, co-existent, contingently so. It can be neither merely cleared-out and dissected, nor captured in suspension (as an excess), as the dominant paradigm of action presupposes in the form of its operative device: the will that acts. It is the apparatus of the will that, abstracted from the body and its potency, actualizes power, wills it into action (as an identity or representation) and attempts to capture its present as the confinement of its future.

II. Act!

It could be said that a disciplined architecture due to its own “functional differentiation” (Niklas Luhmann) in modernity enacts its “end” through its self-extraction from a wider existential potency—its general (by definition political) power of creativity—when it replaces this experience of loss by procuring an efficient, but much more limited in descriptive and normative scope, self-validation for itself as a *techne*, as an end in itself. This is, perhaps, even more depressing an experience today when architecture, for the most part, thinks of itself as near-exclusively serving and sustaining the axis of production (reactualisation) and commodification (depotentialization). What better starting point, then, in order to rethink this paradigm of power (of architectural thinking and practice), other than by re-examining its foundational formulation as *dynamis* and *energheia* in Aristotle (*Metaphysics* 1069b19–20). A paradoxical definition of potentiality (*dynamis*), given that a potentiality, by definition, is, to put it in a modern sense, a “possibility” *that exists*; though a potentiality is not to be confused with a mere possibility. Such a definition of power draws within it a line (and hence a relation) between what could be called an *existent* (and not merely possible or probable) being of potentialization. Historically, the power of existence itself (or the real) has been subject to an understandable line of scission between “what is actual” and “what is potential” given that logically what is potential is always thought in relation to an actuality. Yet, what may be a logical primacy of actuality became in long modernity an ontological motor of truth or reality production on the basis of the state of things, including of political, economic and architectural truth production (of the status quo and its preservation), which led to a misunderstanding of potentiality as something that once actualized belongs to a reproducible past, defutured.

However, in the original formulation in Aristotle, read here in a wider sense than he intended, potentiality as a philosophical and ethical problem is precisely that of a potentiality which is co-existent with, relative to but not reducible or exhaustible in actuality—and this becomes the kernel of his *Metaphysics*. Aristotle, in other words, discovers that there is an internal consistency and continuity to the coming to be of a power despite its paradoxical nature, a power that is both passive and active, resistant and creative.

But how are we to think of such a paradoxical existence of non-being (or of the unthought), that has, through a politically conscious misunderstanding, crippled the public politics of creativity, including, that of architecture? A creativity that wills to produce a near permanently exploitative built environment, estranging buildings and their users from their potency. In contrast, a potency or power, that as we will see below with Aristotle, is

- 2 Agamben, *What is an Apparatus? and Other Essays*, 45.

as much a *dynamis* (potentiality) as an *adynamia* (impotentiality). Power conceived as *dynamis/adynamia*, in Aristotle is genuinely dynamic, in that one can always locate an available way to not act at all, or to act differently. And it seems that the obsession with solidified, reproducible action, the exhaustion of human as well as objective potency has estranged us first from this necessarily risky dynamism of potency. In this light, Giorgio Agamben distressingly asks: how are we to avoid being impoverished by our “estrangement from impotentiality”?² I would like to propose that we can attempt to do that, as a preliminary theoretical step, by exploring what Aristotle thought of potency/power, in order to understand the dynamic existence of/in creation.

Martin Heidegger in *The Letter on Humanism* writes: “We must free ourselves from the technical interpretation of thinking. The beginnings of that interpretation reach back to Plato and Aristotle. They take thinking itself to be a *techne*, a process of reflection in service to doing and making” (1977: p.194). This may be to an extent true and while it may have been much later utilized to condemn the *technai* as mere instrumentalizations, my interest lies in what may be one of the key elements to this “technical” or instrumentalized conception of (architectural) thinking. And I have in mind the predominance of an anxious ideology of mastery in action. That is, a propensity to define being in terms of doing/working in an illusionary over-determined actualization. To such an extent, even, that it forms a certain “activism” of a kind which separates, it is my contention, whether consciously or not, the present from the future (defuturing it). The paradigm of mastery-in-action in western thought, in claiming to enact the future, cancels, in the name of a delusional demiurgic mastery, the plurivocity of the very nature of the future.

It should be made clear from the start, with reference to Aristotle’s conception of potency (*dynamis*), that the expression “existent futures” does not project a nihilistic sense of unlimited futurity, or some naively open realm of infinite possibility. A necessity derives, naturally, from the matter or nature of an object “that can be produced” or a subject “that can be constructed”, with a given material conditionality which is never unlimited, or infinitely open to any forms and uses. But here I am thinking, to be more precise, of potentiality (power, *dynamis*) with particular regard not to the potency of things (or matter itself), but that of thought/theory (including architectural thought); a contemplative potency different in nature to that of an object or material. In other words, the phrase “existent futures” does not invite us to merely say “another world or building is/was possible” (leading us to a spectrum of retrospective or projective decisionism), but rather to locate in the “actual present”, the here and now, the other side of a dual motor of

3 Potency in design and architecture is particularly enabled to indicate this. This is the way I read, for instance, the iconic potentialization and related temporariness of some of Cedric Price's projects.

4 Landrum, "Before Architecture."

5 trans. B. Jowett, in Barnes, *The Complete Works of Aristotle*. Landrum inserts and notes the missing "architects" to Jowett's translation, following Kraut, *Aristotle Politics*.

being that *enables* thinking and imagining another world or building in the potency of an act, with and despite of its current actualisation. It is to recon-
 dition the future as the enabling concept of the present ("what is potential
 can become actual") and, at the same time, to sustain (by design to the extent
 possible) the continuous existence of the future in the actualization of a pres-
 ent ("what is present can become potentialized anew, challenged, critiqued,
 reimagined and so forth").³

It is with this in mind that I turn attention to Aristotle's attempt to,
 among else, think in a consistent manner the problem of power (*dyna-*
mis, potency) in the sense of the way in which natural materials, as well as,
 more crucially for my purposes, sensible beings and thought itself ("reason",
 "learned capacities") can undergo change or transformation (or what in
 classical philosophy was called the relation between non-being and being). If
 Aristotle noticed, in some sense in contrast to his predecessors, that the use
 of, for example, a material can lead to a range of objects which are present
 (existent) in potentiality prior to their actualization (as well as paradoxically
 afterwards by the fact that potency is still related to its being "fulfilled"), his
 wider innovative contribution was as to how to *think* of such a transforma-
 tion, and its formative potency, in ontological terms, or in the terms of the
 being of existent futures.

Lisa Landrum in her nicely conceived review outline of the ancient
 Greek references to architects and architecture in Plato and Aristotle, titled
 "Before Architecture: *Archai*, Architects and Architectonics in Plato and
 Aristotle"⁴, offers a reminder of two crucial points when contemplating, what
 I would call, architecture's "tightrope line of thought" between the technical
 and the political, as this issue invites us to reflect upon. With reference to
 Aristotle's *Politics*, Landrum aptly quotes Aristotle stating in book 7: "[the
 architects (*tous architektonas*), through their thinking (*tais dianoiiais*), are]
 most truly said to act" (1325b20–24).⁵ Here I would like to add emphasis
 to the reference to architectural thinking as an act; and to underline the
 importance of this thinking, in Aristotle's *Physics* and *Metaphysics*, of action
 (as *energeia/entelecheia* and also in the sense of *praxis* in his *Ethics* and *Pol-*
itics). This is to remind, being a mere observer who happens to have taught
 in an architecture school, of the lines that quite literally draw and redraw,
 set and cancel potency and actualisation, between architecting as a public
 transformative social good, and architecting as a private capitalist develop-
 ment of, essentially, the marketization of actuality and its defuturing of the
 future. Especially at a time, and for a long time now, when the market and
 "the good" have merged and are almost indecipherable. Yet, I wish to argue,
 ultimately, that the power or potency inherent in thinking/theorising archi-
 tecture is intimately associated with what in old-fashioned philosophical

language was called virtue, in the sense that appreciating and nurturing the co-existence in action of sustainable and plurivocal futures is the sustenance of the good. I will return to this in the final section.

Landrum ends her piece with reference to Christopher Long, quoting him as follows: “The good is [...] at once elusive and alluring. Its transformative political power comes not to those who pretend to possess it but rather only to those who recognize that the source of its power lies in the way it requires each new generation to take it up as a question and work it out in living dialogue together.”⁶ What I take from this, apart from a certain serendipity of thought, is the need to take up “power” as a question and think its sense for a coming generation, or more precisely to think of the nature and “source” of power (which I will explore below more precisely with reference to its Aristotelian names, *energheia* and *dynamis*) as generative and transformative. There lies I think a key, obvious as it may be, to the fact that architecture’s thought, its potency, is to remain open, metamorphic and questionable, rather than a quest for an absolute architectural end, essence or truth. Indeed, as Landrum notes, Plato and Aristotle, in their time, consistently present architects as “exemplary civic and intellectual leaders acting in awareness of their own (and others’) limits, with knowledge of the most appropriate *archē*, and with a view to the most comprehensive aims—the common good.” And Landrum concludes: “This discloses an alternative and more accurate etymology of architects: not as master-builders but as leaders and makers of beginnings (*archai*)”⁷.

What would it mean for architects and architectural thought and training to be concerned with *archai*? Reflecting on the good of architectural thought may be today nearly impossible as it would require too many parameters to be reconsidered and compromised, but in this theoretical attempt I would like to focus on only one. That is the presuppositional nature (or condition) of the “will to act”, which so characterises a certain dominant (whether progressive or conservative) attitude among architects (as sovereign masters) and architectural training itself. My aim, in fact, is more modest than it may seem: to offer a brief and speculative glimpse from the ancient past, that could in turn trigger a glimpse of a future, a genealogical segment, if you like, of the future present via a future past.

Before I turn to this in the next section let me make some final preliminary clarifications. It should be noted at the outset that by concentrating today on the word power (in its Aristotelian senses of *energheia* and *dynamis*) I, by no means, suggest that we can ignore historical specificity (and thus vast historical distance), or the contemporary internal density and difference of the disciplines of philosophy and architecture. Rather, it is to offer a demonstration of a paradigmatic (in both senses of the word: a

6 *Socratic and Platonic Political Philosophy*, 6; as quoted in: Landrum, “Before Architecture,” 21.

7 Landrum, “Before Architecture,” 20.

8 On the understandings of this (juridicalized) distinction of powers between a *potentia absoluta* and a *potentia ordinata*, which originated in the canonist lawyers' treatment (for instance, Hostiensis, 1270) of papal power and the bureaucratization of ecclesiastical law, who borrowed the terms from theology, to then see it borrowed back by the theologians and applied to God in the fourteenth century, and for it to be retranslated into juristic-political discourses in the sixteenth century and beyond, see: Courtenay, *Capacity and Volition*; and his "The Dialectic of Omnipotence." For criticism of Courtenay's interpretation, see: Oakley, "Medieval Theories of Natural Law"; Oakley, "Jacobean Political Theology"; and Oakley, *Omnipotence, Covenant and Order*. Other critical interpretations include Randi, "La Vergine e il papa"; Randi, "A Scotistic Way of Distinguishing Between God's Absolute and Ordained Powers"; and Tachau, "Robert Holcot on Contingency and Divine Deception."

singular-exemplar key to a wider picture) line of thought, that is defined by the notion of action and a certain drive towards activity; and by extension a state of actuality/actualization (as the end/*telos* or fulfilment of a potency). A line of thought as its power that remains elusive, because it has been in one sense forgotten in the metamorphic density of the historical material that envelops it through many centuries and its many different, though related, metamorphoses: from Aristotle's *Physics* and *Metaphysics* to its rediscovery in medieval times by theologians and canonist lawyers who use elements of it in order to define the power of the omnipotent God, the power of the Pope and the Sovereign King, to the sense in which Nation-States are defined as sovereign potencies (each time formalized between an absolute capacity and an ordinary action or actualization).⁸ I will not be able to delve into these transformations here in any detail, but they are really quite remarkable and they point to a consequence that is crucial: the line of thinking that defines power as between a potency and an actualisation has become an illusory epistemological register of the real, a formalizing filter for a static reality-production and of what it means to act as such. Instead, "power" is to be posed as a problem to the point that it undetermines not only what it means to act but what it means to transform.

A problem, to use Manfredo Tafuri's (1987) terms in a different though perhaps related context, or, rather a project of domination, the domination of reality. This is because activity (and the interminable drive to activity), in general, and the architectural impetus towards action/transformation (of the same) are themselves now an institution; and there seems to be an almost mystical (or blind) belief in action, that intimately ties progressive and avant-garde "movements" to the most basic capitalist intensities of the neoliberal techniques of governance and commodification as generative of every action and actualization. To turn this nauseating tension into some better "productive mechanism" without challenging the very motorization of action (as the actualization of the power of the "real") towards the production of a universal monocular reality, to follow once more Tafuri's reflections on the "historical project", would defeat the very purpose of indicating the intangible aspects of the problem in the conception of the power to act (i.e. that the western paradigm of power conceives of two modes of being: potentiality and not just activity; but a negative understanding of their dynamic relation has dominated their thinking). To reopen the question of the "source of power" in this model between potentiality and actuality means also to aid the multiplication of the rediscovery, a continuous rediscovery, in architectural training, reflection and practice of beginnings (*archai*), cuts and bruises, methods and accidents, consistency and complexity, towards the very potency of architectural goods as virtues. The point, however, is not to

recover some long-lost potency or ever more subversive praxis of that potency; for that would repeat the very way in which potentiality is misconceived as a negative reservoir that remains to be realised and exhausted in the act.

Primarily my aim is to indicate a “problem” in the now institutionalised paradigm of action and actualisation with a primary economic function in productivity and work, and a secondary, technical function spanning across politics, architecture and language itself, in the name of the prioritization of action and the “actualization of” cognition through a stifling causality, a pseudo-finality and a turning of necessity into an inegalitarian, neo-imperial and self-defeating modality of reality domination, to justify the eclipse of the contingent futures that are the natural source of our being.⁹ This is based on the observation of current paradigms of architectural theory and practice that are predicated on the instrumentality of action, the assumptions and status of mastery, a self-satisfied reality and a linear, supposedly absolving, resolution of potential into act. To do this means inhabiting modernity’s ruins, where equally the anxiety of guilt (for things not actualised or over-actualised) and the innocence of origins or archetypes (that remain to be actualised or be eternally postponed) no longer resuscitate anything other than their nostalgic dream of a conservative or radical fullness. Power in its physical and metaphysical sense (the density of the coexistent potential in the reality of every act), is not the power with a capital “P” that one would use to describe its institutional or systemic incarnations, but rather the formulation (and in that sense the forming) manner or modality of the idea of a coming to be. Which implies two things. One fears, contra Tafuri at least in tonality, that a genealogy or a criticism (to use his term) that “constantly” puts “itself into crisis by putting into crisis the real”¹⁰ risks reinvigorating the primary motor of crisis-production, which is the paradigm of power as actualization or “enaction” (an exhaustion of reality itself through its revolutionary suspension); what I would call, with Tafuri this time, the inclination towards “a cure that exorcizes its own power as a sickness”.

The other implication is the common and rightly criticized in the modern history of philosophy (and not only) western binarism that dualizes what is called reality between a representation and a self-identity; only in order to serve the identity’s imposition as a discursive formation that *forms* discourse, and as the norm of verification of itself *and* any other possible discourse. This is perhaps the paradigmatic western line between polar opposites, a line that wishes to render itself “always-already” invisible when it determines what can be visible. Yet, the “line” or “relation” between potentiality and actuality (*dynamis* and *entelecheia*), that defines the ontology of power in Aristotle is not so much a binarism. It becomes such later and most emphatically so in its metamorphosis by Christian theologians and medieval jurists,

9 Agamben, “The Work of Man.”

10 Tafuri, *The Sphere and the Labyrinth*, 9.

all the way to, as Agamben has shown, becoming the paradigm of sovereign law in the nation-state (and by definition the kernel of the state of exception as the permanent source of power and the rule of normalcy/actuality, even after the nation-state's power dissipated).

The incentive to return to Aristotle is, therefore, that when potentiality and actuality (or power) are thought as a binarism and their relation is depicted in the image of a tensional in-between space of experimentation and reconstitutions (of the same), futurity is replaced by fantasy. Power (*dynamis-energeia*), in Aristotle, is inherently incomplete, without a predetermined totality. Aristotle, in his own way, conceived the “reality” of sensible beings and things as continuous intensive contact between powers rather than determined by a binary process between origin and end). We are used to thinking what is potential in the past tense, once its actualisation gives it form. We conventionally think of something being in the state of becoming or potentiality until it “comes and completes” itself, forming an identity with itself, self-justifying and securing its all-present power. Much of this is owed to a reading of Aristotle, but it is a one-sided reading. The other side to this is that when nothing is left incomplete, what Aristotle locates in the *presencing* of the actual is an irreducible dimension of potentiality that is also existent. In my wider reading, which I cannot develop here in any detail, such an irreducible immersion of the actual or “the here and now” in potentiality or futurity is Aristotle's paradoxically empiricist answer to Plato's *chōra* as the imaginary “receptacle mother of the universe”.

The inventiveness of architectural thinking and design appears to be often exhausted not only by the necessary limitations of a professional marketized context and the primarily profit-driven attainability of whatever may be potential, but also by the ontological model of the understanding of action or actualisation as a process that leads a potential project to its actualization. Perhaps the most prized aim of good architecture is duration, but not just in the sense of longevity of use and enjoyment (as well as efficiency and sustainability). What of the design of an inherent futurity, a potency that is not exhausted in a fully predetermined organization of a spatial figuration, but one that is enabling and configured by its uses in its present-futures? While lines are drawn and cut across the present and the future past of the potency of whatever is actualised and designed, such a line—with this reading of Aristotle—remains dynamic, akin to what Jacques Derrida once called “spacing temporization”.¹¹ This is what Aristotle helps us observe as the paradoxical existence of potentiality and I would add, with architecture in mind, the existence of spatial potentiality, the use and inhabitancy (*oikeiōsis*) of existent-futures as architecture's key virtue.

11 Derrida, *Margins of Philosophy*, 13.

Aristotle has been thought as the inventor of the logic of identity and self-containment, but what is self-contained is a self or a spatial reality without a static actuality, or at least with another equally existent modality of being to that of actuality. Potentiality is, in this sense, not a question of degree of actualization that is differentiated and exhausted; and which could be later perhaps improved but ever emanating from the identity of the original same. Rather, potentiality is the abstraction to the second degree of the real as the being of the future in the very moment of presence or actuality (after all, action or actuality in Aristotle's invented term *entelecheia* means "being within its *telos*", being within, becoming towards an end-line or limit). Potentiality exists in the duration of a limit that continuously contracts (sometimes it dreams, sometimes it stutters, to remember Deleuze). Our imagination is accustomed to prefer to think of the future on the basis of the presented-past, when in fact the future contracts within the very expression or coming-to-be of the actual. Potentiality is the name given to the immanent existence of the future in the present. It is a form of paraconsistency in being.

The domination of actuality, each time a version of reality, and of actualization as a type of process that exhausts or crushes the potential into the real, is not only a discursive strategy that dominates as a norm of verification (a motor of reality production), it is also a figure of epistemologization that determines what a science or discipline is as a whole. Both a figuration, a sketch, that captures the imagination (and gives it an *archē*-tectural model) and a disfiguration of what is potential (which includes but is not identical to the possible). In other words, there is attractiveness in the prevalent model of actualization (it breeds action-seeking, present-suffused, producers of finality) but also an internal negativity (the future gets cancelled in the name of a present intelligibility), one that renders the particular here and now as a universal neutralization (a safer investment) of the good to come. Such anaesthetics breed a particular aesthetics, the necessity of a disinterested aesthetic judgement on the present-future, such as the one, for instance, that necessitates the search of the good to become an interminable "managerial efficiency or resilience". This kind of imposed conformity and trained complacency has its root in the epistemologization of a paradigm of thinking, where acting and designing feels confident enough to conceive and delimit itself as phallocratic "present", at the cost of only perceiving the future through a process between means and ends.

Such a process acquires the nature of a common-sensical necessity, a "there is no alternative" type of disfiguration of reality, that never feels confident enough to have its intelligibility exposed (or what philosophically is called singularity, the peculiar modality of the existence of potentiality-in-actuality, that is neither universal, nor simply particular). Yet this is

how an episteme and an experience of knowledge can *actually* become possible. The historicity of an episteme, including the knowledge that architecture procures, is neither diachrony (some origin that authorises what is good architecture in the present), nor in, one sense, synchrony (a present that is in constant conflict with another present, as with the conflict of the merely possibles—a nihilist, at its core, experience of a civil war of ideas, markets and bodies). Rather, the experience of an episteme lies in between diachrony and synchrony, in a inline crossing of the two, rendering inoperative (to use Agamben's term) the dichotomy between the past-present and the present-futures. The ontological character of the present, its modality, makes no good sense otherwise, since the so-called present is neither just a material figuration of whatever is produced or actualised each time, nor a merely cognitive (abstract) relation of a cause to an effect, a means to an end, that meets in the present its "end" (in both senses of the word). The present, the here and now, has always been, a synchronic elsewhere.

III. A Para-Ontology of Action

Aristotle's ontology of power is complex and multi-faceted and my purpose is not to summarize or explain it in any adequate detail. I am going to briefly focus on just one key aspect of it as expounded in *Metaphysics*, book *Theta*.¹² In book *Theta*, 3 Aristotle argues against a group of philosophers known as the Megarians (who hold that power exists only in doing or in being done, i.e. in its exercise and actualization) by developing a theory that shows power or potentiality (*dynamis-energeia*) as existing independently from its exercise or actualization. Potentiality (power) is one way, among others, in which being *is* (1017a8–1017b7). Power (*dynamis-energeia*) draws Aristotle's attention because it is paradoxical: in one sense it has the ontological status of being (in its actualisation) and, at the very same time in one sense, of not-being (in its potency). This potential being is however within being, by the fact that it exists as a power (potentiality). The distinction between potentiality and actuality (the two forms of being of a power) lies within being, not as a mere matter of theoretical contemplation, but as in the very nature (*physis*) of a (sensible) being. This may seem like a mere logical schematization, but I would like to suggest that drawing on a reading of Aristotle's innovative formulation we can appreciate something further than that.

To enlarge this sense, and to speak of contemplation, or the being of contemplation, as an *existent* form of being, we can say similarly that the power of (architectural) thinking *exists* both in a state of potentiality and in a state of actuality, in a particular experience of contemplation that equates the being of an active and a potential thought while it also renders them

12 See, for a start: Witt, *Ways of Being*; Charles, "Actuality and Potentiality in *Metaphysics* Θ"; Makin, *Metaphysics Book Theta*; and Beere, *Doing and Being*.

distinct. An active thought in its linguistic being and the cut that the statement “I, think ...” performs, co-exists with the potency of thinking in its continual coming to be within an (also) non-linguistic body. To appreciate the act of contemplation as experientially existent in a state of continuous potentiality leads perhaps to an appreciation of its own dual status and of its existential knot given its actual yet undetermined ethos (way of being). The co-existence of potency and actuality has the effect of a radical equalization, a certain egalitarianism of existence’s present futures, and this becomes most visible in the open plateau that is thinking as an ethos, the contemplative way of being.

But there is more that we can draw from Aristotle’s theory of power/potentiality. A potential thought is still powerful when its thinking is actually expressed, and what I would define as good thought does nothing else than struggle to “save” that potentiality in its actualised expression. This may also explain how cumbersome the experience of expression and thought is between potency and actuality. This however does not mean that one should existentially privilege one state over the other. Aristotle adds one more layer to this, since in book *Theta*, 8 he aims to show that potentiality’s existence is never independent of actuality. In fact, potentiality, Aristotle will say, is ontologically dependant on its correlative actuality; which is to say that without actuality, potentiality cannot be. Yet, Aristotle speaks of the primacy of actuality, here, in a particular sense: actuality is primary because it is more proximate to the *telos* (the actualized state) of a being or thing, than potentiality is; and so it is primary in that sense of proximity to an end, and only.

Focusing or grounding our contemplation on just one side of being (what is potential or what is actual) would miss the point. These two layers comprise on the one hand a “spatial” equality of existence between potentiality and actuality, and on the other a “temporal” primacy of actuality (with regard to the present state of a being or thing). We perceive what is potential from either side, while the line of potency will inevitably experience also the cut of expression or present being. Which is to say that at the state of an actualized thought, being or thing, its potency is not fulfilled in the sense of a dissipation or expenditure, but “saved” in a spectrum of power. Which is another way of saying that our being of contemplation is a second nature within another, and in this sense our second chance at a good life. How are we to think of such a potency that survives action or actualization and why would it matter for architectural thought and theory?

Before we go into some of the detail of this formulation of our being in the dual existence of power as potency and actuality or action, it is worth noting some of the philosophical context to Aristotle’s metaphysical treatment of power by reminding that the volumes titled (posthumously)

as *Metaphysics* literally follow his books called *Physics*. In *Physics*, Aristotle seeks to discover the grounding or foundation of reality (that is reality understood as the total body of matter and form). The kernel of his reflection at this point is led to a core characteristic or principle (*archē*, in the sense of a beginning) of power: what he calls *metabolē*, *kinēsis* or change/movement, taking place in differentiated ways in terms of *ousia* (substance), quality, quantity and place (III.1,200b33–201a16). Reality, for Aristotle, is a totality comprising powers that contact each other and such contact is continuous. Movement (*kinēsis*) or change/transformation (*metabolē*) is continuous for beings and generation (*genesis*, coming-to-be) does not derive at any point from nothing (absolute non-being) or from a deterministic original cause (absolute being). Each *metabolē* or movement (and hence each contact between *dynamis* or powers) takes place between *dynamis* and *entelekheia* (a potentiality or capacity and an actualisation or fulfilment); or to put it in a more contemporary sense between a future and a present, a potency and an act. While such *metabolē* is continuous, it is not unlimited, in other words it is never merely indeterminate. To venture a dizzying transhistorical sketch, movement or being, in Aristotle, approximates what will be understood much later by medieval philosophers and theologians as a synchronic *contingent being*: i.e. being is neither merely potential, nor merely actual but the totality of its potency and its actualised present power.

Let's take a few steps back and revisit Aristotelian power. Before Aristotle, philosophical reference to *dynamis* can be, for instance, located in the definition of *being (on)* by Plato, in the expression: “*ouk allo plēn dynamis*” (“nothing else but *dynamis*”; *Sophist* 247e). In Aristotle, however, we find an innovative theorization of being/power, and the first treatment of the concept is met in *Topica* D 4.124a31–34 and 5.126a30–b6. Though there are many meanings of *dynamis*, Aristotle thinks there are ways in which they relate to one another, and this was probably the initial seed for his investigation in *Physics*. At the heart of this intuition is the fact that there is a meaning of *dynamis* quite close to the much earlier Homeric use of the term: it is *dynamis* as an “active power”. For *dynamis* used in this way, Aristotle gives eventually in his *Metaphysics* the following definition: “*Dynamis* means a source (*archē*) of movement (*kinēsis*) or change (*metabolē*), which is in something else or in itself as something else.” (*Metaphysics*, 5.12). The definition, grounded as it is in the *experience* of being, leads him to the relation between potency (*dynamis*) and act (*energheia*), first, in terms of what distinguishes them. The problem being that a potentiality is a possibility (or a future) that *exists*. However, unlike mere possibilities which can be considered from a purely formal standpoint as equal among themselves, potentialities present themselves above all as things that exist singularly, but that at the same time,

do not exist in the same way in which actual things exist (i.e. potentialities that have been actualized). They are present, yet they do not appear in the form or mode of present things. In what way do potentialities appear or are existent?

What is at stake for Aristotle is the *mode* of existence of potentiality as not reducible to actuality. This is no minor problem, or discovery, for Aristotle, since this is a core element of his *Metaphysics* without which he would not be able to encounter a key way in which the experience of being is to be understood. Without an understanding of power/potentiality a core form of reality would go amiss. This becomes even more acute when one considers that being for Aristotle is at stake in every sense of the term “*dynasthai*” (to be able). If what is actualized appears in our experience as “more real” than what remains potential, this is already an indication of the problem in contemplating the experience of being. When Aristotle notes actuality as prior (or primary) *in being* to potentiality, he means that actuality is independently of the potentiality as a different mode of being, that is, as intimately connected to a being’s mode of being (as its *telos* or end). This is why Aristotle says that active power is the core concept of *dynamis*, its *kyrios horos* (*Metaphysics* 5.12, 1020a4). As we said already, this can be easily misunderstood as a privileging of activity or actualized potentials. There are, though, two modes of being and they are both relative because, as it was noted, Aristotle conceives of his ontology as an ontology of powers that are in continuous contact, *they come to be in acting*, rather than in a linear production line.

In Aristotle, then, the primacy of actuality is a logical strategy, not a normative one. This becomes more evident when he moves by analogy to other types of *dynamis* (ones that are not dispositions of change, but dispositions for being something). And it is with those particular *dynamis* that I am concerned here in order to think of the potency of architectural thought. Aristotle writes: “our meaning [...] is as that which is building is to that which is capable of building, and the waking to the sleeping, and that which is seeing to that which has its eyes shut but has sight, and that which has been shaped out of the matter to the matter, and that which has been wrought up to the un-wrought. [...] some [of these] are as movement to *dynamis*, and the others as substance to some sort of matter.” (*Metaphysics* 11.6, 1048a35–b9; Ross, 1936). Aristotle’s claim is that, in a way, a substance (a disposition for being something) relates to its matter like a change relates to the respective *dynamis*. Here, we sense that Aristotle’s theory of *dynamis* becomes relevant to the very heart of his ontology of being, the hylomorphic composition of substances.

Further to this, Aristotle distinguishes between two types of potentiality: a generic potentiality (e.g. the potentiality of a child to become a painter)

which does not interest him specifically, and a particular, existing, potentiality (e.g. the architect who has the potential to design, think and build) which differs from the former type in the obvious sense that the architect does not need to suffer an alteration, but “has” (thanks to a *hexis*, a “having”) a potentiality to, for instance, build (as well as not built—*mē energhein*). It is this peculiar having (*echein*) of a potential *dynamis* that is enigmatic, as Agamben notes, for the Aristotelian formulation of power/potentiality. Sensible beings are characterized by a dual mode of being in terms of their power of being (potency and act) and their potency’s being is that of an equally existent power to do or to not do something (i.e. it is subject to contemplation).

Agamben has lucidly observed, as we will see in the next section, that it is the nature of the *existence* of potentiality that forms the “secret kernel” of Aristotle’s (meta)physics of real (existent) being. In the particular discussion in *De Anima*, which Agamben refers to in order to indicate this, dealing with why there is no sensation of the senses themselves, Aristotle proposes that potentiality is (also) the undergoing of a *sterēsis*, not in the sense of “a simple privation (i.e. non-Being) but rather as indicating the *existence* of non-Being, the *presence* of an absence”.¹³ To “have a power” means “to have a privation”, not as a mere logical hypostasis of power but as “the mode of existence of this privation.”¹⁴ Privation (*sterēsis*) in *Metaphysics* book *Theta* has, in fact, two meanings: a) the “missing” or “failing” of something positive (i.e., the Form, *eidōs*); b) the “substrate” from which the positive something is missing. In fact, this understanding of a *steretic* experience, a suffering or passion, is central to Aristotle’s understanding of *hulē* (matter). And matter, in the sense that most concerns us, is *hulē noētē* (intellectual matter or *dynamis*) defined as pure *dynamis*. In *Physics* (193b19–20), Agamben notes, “privation is like a face, a form (*eidōs*), so that when Aristotle undertakes to conceive of the mode of existence of *dynamis* in *Metaphysics* book *Theta*, he does so precisely in order to “assure the consistency of this ‘form’ or ‘face’”.¹⁵ This serves to explain why Aristotle in *Metaphysics Theta* has to counterpose, in part, his theory of *dynameis* against an alternative position put forward by a group of philosophers called Megarians.

Aristotle describes their position as follows: “There are some who say, as the Megarians do, that a thing can act only when it is acting, and when it is not acting it cannot act, e.g. that he who is not building cannot build, but only he who is building, when he is building [...]” (*Metaphysics* 11.3,1046a29–32). The Megarians regard the realization of something as both necessary and sufficient for *having* the power to do this/that. Such an emphasis, however, on the sufficiency of the actualization of something leads, Aristotle argues, to some peculiar conclusions. For example, an architect would not have any designing potential when not designing; and there would

13 Agamben, *Potentialities*, 179; my emphasis.

14 Ibid.

15 Ibid., 15.

be no difference between a non-designing architect and someone who is not an architect at all. In addition, and more crucially, if only what is actualized is perceivable and, thus, exists, then something would only be perceivable when encountered as a matter of fact. Finally, no principle (*archē*) of change or *metabolē* could be conceived if all that is encountered is actions and their actualisations.

In other words, power cannot and should not be thought only from the vantage point of actuality (or materiality in the sense of “presence”) as this misses a fundamental way in which being is. Powers exist whether they are realized or not. This duality of being renders architectural thought and design not just a technical matter that is to be acted/executed irrespective of its contemplative potency, but a matter (also) of ethics (i.e. as to whether it should be acted or executed at all or in another way). Unrealized, though existent, *dynameis* show that action or realization can no longer be regarded as being the necessary or sufficient condition for “having”, or better, being a power. One does not, in other words, think well (architecture) if exclusively from the vantage point of current actualities or actualizations (and their supposed necessary conditions). If that were so, then architects would merely have to do their “duty” according to the dictates of what has been already actualized in the built environment, or whatever the “market forces” demand. The untying of the ideological knot of power as action (ignoring its, to put it in another way, passions), is not to give way instead to a license towards “anything goes” (or equally “nothing goes”), as if one could contain all potentialities in a single perfect actuality or in a state of pure potentiality; nor is it a license to “manage” potentiality in the name of the present state of things and only, i.e. to depoliticize potentialities and actualize only those that are sufficient or necessary to the sustainability of the present.

Let’s outline then some further elements to the theory of power that has quite literally captured the western imagination, before we can respond more adequately to this knot. Aristotle summarizes some key characteristics to power in the sense that concerns us: (a) every power is at the same time the power for the opposite (power is two-sided in its very existence); (b) everything that is capable of being is not necessarily actual; (c) the condition of actuality is not the action but its power; (d) coming-to-being (*genesis*) is always out of a relative non-being (potentiality) that is a form of being. This latter point is crucial and this is how Aristotle describes it in another work: “Now for things which are of a nature to come-to-be, the material cause constitutes “the possibility of being *and* not-being”” (*De generatione* 2.9, 335a32–33.) Architectural thought is an act that, in this sense, has to be contemplated as constituted in the simultaneous “possibility of being *and* not-being”. What would that mean for its practice? I will return to this more

directly below, but for now let me pose it enigmatically: what if what architecture mainly *does* is actively thinking and expressing its potency? What if architecture is too often overtaken by the speed and tension of creativity as actualization, that it misses the other equal side of its creative power, the saving of its potency, including a higher form of cessation or rest, a passion or suffering (an impotentiality) in the Aristotelian sense. The actualization of a potency is, in this sense, the relatively more proximate potency in the midst of potentialities which exist (also) as a privation which can be filled, a desire which can be satiated (*mē on*, not-being) or not.

“Active thinking” may, thus, mean that architectural contemplation is never an exercise in “mere” theory or abstraction understood as the means towards the satisfaction or fulfilment of an actualisation, but is intimately and continuously tied to both conditions necessary to the experience and being of the good. That power in Aristotle is not understood as the experience of a self-identity, or as something that can ever be fully achieved, means that an act of architecture is never complete on its own. A thing may never be what it is not (i.e. a contradiction), yet the observation that a thing can become what it is not (i.e. a contrariety) leads Aristotle to redefine the very nature of what it means to “have” a power as a matter of being and exercise it; placing, hence, human action in the openness of ethical contemplation (not a linearity of living, but the contingent plurivocity of living well). The role of theory, including architectural theory, is in this way also affected. Philosophy (or theory) itself, for Aristotle, concerns this very understanding, that is, philosophy arises out of the desire all human beings have for insight (*eidēnai*), for contemplation, or better perhaps for encountering their potential. Appearances are, characteristically, at stake for human beings in a particular manner. Wonder (which generates as well as errs, *planē*) does not cease, because it is not a possession to be “had” once and for all, but a nature (*physis*) to be continuously encountered as it saves its open existence in a potential duration. In other words, when in *Metaphysics* 11.3 Aristotle formulates actuality he says that “actuality is *malista*—above all else—movement” (1047a32; Ross 1936), this is to be seen as closely linked to the understanding of *energeia* (actuality) as a finite or incomplete motion. *Energeia* can be understood as what Aristotle called “that perfect motion” (not an exhaustion upon its realization, as the Megarians proposed, but as the synchronic contingency of potentiality/*dynamis* and impotentiality/*adynamia*).¹⁶

Incidentally, for this reason theoretical reflection is not, as some would still have it opposing (neo-)idealisms to (neo-)materialisms and back again, detached from experience or *praxis*, but its highest expression. A power’s potentiality (which is always an impotentiality also) is immanent in, while distinct from, its action or actualization. Immanence, in this sense, points to a

16 “Synchronic contingency” has a complex history in philosophy and its most significant proponent is Duns Scotus. Synchronic potentiality or possibility equates with synchronic contingency and the two indicate, in Scotus, the freedom (or freeing) of the will as a rational potency, i.e. as a receptive (of its own immanent action) potency (*receptiva*). For the will as the perfect, immanent, rational potency, in other words, willing this or that and not willing this or that are non-essential conditions to the will on their own regard: the essential condition of the will (its immanent property: contingency) is rather contained in the *syntagma*: “willing-this-and-not-willing-this” (which similarly can be rephrased with regard to opposite objects). See, for instance: Scotus, *Lectura* I. 39, 45–54; and see, further: Randi, “A Scotistic Way of Distinguishing Between God’s Absolute and Ordained Powers.”

17 Agamben, *Potentialities*, 231.

different mode of contemplation. What something is, expressed by questions of “*to ti on*” are transformed in Aristotle to “*dia ti*” questions. As Agamben writes: “what is clearly at work here is the exemplary principle of Aristotle’s thought, the principle of *archē*. This principle consists in reformulating all questions that have the form of “what is it?” as questions that have the form of “through what thing (*dia ti*) does something belong to something else?”¹⁷

On the one hand, the life of contemplation is bound to its present-future. On the other hand, it constantly remains with the source of “movement” that it itself is. It is at this point that one could note the ancient Greek middle voice, which as a verb form denotes a transitive situation, a “going through” or passion, conceptualized as a single entity acting on itself (both active and passive in a sense). Or, to put it in another way, where the transitive and intransitive can no longer be distinguished. In the middle (voice), the architectural capacity to contemplation, in its ever-potential existence in the actual, shows itself in its coming-to-be-realised as the ethical experience of project and design. Architectural thinking cannot be enclosed in the actualised present, since its present is also a state of potency which cannot be predetermined or overdetermined. This places architecture within an inherent challenge but it can also be a blessing in that this does not render contemplation as an all-powerful “presence”, but as exposed to the disclosure of a privation or *sterēsis*, the passion of what is other than itself in itself, each time, and where a coming architecture encounters its virtual ethos.

IV. Agamben’s Critique of Master-Power

It is with this in mind that Agamben turns to reread Aristotle’s analysis in book *Theta* of *Metaphysics* in order to understand the *eidos* (face) of this privation which at the same time is also the potentiality for presencing, actualising. It is necessary to engage with Agamben’s reading as it is the most inciteful and influential reading of our time, significantly exposing the layers that tie this metaphysics of power to its political and juridical manifestations. Agamben centres his rereading on two key related propositions of Aristotle’s, which we have met this far only by implication. Briefly:

18 Ibid., 182.

a) The privation other to potentiality is impotentiality (*adynamia*): “All potentiality is impotentiality of the same and with respect to the same [*tou autou kai kata to auto pasa dynamis adynamia*]” (1046e25–32).¹⁸ This proposition means that in its originary structure potentiality maintains itself in relation to its own privation—and this is the ground of an ethical disposition. To put it more simply, in architectural

19 As Miloš Kosec puts it, recently, in his very well-written and thought out dissertation that ought to be published (*Passivism: Activism and Passivity in Contemporary Architecture*), in an extensive engagement (Ch.2), the Lacaton & Vassal project in Léon Aucoc square illustrates proximate parameters to an active “not-doing” as one type of response to the ideology of action’s mastery. Lacaton and Vassal, Kosec writes, claimed “true mastery” in architecture “not because of any formal perfection but for their ability to conserve potency and impotency in the act in a world that has all but banished all possibilities for inoperativity. Refraining from action in a world of compulsory activity is suddenly not just a sign of good taste (as the ability to restrain from doing) exposing its own inactivity and its own potentiality, but also at the same time an expression of Bartlebian ethics, of pure potentiality that erodes the seemingly seamless ties of operativity of over-proliferating governing apparatuses. If poetry is the contemplation of its own medium, of language and of its potentialities, then architecture is contemplation of its own medium and its own potentialities.” (85). And Kosec is particularly perceptive in also noting that such gestures require also the fulfilment of “mastery” itself (87–88), its authorship as he puts it, meaning its will-to-mastery becoming inoperative in itself. See also Boano (*The Ethics of a Potential Urbanism*, 49) for the first, incidentally, book-length engagement with Agamben’s thought in relation to architecture and a brief reference to the project that Kosec analyses in detail. On Bartleby, see Deleuze, *Bartleby; Or, The Formula*; Agamben, *Bartleby, or On Contingency*.

20 Agamben, *Potentialities*, 182.

21 *Ibid.*, 183.

contemplative activity, as well as in the act of designing, the power to think or design something is always also a power to not do so. This can be thought not only in the sense of reactively deciding to not design or not think in a particular way, but also in the ethical dimension of an act acting by, paradoxically, *being able* to not do something, taking us away from the phallogocentric, among else, obsession with mastery in action.¹⁹

b) Intimately related to the first, the second proposition states: “What is potential is capable [*endechetai*] of not being in actuality” (1050b10). This proposition means that the figure of potentiality (power) is not directly indicated in activity and enactment, but in its being (also) the potential to not be (impotentiality); characterized by a fundamental ontological passivity as Agamben puts it: in the sense that potentiality undergoes, “suffers” its own non-being.²⁰ If Aristotle was struck by the observation that potentiality is a different way in which a being exists, from these two propositions taken together Agamben is struck by the question of how, if all potentiality (*dynamis*) is always-already impotentiality (*adynamia*), can there *be* potentiality? What in other words is the actuality of impotentiality (the power to not do)? Is it nihilistic inaction, militant withdrawal, solipsism and self-centred complacency? This is answered by Aristotle, in Agamben’s reading, by a third key proposition:

c) “A thing is said to be potential if, when the act of which it is said to be potential is realized, there will be nothing impotential [*esti de dynaton touto, hoi ean hyparxei hē energeia ou legetai ekhein tēn dynamēn, ouden estai adynaton*]” (*Metaphysics* 1047a24–26). For Agamben, contrary to the conventional interpretation of this perplexing proposition in the manner of “if there is no impossibility, then there is possibility”,²¹ the question should be understood as: “what is the potentiality of which, in the moment of actuality, there will be nothing impotential?” The answer is: the potentiality to not-be (*adynamia*). Or, in a fuller expression: “if a potentiality to not-be originally belongs to all potentiality, then there is truly potentiality only where the potentiality to not-be *does not lag behind actuality but passes fully into it as such*. This does not mean that it disappears in actuality; on the contrary it preserves itself as such in actuality.” Agamben adds the consequent formula: “what is truly potential is

22 Ibid.; my emphasis.

thus what has exhausted all its impotentiality *in* bringing it wholly into the act as such.”²² But what does it mean to bring impotentiality wholly into the act as such? Herein lies an ethics and a politics of contemplation in not conceiving of power or potentiality as a reservoir to which one taps when necessary in order to preserve the mastery of one’s authority, act, idea and so forth, but rather as something that is on an equal par with its impotentiality, its inaction, which, radically, means that no power can claim sovereignty or domination over itself or over anything else, but must first be constructed, exposed in its contemplation not as force, but as passion.

Let’s take a step back. Three possible interpretations present themselves to Agamben as to the latter formula, but only one is pertinent. The first maintains for the exhaustion of impotentiality in actuality (and, in this sense, is akin to the Megarian position: *hotan energe monon dynasthai*—potentiality exists only in act; 1046b30). This is the interpretation that, in one respect at least, is dominant today and is held by those that consider reality as driven by activity (whether progressively or conservatively so); and where the motor of reality is action, an understanding of action which once established or actualized (and usually imposed by some or other form of violence) is self-sustainable (a master) not only as to itself but as to the domination of the longevity of its potency: i.e. it becomes the self-authorizing mastery principle of any further action.

Another possible, and related to the first, interpretation maintains for the exhaustion of impotentiality in actualisation, that does not however terminate potentiality as the Megarians have it, but maintains a two-way passage between actuality and potentiality (a potentiality thought as the effective mode or ground of actuality’s existence). This, for Agamben, bequeaths the West with three intimately related paradigms of power: (a) its paradigm of Sovereign Being in philosophy (that is a Being that founds itself sovereignly as a master, without anything preceding or pre-determining it—*superiorem non recognoscens*);²³ (b) the medieval theological model of the omnipotence of God in monotheism (whose power is grounded in a closed dialectic of mastery between a *potentia Dei absoluta*, God’s absolute power—what he could do—and a *potentia Dei ordinata* God’s ordered power—what he does or has done;²⁴ and (c) the juridico-political paradigm of sovereignty in its modern form as the decision (action) on/of a state of exception (as a reservoir of potentiality).²⁵ Through a long history that cannot be summarized here and which spans from the 13th century to today, this formula of power/potentiality understands potentiality as able to maintain itself in

23 Agamben, *Homo Sacer*.

24 On this distinction the literature is immense, see indicatively: Rudavsky, *Divine Omniscience and Omnipotence in Medieval Philosophy*; Oakley, *Omnipotence, Covenant and Order*; Courtenay, *Capacity and Volition*; and Courtenay, “The Dialectic of Omnipotence.” Also: de Muralt, *L’unité de la philosophie politique*, 115–56.

25 See: Agamben, *State of Exception*; for the historical and juridical context, see, indicatively: Pennington, *The Prince and the Law*; Post, *Studies in Medieval Legal Thought*.

relation to actuality in the form of its suspension, resembling the paradigm of sovereign exceptionality across the regions of theology, law, politics and philosophy.

As Agamben notes, in this manner through the ever-present through its suspension potentiality of a prolonged or permanent state of exception “sovereign power can also, as such, maintain itself indefinitely, without ever passing into actuality.”²⁶ This reverses the supposed exhaustion of potentiality in actuality by enabling the exhaustion of actuality in a state of suspended inactivity in impunity, an activity that effects its pure or absolute potential by being in force without acting, without taking up its responsibility. This is the root of Agamben’s critique of the paradigm of western potentiality/power as one that grounds the absolute powerfulness of power (its potentiality) at the root of the paradigmatic understandings of God’s impotent (absolute) power in a line that connects the Pope’s power, the Emperor’s, the King’s power, and today the power of the free, liberal, sovereign subject who is to freely and continuously master its acts while in a state of absolute impotence (i.e. whereby acting means exclusively to produce, consume, exchange).

In contrast, a third interpretation maintains, in an unconventional rereading of Aristotle, for the “exhaustion” of potentiality in the sense of carrying itself in the act “as such”, so that each act remains not only accountable (and thus not sovereign or pseudo-exceptional, or ever claiming for a totality of its being, whereby its being can be considered “present”), but also saveable, through the preservation of its existent—otherwise potentiality in actuality. This, for Agamben, would not be presupposing a negative relation between potentiality and actuality as in the second interpretation. Instead it would sever such a relation by rendering its first principle as not the primacy of activity and action, but the primacy of *contingency* (the coherent coexistence of potentiality *and* actuality). The survival of potentiality does not save actuality’s relation to a potential reservoir of power (to which it can draw power to be “had”, or to which it can turn in order to save itself by suspending itself, as in a juridico-political state of exception), but “gives” potentiality to itself rendering both actuality and potentiality synchronically exposed, contingent and, hence, incapable of absolute mastery.

The genuine formula of potentiality—to pose the enigma anew with Agamben—is not that of the end-means relation between actualisation and potentialization, but that of the potentialization of potentiality as such: the exposition of a passion (*pathos*, *suffering*, *sterēsis*) of appearance (*eidōs*, form), the “intimation of Being without predicate,” potentiality’s own ontology.²⁷ But this is not an easy task at all (it may even be an impossibility, if thought only from the perspective of action/actualisation). Notably, Agamben stresses how before the abyss of the ontological existence of potentiality,

26 Agamben, *Homo Sacer*, 47.

27 Agamben, *Potentialities*, 257.

28 Ibid., 254.

29 Ibid.

30 Aureli, *The Possibility of an Absolute Architecture*; Aureli, *Less is Enough*; Spencer, "Less than enough."

31 Agamben, *Potentialities*, 261.

32 Ibid., 267.

33 Ibid.

34 Agamben, *La comunità che viene*, 92–3.

35 Agamben's reading of Aristotle is significantly influenced by Heidegger's (*Aristotle's Metaphysics*).

36 On Dé-cr ation, see: Weil, *Oeuvres compl tes*, 349–350. For a thorough engagement with Weil's thought, see: McCullough, *The Religious Philosophy of Simone Weil* (chs. 1 and 5, in Particular). For the relation between Agamben and Weil with regard to decreation, see: Ricciardi, "From Decreation to Bare Life," 75–93.

the ethical (and juridico-political) traditions "have often sought to avoid the problem of potentiality by reducing it to the terms of will and necessity".²⁸ By rendering the "will to act" as the effective (operative) motor of reality production, masterful actualization aims to exhaust whatever other potentiality may be available each time by singling out what is willed as enacted; as well as ensure that what is actual is and must be exclusively necessary (since the will is, ideologically, imagined as "free" to necessitate its existence, its autonomy and self-mastery). Yet power/potentiality, for Agamben, is not will and impotentiality is not necessity: "To believe that will has power over potentiality, that the passage of actuality is the result of a decision that puts an end to the ambiguity of potentiality [...] this is the perpetual illusion of morality."²⁹ And I would add that it is also the perpetual illusion of the architect as an actor, a master-creator of fundamentals, who wills-to-will architectural decisions (literally pro-ductions: cuts of potentiality) in pursuit of the dream of an absolutely actual architecture that erases or limits any ambiguity and inherent "otherness" (on one of the most interesting recent discussions of the search for an absolving politics of architecture, see the positions of Aureli and Spencer).³⁰

Agamben's ontology of potentiality, much as it owes to Aristotle, goes further (in that it takes away the emphasis on action which comes natural to Aristotle's time) and is ultimately conceived as an experiment (as denoted in the word "experience"), given that the radical contingency of potentiality/power means that actuality is each time concerned "not [with] the actual existence or inexistence of a thing, but exclusively its potentiality".³¹ And in this sense, potentiality in its absolute sense (its reflection on its own potentiality) becomes the principle of an ethical contingency as a para-ontology of power. Ethically, what is necessary is not the occurrence or non-occurrence, the truth or untruth of a particular deed or event, but rather the *contingentia absoluta* of the no-more-than-not-true (or it will occur no-more-than-not) as a whole, calling into question the irrevocability of the past's futures, or what Agamben calls *past contingents*.

Yet, *contingentia absoluta*, in this sense, concerns past contingents not in order to make the past once more necessary but, rather, "to return it to its potential not to be."³² To render present futures, means to enable contemplation its power and ethical sense to reflect on its nature as a contingency rather than a mastery. A *restitutio in integrum* of potentiality³³: a *decreation* (*decreazione*), as Agamben calls it³⁴ echoing, perhaps, Aristotle's term of an immobile flight as a *dynamis akinisias*, a certain de-action; or what Heidegger called "the quiet power of the possible" (*die stille Kraft des M glichen*).³⁵ "Decreation" (beautifully thought by Simone Weil from whom Agamben is inspired)³⁶ renders inoperative, first of all, the paradigm of self-grounded,

37 See, as a starting point: Agamben, "L'opera dell'uomo."

38 On negativity see: Agamben, *Language and Death*.

39 Agamben: *Homo Sacer*, 47.

40 *Ibid.*, 48.

and self-justified sovereign action, and "activates" a *potentia inordinata* (non-ordained power) that is essentially another name for the politics or ethics of inoperativity: rendering mastery inoperative.³⁷

Meanwhile, Agamben's reflection points, also, to the problem of this "restitution". For him the problem remains that any restitution can be revisionary in search for its mastery, reactive, full of its own negativity and hardly anything affirmative, active but without much sense or a way of life.³⁸ One must think the existence of potentiality without any relation "to Being in the form of actuality—not even in the extreme form of the potentiality not to be, and of actuality as the fulfilment and manifestation of potentiality—and think the existence of potentiality even without any relation to being in the form of letting potentiality be in the form of the irredeemable contingency of being."³⁹ For Agamben, one needs to resist *deciding* between potentiality and impotentiality,⁴⁰ for that would still be a sovereign decision, a mastery willed into action; one must, instead, seek the manner in which contemplation and action and an experimental empiricism can no longer be distinguished (as he expands on this in *The Use of Bodies*).

V. The Virtuality of Virtue

That we need to veer away from the dominant paradigm of mastery (across the right and left of its spectrum) in activity (i.e. the activation of a reservoir of power that is to be exclusively "had" imposing the sustainability of the actualization of always-already exhausted potentialities) appears self-evident today in the catastrophic planetary situation in which we find ourselves. The dominant paradigm of action (centred on the mastery of the will) is grounded on nothing but the abstraction of willed-freedom in its full vacuity (whereby freedom is conceived as the power over potentiality, and as the power of the individualized will to act: to produce, to consume and exchange). Is it, then, an accident that hardly anyone—including architects—genuinely loves or desires what they seem to enact with such mastery? Each time, it seems, a mere metaphor of power is enacted though one in great demand (an investment towards a self and a mastered life that leaves no chance to living well for the vast majority of people). In this instance, metaphors, despite of what their name suggests, do not move us to "another better place". They just postulate yet another place *without a subject*. Veering away from this paradigm of action (and the false expectations of mastery it relishes) will probably involve a reconceptualization of our social and political ecology of acting, requiring something as challenging as rendering inoperative the will to act out of/a mastery (where, by definition, every act is always an expropriation of another's will to appropriate).

I would like to emphasize one side of this, the ethical side of such a para-ontology of potentiality where potentiality exists beside (*para*) actuality. The ethical focus does not derive from an attempt to reverse the ontological priority of actuality. It is understandable why potentiality cannot be thought as separate from actuality, or to put it more generally power cannot be thought outside of the reality it encounters (as its end/*telos*). Aristotle emphasizes actualized being or existence as the *telos* of potentiality, not in the sense of an exhaustion or finality, but in the sense of a fulfilment: “for the functioning (*ergon*) is the end (*telos*), and the actuality (*energeia*) the functioning (*ergon*); and that is why the name “actuality” (*energeia*) is employed with respect to the functioning (*ergon*) and points towards the fulfilment (*entelechian*)” (*Metaphysics Theta*, 1050a22–24; Makin, 2006). To render this in another manner: if the actuality of something is its end (in the sense of a *telos* rather than finality), the actuality of a potency *is* in the activity; and, in this way, the meaning of the very term “actuality” can only be derived from the joint “activity” of the coming-to-be of a potency in actuality, never arriving to the sense of a “complete or total reality”.

It ought to be remembered, however, that for the Greeks and Aristotle in particular, the *telos* or end is not the achievement of whatever end may be willed. For example, the particular potentiality of contemplating (of reasoning and theory), needs to find its way towards the virtuous *telos* of contemplating well. This may explain why contemplation as a way of life (*ēthos*) was revered by the Greeks. This means that contemplation to achieve its end, the contemplation of the good, needs to be fully in use (rather than remain an abstract potential, that is suspended or deformed in a melancholic compromise with an actualized state). This brings us back to our problem, as I hope I have indicated: the dominant paradigm of mastery in action as an appropriation, rather than a use, is not accidental in the western imaginary of power. To critique, however, the dominating paradigm of sovereign appropriative action is not to say that human beings are not the animals that are characterized by the need to act, in the sense of the exercise/use of their non-predetermined capacities or potentialities, or that they live anywhere but in the realm of possibility.

We are the species that when self-conscious and reflective realise that we do not have a destiny or predefined essence/end. The particular kind of “action” (contemplation or theory) that I am pointing to, however, as shown in the *Nicomachean Ethics* of Aristotle’s, and which differentiates this animal from others, is not language or any other predetermined characteristic, but “reason” in the sense of non-pre-determined thinking or self-reflection: “Of that which has reason, (a) one part has reason in the sense that it may obey reason, (b) the other part has it in the sense that it possesses reason or in the

sense that it is *thinking*" (1098a4–7; Apostle, 1980). While "natural powers", like sensations, exist as potentialities and are then used or experienced, reason as a power or *dynamis* is first used (practiced) and potentialized in thinking. This differential line, which marks human beings as much as it is marked by human beings, could be thought as the threshold within which what we can call our ethical kernel of experience takes its very place as a threshold between actuality and potency (and it is this threshold that has been displaced by the dominant paradigm of the will to act in order to leave potency behind). Could it be that acting can be rethought along the lines of common use, rather than the willing of a masterful acting and having? And could it be that this practice of a certain potentiality (in use)⁴¹ is what architecture is called to nurture and "save" in the built environment?

In this sense, a "just" architecture, to borrow a familiar phrase in critical spatial studies, does not exist in any other manner than as the common practice of potentiality (it is not a destiny that can be infinitely postponed in the form of a mere hope, or an "outside" that cannot be experienced in the form of another utopia). Common use or practice of it is the only way to attain it. Not attaining it, not practicing it, is the primary goal of the dominant paradigm of action that displaces the act's potency in the will, and makes of it an abstraction, an expectation that cannot meet its genuine fulfilment, cannot be lived but be displaced in postponement. The displacement of the act in the will of its master is also a displacement of contemplation, but contemplation cannot ultimately be fooled by the experience of the pseudo-sensorial device of the will. The age-old investment in willed or actualised action, in its setup opposition to its exposure in contemplation, does not ultimately work (and it should be noted that *energhēia* has been also translated as work, *ergon*). It is to a spatial regeneration of the virtue of contemplation as the phenomenal co-existence of potentiality and actuality, that progressive socially-engaged architectural practice could turn anew.

It is now time to note, too, that Aristotle conceived of a power's dual ontological status (as potential being and actual being; in *Physics* I) in order to resolve the very aporia of how to think of change or *metabolē*/transformation in and as being, which I hope now appears more fitting a reference to architectural theory as a spatial practice, than perhaps at the start. The primary consequence of this discovery of Aristotle's is that it renders change (power/potency) itself a *being* (i.e. *existent*, a way of being and a life that can be attained, that is formed and continues to be forming through use, and not as a merely abstract possibility that could be predefined or reserved, fully repressed or partially erased). Architecture can then speak of its contemplation and creations in terms of two forms of equally existent being that are interdependent *in* the present (and, in this sense, thrown into interminable

41 Aristide Antonas and I have tried to express and project various examples of placing a rethinking of "common use" at the heart of architectural design and theory. Some of these are described in: Antonas and Zartaloudis, *The Protocols of Athens*, 11–207; and in: Antonas and Zartaloudis, "Protocols for the Life of the Ordinary."

42 How this antagonism is to be perceived and ultimately used remains, for me, an open question. It is plausible that in part this experience of antagonism (and a certain creativity with and against it) can include the manner of ideas, countervalues, cultural styles etc. that Fredric Jameson describes, in terms of readings of Gramsci, as "virtual or anticipatory": "in the sense that they "correspond" to a material, institutional base that has not yet "in reality" been secured by political revolution itself" (*Architecture and the Critique of Ideology*, 69). My sense is that, however, this counter-culture revolutionary anticipation logic falls often enough within the very same conditionality of the paradigm of mastery in action (and its internal negative scission between a potential and an actual power) that I am arguing is part of the problem. With thanks to Alexandra Vougia for pointing me to this connection in Jameson.

antagonism of sorts between potentiality and actuality).⁴² *How to think this antagonism is not predetermined and that is the task, if that is the right word, of contemplation or theory in architecture.*

Bibliography

Agamben, Giorgio. *La comunità che viene*. Torino: Bollati Boringhieri, 1990.

Agamben, Giorgio. *Language and Death: The Place of Negativity*. Translated by K. E. Pinkus and M. Hardt. Minneapolis: University of Minnesota Press, 1991.

Agamben, Giorgio. *Homo Sacer: Sovereign Power and Bare Life*. Translated by D. Heller-Roazen. Stanford, CA: Stanford University Press, 1998.

Agamben, Giorgio. "Bartleby, or On Contingency." In Agamben, Giorgio. *Potentialities*. Stanford, CA: Stanford University Press, 1999.

Agamben, Giorgio. *Potentialities: Collected Essays in Philosophy*. Translated by D. Heller-Roazen. Stanford, CA: Stanford University Press, 1999.

Agamben, Giorgio. "L'opera dell'uomo (*Etica nicomachea* I, 6.1097b22-1098a18)", *Derive Aprodì*, "Forme Di Vita", *La Natura Umana* 1/2004: Roma.

Agamben, Giorgio. *State of Exception*. Translated by K. Attell. Chicago: University of Chicago Press, 2005.

Agamben, Giorgio. "The Work of Man.", In Giorgio Agamben: *Sovereignty and Life*, edited by Matthew Calarco and Steven DeCaroli. California: Stanford University Press, 2007.

Agamben, Giorgio. *What is an Apparatus? and Other Essays*. Translated by D. Kishnik and S. Pedatella. Stanford, CA: Stanford University Press, 2009.

Agamben, Giorgio. *The Use of Bodies*. Translated by A. Kotsko. Stanford, CA: Stanford University Press, 2016.

Antonas, Aristide and Thanos Zartaloudis. "The Protocols of Athens." In Antonas, A. *The Archipelago of Protocols*, 11-207. Barcelona: DPR Barcelona, 2016.

Antonas, Aristide and Thanos Zartaloudis. "Protocols for the Life of the Ordinary," e-flux, 2018. <https://www.e-flux.com/architecture/positions/204038/protocols-for-a-life-of-the-ordinary/>.

Apostle, H. George. *Aristotle - The Nicomachean Ethics*. Trans. comm. glos. Springer Netherlands, 1990.

Aristotle. *The Complete Works of Aristotle*. Edited by Jonathan Barnes. Bollingen Series LXXI. 2 vols. Clayton, GA: IntelLex Corporation, 1992.

Aureli, Pier Vittorio. *The Possibility of an Absolute Architecture*. Cambridge, MA, and London: MIT Press, 2011.

Aureli, Pier Vittorio. *Less is Enough: On Architecture and Asceticism*. Moscow: Strelka Press, 2013.

Beere, Jonathan. *Doing and Being: An Interpretation of Aristotle's Metaphysics Theta*. Oxford: Oxford University Press, 2009.

Boano, Camilo. *The Ethics of a Potential Urbanism. Critical Encounters between Giorgio Agamben and Architecture*. London: Routledge, 2016.

Charles, David. "Actuality and Potentiality in *Metaphysics* Θ ." In *Being, Nature and Life in Aristotle: Essays in Honor of Allan Gotthelf*, edited by J. G. Lennox and R. Bolton. Cambridge: Cambridge University Press, 2010.

Courtenay, William J. "The Dialectic of Omnipotence." In *Divine Omniscience and Omnipotence in Medieval Philosophy*, edited by T. Rudavsky. Dordrecht: Reidel, 1985.

Courtenay, William J. *Capacity and Volition: A History of the Distinction of Absolute and Ordained Power*. Bergamo: Pierluigi Lubrina, 1990.

Deleuze, Gilles. "Bartleby; Or, The Formula." In *Essays Critical and Clinical*. Minneapolis: University of Minnesota Press, 1997.

de Muralt, Andre. *L'unité de la philosophie politique: de Scot, Occam et Suarez au libéralisme contemporain*, 115–56. Paris: Vrin, 2002.

Derrida, Jacques. *Margins of Philosophy*, 3–27. Chicago: University of Chicago Press, 1984.

Heidegger, Martin. *Aristotle's Metaphysics* Θ 1–3. Translated by W. Brogan and P. Warnek. Indianapolis: Indiana University Press, 1995.

Heidegger, Martin. "The Letter on Humanism." In *M. Heidegger: Basic Writings*, 53–114. Translated by D. F. Krell. New York: Harper, 1977.

Heller-Roazen, Daniel. "To Read What Was Never Written." In Agamben, G. *Potentialities: Collected Essays in Philosophy*, 1–23. Translated by D. Heller-Roazen. Stanford, CA: Stanford University Press, 1999.

Grosz, Elizabeth. *Architecture from the outside – Essays on Virtual and Real Space*. Cambridge, MA: MIT Press, 2001.

Jameson, Fredric (1982/1998) "Architecture and the Critique of Ideology." In *Architecture Theory Since 1968*, edited by M. Hays. Cambridge, MA: MIT Press.

Kosec, Miloš. "Passivism: Activism and Passivity in Contemporary Architecture." PhD diss., Birkbeck College, 2020.

Kraut, Richard. *Aristotle Politics*, Books VII and VIII. Oxford: Clarendon Press, 1987.

Lacaton and Vassal. Lacaton & Vassal projects – Place Leon Aucoc (n.d.). Accessed October 9, 2020. <https://lacatonvassal.com/index.php?idp=37#>.

Landrum, Lisa. "Before Architecture: Archaic, Architects and Architectonics in Plato and Aristotle." *Montreal Architectural Review* 2 (2015): 5–25.

Long, Christopher P. *Socratic and Platonic Political Philosophy: Practicing a Politics of Reading*. Cambridge: Cambridge University Press, 2014.

Makin, Stephen. *Aristotle – Metaphysics Book Theta*. Oxford: Clarendon Press, 2006.

McCullough, Lissa. *The Religious Philosophy of Simone Weil: An Introduction*. London and New York: I.B. Tauris, 2014.

Oakley, Francis. "Medieval Theories of Natural Law." *Natural Law Forum* 6 (1961).

Oakley, Francis. "Jacobean Political Theology: the Absolute and Ordinary Powers of the King." *Journal of the History of Ideas* XXIX (1968).

Oakley, Francis. *Omnipotence, Covenant and Order. An Exercise in the History of Ideas from Abelard to Leibniz*. Ithaca-London, 1984.

Randi, Eugenio. "La Vergine e il papa, Potentia Dei absoluta e plenitudo potestatis papale nei xiv secolo." *History of Political Thought* 5 (1984): 425–25.

Randi, Eugenio. "A Scotistic Way of Distinguishing Between God's Absolute and Ordained Powers." In *From Ockham to Wyclif*, edited by A. Hudson and M. Wilks, 43–50. Oxford: Oxford University Press, 1987.

Ricciardi, Alessia. "From Decreation to Bare Life: Weil, Agamben and the Impolitical." *Diacritics* 39.2 (Summer 2009): 75–93.

Ross, W. David. *Aristotle's Metaphysics*, Vol. 1. Oxford: Clarendon Press, 1936.

Spencer, Douglas. "Less than enough – A critique of Aureli's project." In T. Stoppani, G. Ponzio, and G. Themistokleous. London and New York: Routledge, 2007.

Pennington, Kenneth. *The Prince and the Law, 1200–1600: Sovereignty and Rights in the Western Legal Tradition*. Berkeley, CA: University of California Press, 1993.

Post, Gaines. *Studies in Medieval Legal Thought: Public Law and the State, 1100–1322*. Clark, NJ: The Lawbook Exchange, (2006/1964).

Rudavsky, Tamar, ed. *Divine Omniscience and Omnipotence in Medieval Philosophy: Islamic, Jewish and Christian Perspectives*. Dordrecht: Reidel, 1985.

Tachau, Katherine H. "Robert Holcot on Contingency and Divine Deception." In *Filosofia e Teologia nel Trecento: Studi in ricordo di Eugenio Randi*, edited by L. Bianchi, 157–96. Louvain-la-Neuve, 1994.

Tafuri, Manfredo. *The Sphere and the Labyrinth*. Cambridge, MA: The MIT Press, 1987.

Weil, Simone. *Oeuvres complètes*. T. 6, vol. 2. Edited by A. A. Devaux and F. de Lussy. Paris: Gallimard, 1998.

Witt, Charlotte. *Ways of Being: Potentiality and Actuality in Aristotle's Metaphysics*. Ithaca, NY: Cornell University Press, 2003.

Knowledge Apparatus

**Mariabruna Fabrizi,
Fosco Lucarelli**



Mark Johnson, philosopher and theorist in the field of embodied cognition, employs the figure of the line recurrently as the main component of visual schemata. For embodied cognition, the theory which demonstrates how our physical experience of the world profoundly influences abstract thought, schemata are structures which are extracted from bodily experiences and translated as cognitive instruments which our brain employs to convey meaning. The recurring schemata of “path”—the physical experience of moving from one place to another—is thus represented by a simple line and translates in cognition in the idea of connection, the way two entities relate one another¹.

The line which connects dots and thus establishes immediate social relations between data, concepts, geographies appears as the visual metaphor of the network (the central figure in contemporary information-based society). The multiple lines defining a network materialise human ability to relate subjects and construct knowledge out of isolated objects, while “moving” from one concept to another.

The work of Catalan polymath Ramon Llull (1232–1315), considered among the ancestors of formal systems of logic and even of computation and artificial intelligence,

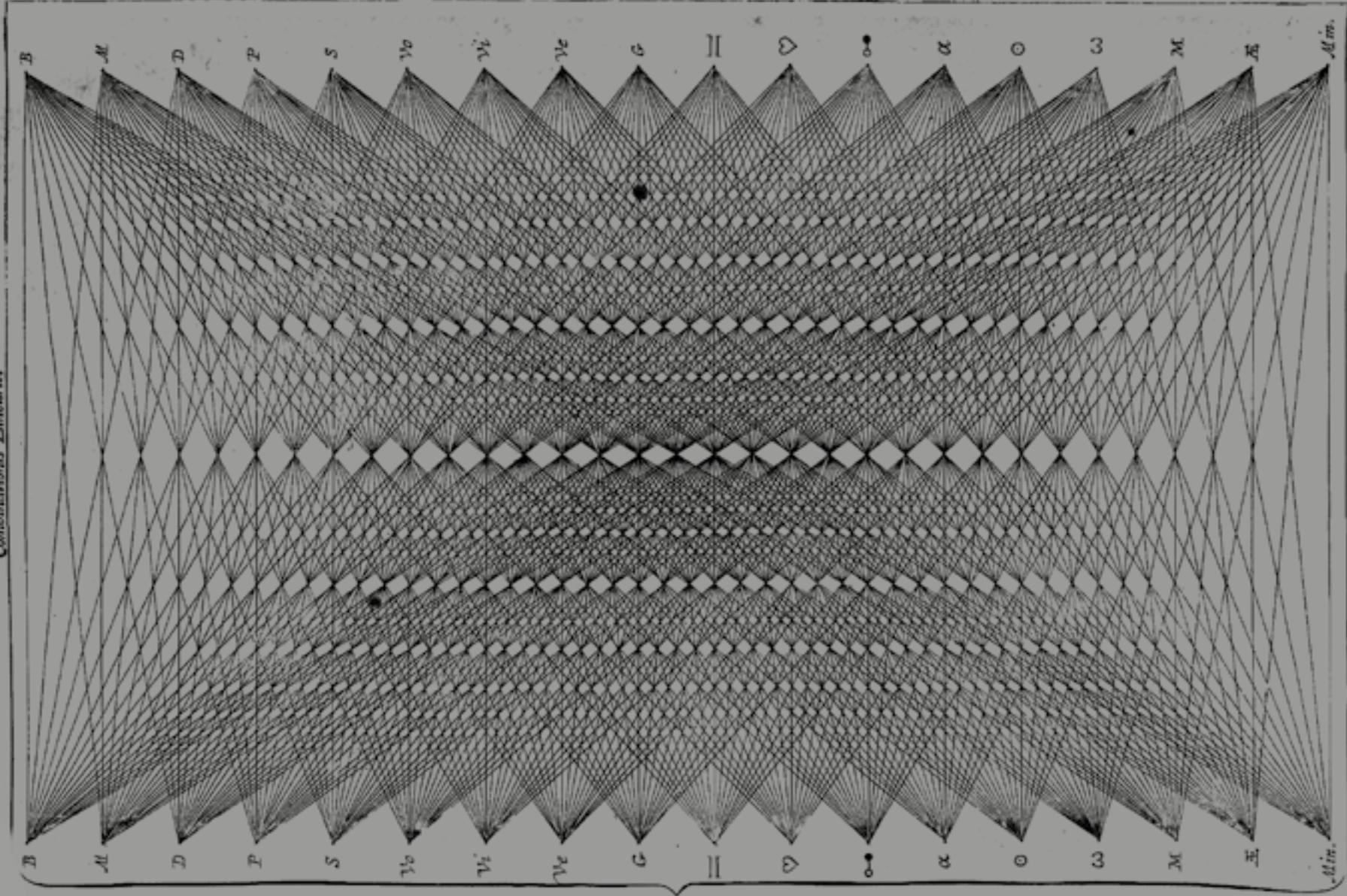
¹ Mark L. Johnson, *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*, University of Chicago Press, 1987

constitutes a precedent in the visual construction of relationships through multiple lines shaping a network. Lull's *Ars generalis ultima* ("The Ultimate General Art") or *Ars Magna* included paper-based mechanisms aiming to create new knowledge from the connection and combination of different concepts. In the first illustration of the *Ars*, nine points equidistant on a circumference are all connected through similar lines. This system allows all the words written beside a rim to associate mutually. As metaphors of multiple paths, the lines materialise here the active role of the various terms and the way they interact in a dynamic system of relationship.

Lull initially conceived the *Ars Magna* as a device destined to the conversion of Muslims through the logics of Christian faith. However, the work progressively revealed an intrinsic capacity of acting as a "logical machine:" an apparatus able to produce knowledge in different fields through multiple combinations of notions. Through the symbolic potential of the line, Lull constructed the very first demonstration that a device can imitate human thought. Based on Lull's previous discoveries, Jesuitic polymath Athanasius Kircher developed various combinatory systems capable of generating all possible combinations from a finite collection of elements. Such techniques applied to the composition of aleatoric music, the description of alchemic tables of transformation, the construction of a language. When the lines intertwine, they draw figures whose striking visual qualities reveal Kircher's aesthetic preoccupations.

When, in 1666, Gottfried Leibniz wrote his youthful work *Dissertatio de arte combinatoria*, he was inspired by Ramon Lull's *Ars Magna*. Despite lately considering his text as immature, the *Ars combinatoria* constituted the

Combinatio Linearis.

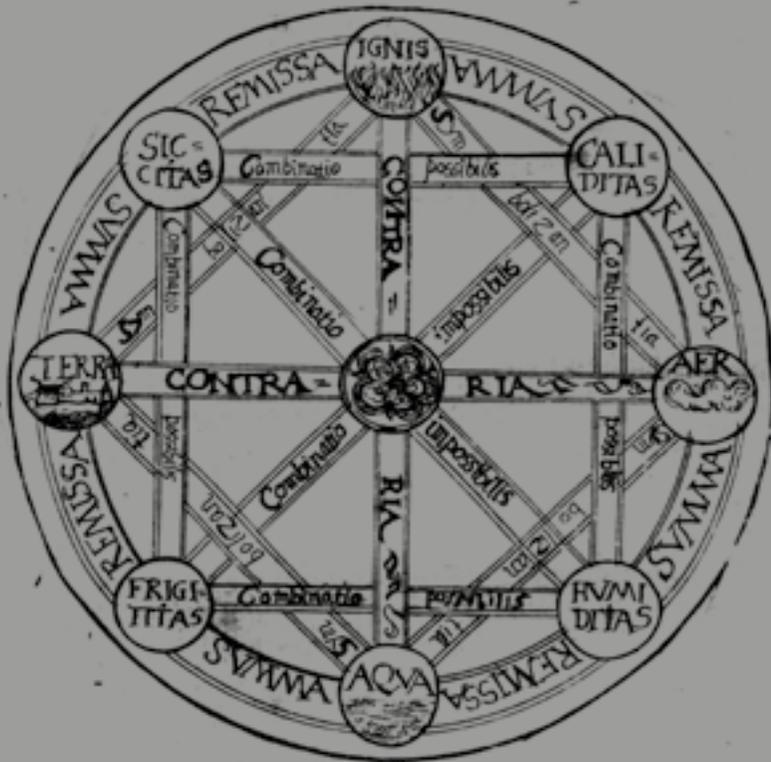


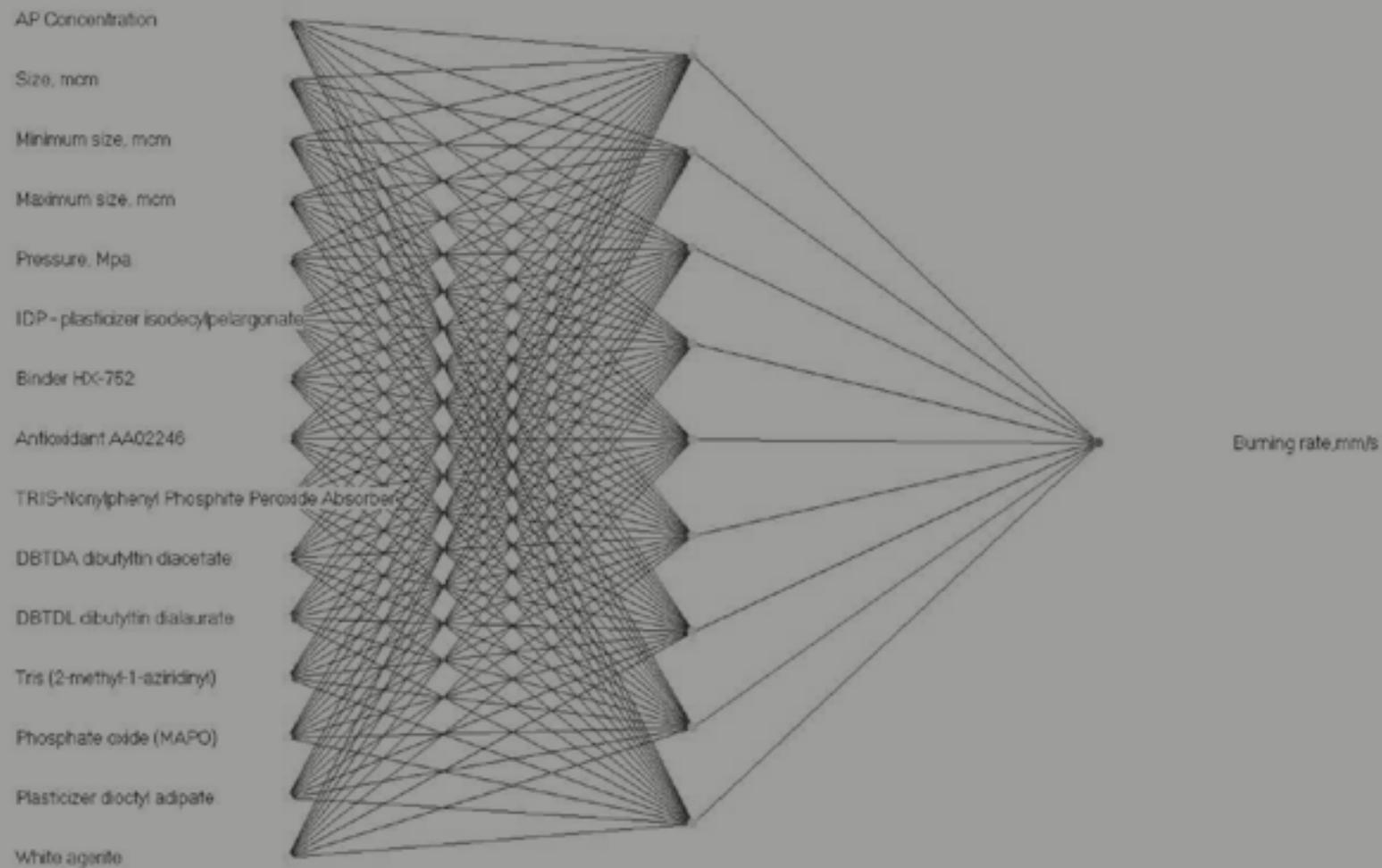
*Omne
Aliquod.*

philosopher's accessway to the world of logic. In this work, all concepts derive from combinations of a small number of simple notions. A series of lines connecting basic concepts is again the figure which defines the intellectual operations. However, the lines are no longer just pure connectors; here, they get sufficiently thickened to include the kind of relationship they are supposed to symbolise (*contraria*, *possibilis*, *summa*). The lines do not lie on the same plane as in Lull's figures, but they are superposed to construct an actual tissue of relationships.

All these historical figures represent early attempts to exteriorise human thought and logic through simple devices based on the ability of the line to act as a connector. Or, as Mark Johnson implied, to translate figuratively the act of walking from one place to another into the conceptual operation of relating notions to conjure up concepts. The visual appearance and intrinsic logic of those early devices resurfaced in the symbolic representation of the network, a figure made of interconnecting lines, which became widespread with the amplification of communication infrastructures. In the network, more points are connected by more lines, intersecting and transmitting information on different scales. The basic schemata of the path turned into the universal metaphor of how a multiplicity of things communicate and eventually produce a world-wide brain.

Such a cognitive analogy would become literal through the model of the "artificial neural network", the typical representation of computing systems inspired by the biological neural networks in the human brain. ANNs visualisations are an attempt to simulate the architecture of the human brain to improve the performances of conventional algorithms. The points in the network represent artificial neurons and the





-5.53165246584338

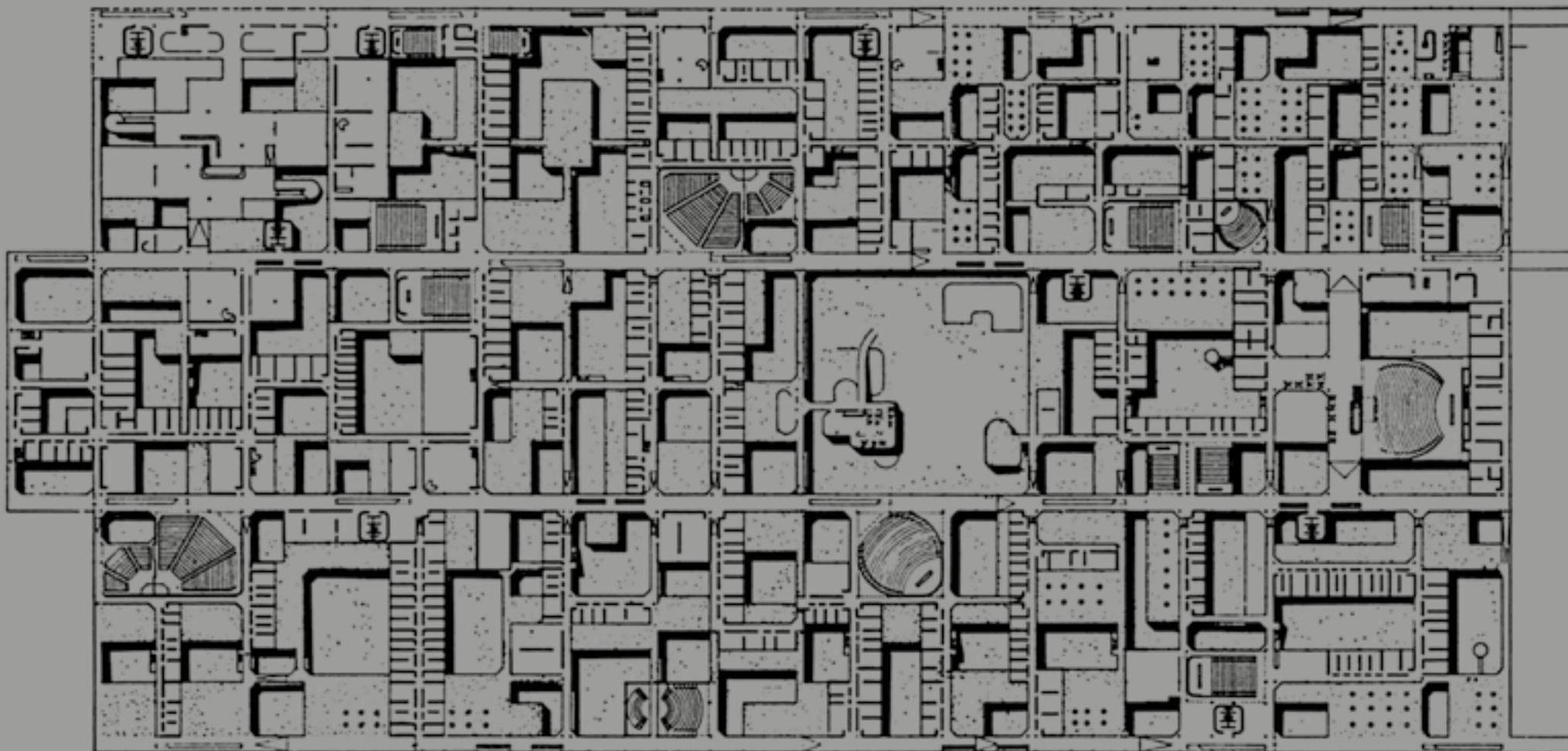
0.40916120419528

6.3498548

The ANN structure for solving the direct problem, in V. S. Abrukov, Amrith Mariappan, Sanal Kumar, Darya Anufrieva, "Comprehensive study of AP particle size and concentration effects on the burning rate of composite AP/HTPB propellants by means of neural networks. Development of the multifactor computational models. Direct tasks and inverse problems & virtual experiments", Preprint, October 2020. Licensed under an Attribution-ShareAlike 4.0 International License (CC BY-SA 4.0)

lines (here, called *edges*), act like the synapses in a biological brain, capable of transmitting signals to other neurons.

For the lines in the network to literally configure physical paths and the points to appear as real destinations, we have to look at a further materialisation of the notion of the network, in which the metaphor becomes space, and space an architectural project. In 1963, the architects Candilis, Josic, Woods and Schiedhelm won the international competition for the new campus of the philological institute in Berlin. Their design had the purpose of transforming the campus in a deeply interconnected “city” endowed with internal streets, squares, courtyards and multiple walkways. The network would appear as a guiding scheme in the project presentation, as it would translate in a spatial grid without any hierarchical distinction between classrooms, departments and facilities. Behind the proposal was a radical rethinking of the educational system: the figure of the network—the ideal of horizontal communication among students and teachers—becoming actual space. In this project, the thinking-devices based on combinatory logic which exteriorise the brain processes would become a full environment where multiple paths allow people to walk across an urban landscape of information and produce new knowledge.



Candilis, Josic, Woods, The Free University of Berlin,
Plan of Upper Level, 1963-64

A View on Nature: Leon Battista Alberti's Legacy

Chiara Toscani

Introduction

This essay aims to illustrate the relevance of Leon Battista Alberti's humanism to contemporary ecological challenges, particularly with regards to the relationship between humans, nature, and the arts, including architecture. In order to understand that relevance, Alberti's work should be read as a holistic project lead by one all-compassing aim. The multiplicity of topics covered and the different literary styles give rise neither to obstacles to reading the works as a whole nor the suspicion of inconsistency. On the contrary, this variety is evidence of the breadth of his insight.

On the one hand, Alberti shows the power of the line, as the founding element for prospective constructions, along with other measurement tools, invented to describe reality, but mostly to design new inhabited spaces. His confidence in Nature, as a perfect model knowable through physical observation, is what opens up his new direction. For this reason, his works can be considered one of the first to draw a connection between the practical and theoretical spheres and a scientific concept of Art. Three treatises, *De Pictura*, *Descriptio Urbis Romae*, and *De Statua* will be the main references to support this argument.

On the other hand, in texts such as *Vita S. Potiti*, *Della Familia*, and *Theogenius* he investigates the inner attitude of living beings, made up of virtues but also faults, exploring its multiple connections on social structures, from the family through to the political, and their environment. He does not focus on practical transformations, but on human beings' purpose that indirectly underlies and affects them. Both originate from the two interpretations of Nature. However, Alberti is able to find a convergence between these two apparently irreconcilable approaches. He strongly contributes to Arts and Architecture's progress, without underestimating the destructive capacity of the human actions on Nature.

Nature as *Machina Orbis*

As mentioned above, before completing *De Re Aedificatoria*, Leon Battista Alberti had already explored how other art forms, such as painting and sculpture, could be reformed for a more secular and scientific culture. *De Pictura*, *Descriptio Urbis Romae*, and *De Statua*, represent the first field of investigation. Here, he combines theoretical and practical contributions, defining new artistic principles based on a specific idea of Nature, seen as visible and invisible structure, knowable through direct experience.

This will be the basis for the future scientific method.

This different approach evidences, reading his claim, the importance of other disciplines in creating a stronger theoretical impact. He looks at both classical Greek and Latin authors and their legacy in mathematics and geometry, but also in poetry and rhetoric. However, more than any other discipline, Alberti considers geometry to be the foundation for painting, dedicating to it entirely *De Pictura's* first chapter: “I want the painter, as far as he is able, to be learned in all the liberal arts, but I wish him above all to have a good knowledge of geometry” (L.B. Alberti, *De Pictura*, paragraph 53).

Later, in *De Statua*, geometry will be fundamental to understanding any natural body or environmental proportions, to be copied with the use of trilateration and coordinates. In fact, geometry, unlike the mathematical fields that deal with inner structures, is concerned with the physical appearance of the world as well.

As a result, in both treatises this discipline finds a practical application through new tools that open up knowledge of the environment as a tangible experience, that will affect new creative trajectories. The first treatise covers the invention of perspective. The visual rays, intersecting a surface, are the foundation of this new way of looking at the world. Those lines mediate the relationship between the human eye and the external world, describing it accurately. As a consequence, this descriptive process is used later to project pictures and buildings.

Whilst perspective still belongs to the abstract realm of drawing, in *De Statua*, Alberti invents new tools: *normae*, an object made by *exempted and squares*, used to record dimensions along the Cartesian coordinates, lengths, thickness and widths, and to describe “*more stable and fix by Nature*” (L.B. Alberti, *De statua*, paragraph 8); and the *finitio*, used to record curves and body variations like movements.

In spite of their differences, these tools allow the achievement of important new artistic principles: *circumscription*, *composition*, *historia* and *reception of light*. Within *Descriptio Urbis Romae*, he shows other similar tools, used on this occasion to describe a city: Rome. Through a numeric system of

coordinates, a sort of parametrical precursor as suggested by Mario Carpo, he draws a series of connecting points and lines on the ground on which to create an accurate map: walls, gates, rivers, and monuments, all parts of an urban structure rather than sequences or single buildings. Alberti explains precisely how this process works:

Using mathematical instruments, I have recorded as carefully as I could the passage and the lineaments of the wall, the river, and the streets of the city of Rome, as well as the sites and locations of the temples, public works, gates, and commemorative monuments and the outlines of the hills, not to mention the area which is occupied by habitable buildings, all as we know them to be in our time. Furthermore, I have invented a method by which anyone, even a man endowed with only an average intellect, may make both exceptionally easily, and also very accurately, depictions on any surface, however large. It was some intellectuals, friends of mine, who moved me to do this, and I thought it good to assist their studies.

M. Carpo, *Leon Battista Alberti's Delineation of the city of Rome*, 98

This accurate process leads to the definition of some principles that are similar to those for painting and sculpture, *lineamenta*, *collocatio*, and *situs*, crucial to planning and designing new parts of the city in the manner employed by Princes and Popes in Rome at the time, whereby they would extend lines to define intersections on the ground.

Lines, surfaces, and numbers, recorded by tools and defined by principles, would capture the Beauty “*distributed by Nature*” (L.B. Alberti, *De statua*, paragraph 12), providing it to humanity as a new cultural horizon.

However, the crucial thread in Alberti's thought that encompasses all these processes and concepts is the idea of *Nature as a perfect model* to copy, and from which should come any principles and disciplines. Everything can be learned from Nature, conceiving it as a unique source, a perfect organism of shapes, movements, characters, and colors, and of the real Beauty. For this reason, over any other tools or principles, human eyes are the main medium through which to apprehend the external world. Together with the eyes, Alberti also mentions the role of the mind, which should select excellent examples “*from the most beautiful bodies, and every effort should be to perceive, understand and express beauty*” (L.B. Alberti, *De Pictura*, paragraph 55).

For the first time, Beauty is not an abstract idea, but a result of the selection of many beautiful examples. The artwork is the result of human

invention and can be more perfect than Nature itself, even if it is a copy, opening up the debate on the transformation of Nature into artificial, and autonomous objects.

Although this idea of Nature is strongly reiterated in each of those three treatises, it is in *De Pictura* that Alberti begins a brief investigation of another meaning of *Nature, as essence*. This represents the immaterial side of living beings, the natural attitude, that, however always find an expression through the body, actions, purposes, etc.

Alberti explores this second interpretation in other works such as *Apologhi, Della Famiglia, Theogenius, and Momus*, but in this treaty, he relates it to the artistic world. *De Re Aedificatoria* is the only treatise that fully converges *both aspects*, thereby providing a specific role for the architect and the artist.

In chapter two, paragraph 41, Alberti explains how the painter should define a “*historia*”, a narrative of the painting, covering its general composition, its characters’ movements, and their bodily expressions:

A “historia” will move spectators when the men painted in the picture outwardly demonstrate their own feelings as clearly as possible. Nature provides that we mourn with the mourners, laugh with those who laugh, and grieve with the grief-stricken. Yet these feelings are known from movements of the body.

L.B. Alberti, *De Pictura*, paragraph 41

Claiming this, Alberti highlights the subtle thread that joins internal and external Nature, between human feelings and their bodies, community, and environment.

A few paragraphs later, in chapter three, Alberti adds that the painter’s aim as being to “*obtain praise, favor and good-will for his work much more than riches. The painter will achieve this if his painting holds and charms the eyes and minds of spectators*“. Later still, Alberti concludes that a good painter should be a good man, introducing a specific connection between his virtue, and his artistic work.

He is aware of the strong relationship between the artist, his outcomes, and his moral values. and at the end his spectators, that as a result, open up the civic issue of the role of art, which will become the crucial aim of architecture in creating a harmonious society.

Nature as Immanent Realm

A familiarity with some of Alberti's previous dialogues, such as *Apologhi*, *Della Famiglia*, *Theogenius*, and *Momus* is essential to fully understand his idea of inner Nature (essence). These works are part of his ethical and social research, an attempt to give relief to the human soul and to probe human existential struggles¹.

Each work is represented by one or more central characters: Saint Potitus in *Vita S. Potiti*, Batista and Giannozzo in *Della Famiglia*, Theogenius, Genipatro and Microtiro in *Theogenius*, Gelastus, and Enopus in *Monus*. Despite their differences, they are characterized by a similar style of narration² that unveils the connection between the characters and their corresponding environments: wild nature for Saint Potitus; the city and the countryside for Batista, Theogenius, Genipatro, and Microtiro; and the underground world for Gelastus. These places are not just settings for each dialogue, but sophisticated and metaphorical mirrors to human behavior, their qualities, and their state of mind. In this sense, a "pre-ecological" thinking emerges here to describe a complex research trajectory that will find an answer in his theory of Architecture.

In *Theogenius* especially, Alberti employs a bucolic dialogue where this narrative form is used to assert that human beings, their nature, and their landscape can be conceived as a single entity, where external and internal realms are inextricably connected as a network, although they are visibly separated. Theogenius and Microtiro, the two main characters of this work, reflect on the idea of fortune and the valuable virtues of human beings whilst they are in the shade of the trees. This idyllic setting helps the reader to picture and consequently to understand their human qualities and the value of the philosophical topics they are exploring.

This harmonious intellectual atmosphere is disturbed by the entrance of Tichipedo, the owner of all the surrounding land, who brings with him the shadow of the urban landscape. As in many of the other dialogues, such as *Della Famiglia*, the bucolic landscape is seen as a model of Beauty and placed in contrast with the urban landscape, described as a place of ugliness marred by excessive and ostentatious wealth. On the one hand, pristine nature is the mirror of humanistic virtues and the real source of human fortune. On the other hand, the city is an image of the arrogance and malfeasance of human beings and the origin of their unstable and fragile fortunes.

In addition to offering a distinct concept of inner human nature and its effects on society, Alberti shows how it physically transforms the environment, opening up a further concern in how human beings conceive the transformative process, creative or not.

¹ For many years, scholars have attempted to highlight his art treatises at the expense of his other works, in order to keep intact an idea of Alberti as a consolidated humanistic intellectual. As a result, his complex contribution, less aligned with stereotypical tradition, has been underestimated. Eugenio Garin, in *Medioevo e Rinascimento. Studi e ricerche*, is the first to highlight this aspect of Alberti's work, trying to understand them in their entirety. He claims that Alberti's contradictions are not related to his maturity or related to different opportunities and fortune during his life.

² *Theogenius*, a bucolic dialogue, particularly confirms the use of Arcadian as an adjective to identify a narrative approach to this idea of Nature, close to contemporary ecological thought.

In the second part of *Theogenius*, Nature is described as having two aspects: its bucolic and magnificent elements and, in contrast, its dangerous manifestations. Alberti does not hide this latter aspect; he references many examples of urban catastrophes caused by floods, earthquakes, and volcanoes, recognizing the danger in many poisonous plants and savage animals. However, Alberti roundly condemns human beings, calling them “*ominuccuoli*”³ who, through their arrogance and restlessness, are the real cause of natural disasters. He is aware that the dangerous aspect of Nature is incomparable to the damage caused by humans.

It is a fact that Alberti's judgment on human beings is cynical and clear-sighted: human beings too often demonstrate little consideration for their environment, including other similar living beings and animals. This means that, unlike in Barbaro's approach, human actions could cause societal disruption and environmental damage if not guided by virtue and correct ethical behavior. This consciousness may have led Alberti to conceive of Nature as more than just a human resource, thus distancing himself from Cicero's⁴ vision of human beings as explained in his *De Natura Deorum*⁵.

For the Latin writer, the human being is central to the whole of reality and has a more important role than other living things. Cicero's use of particular terms demonstrates this belief: phrases such as “*domitu nostro*” and the “*homine dominatus*” clearly show how he frames nature from the human perspective. He gives legitimacy to the imposition of human will on plants by growing them and on animals by hunting or using them, guided only by human desires and only to their benefit. The human's power is never denied and he is described as having a “domain”, which expresses an idea of absolute possession over natural resources. From Cicero's point of view, the perfect and divine nature of the world is the basis of his claim to a specific hierarchy of living things. This perfection is not characterized by the idea of beauty; rather, its harmony is the result of divine wisdom and intellectual power. In consequence, humans receive a privileged place in comparison to others, giving them the full right to subjugate the world.

In contrast, Alberti's vision of Nature can be aligned to some contemporary ecological thinking, where Nature is not a separate category from human beings but embraces all living beings equally. For this reason, the effects of the interaction between Nature and humans must be taken into consideration in all human activities.

3 This word in Italian means human beings poor of intellectual skills.

4 J. R. Spencer describes in *Ut Rethorica Pictura* how Alberti tapped into Cicero's works, *De Oratore* and *De Inventione*, to define the narrative structure of *De Pictura*, and other important ideas, such as *Concinnitas*, etc. However, regarding his approach on Nature, Alberti has an opposite point of view.

5 Garin, *Medioevo e Rinascimento. Studi e ricerche*, 149.

Nature and Architecture as the Good Medicine

These arguments clearly support Eugenio Garin's claim: Alberti considers Nature not just as a "*Machina Orbis*", governed by numbers and a perfect and beautiful realm, but also in terms of its immanent side. This means considering the connection between inner and outer worlds, human and other living things, behaviors and environment, civic community, and urban structure, made up as a constellation of lines, mainly shaped by how human beings perceive culturally Nature, and the world outside.

The first interpretation of Nature contributes to building a new human creative horizon, rule-based and grounded in scientific and practical process. The second aims to frame the cultural issue that could lead humanity to a more peaceful and harmonious civic life. To achieve that, he carefully analyses many classical authors, such as Pliny, Ovid, Cicero, and Quintiliano, as well as hermetic philosophy⁶. These contributions are crucial when they suggest an ideal of Nature, as a boundless vital force, namely consisting of the inner ability to heal itself, like medicine. For instance, the "*noble lie*"⁷ that involves the myth of *Khora* and its social use as *Pharmakos*, as argued by Plato in *Timaeus* and *The Republic*, could be the inspiration for Alberti's aim to resurrect the Greek idea of the Polis, in which the urban structure and community are a unique body, due to the fundamental connection between citizens and their land. However, as further demonstrated below, Alberti does not embrace this connection, which meant the closure of the borders in the Polis. In the Seventh book of *De Re Aedificatoria* he claims: "*Yet I don't think that we ought to follow these who exclude strangers of every kind.*" (L.B. Alberti, *De Re Aedificatoria*, Book 7, 191). This capacity to conceive of a united community does not preclude permeable borders and an idea of a territory for the many. On the contrary, this healing quality implies a consistent constituent aim that could be very fruitful. Changing the cultural approach on which human behavior is based could positively affect the social and physical environment.

In this sense, Architecture, through its civic role, could become the best discipline to address this change, as long as it is based on the principles identified above.

Momus can be considered a sort of bridge between these dialogues and the art treaties and the writing of *De Re Aedificatoria*, which could be seen as representing the culmination of his explorations.

In *Momus*, Alberti writes of a minor Greek god and his vicissitudes whilst in exile in the human world, and his travels between the heavens and earth following divine forgiveness. Although the story deals with a completely different subject to those described above, it can also be seen as a narrative

6 Garin, *Medioevo e Rinascimento. Studi e ricerche*, 133.

7 Plato uses the word *Khora* in many dialogues, the *Republic* and the *Laws* and *Timaeus*. This latter was the first to deal with *Khora* and its relationship with Plato's cosmological doctrine. The important concept that emerges from *Timaeus* is that Nature is a material and living organism, according to the Ionian tradition, but shaped looking at the intelligible world of Ideas, based on arithmetical and geometrical rules as stated by Pythagoras. On one hand, these Arithmetical and geometrical rules are the source of orderliness and harmony. On the other hand, the vitality is given by the motion. These two qualities together are the base of a pervasive idea of Nature, conceived as body (plants, animals, stuff, and human beings), soul and mind, three immanent essences of Nature. The *Khora* is the original matter/stuff, that connects the two worlds, sensitive world and intelligible. *Khora* is in-between the two worlds. It is described as a receptacle, the womb, the place/space where all things take a shape. Although its feminine adjectives, it is not identified as a woman/mother in contrast with a man/father, a third, motherly place that generates all earthly things, ontologically is different from them. As a result, *Khora* has two main qualities: its maternal aspect and its spatial aspect. The first means that all living beings come from the same receptacle, the same original and vital matter. The second mean puts together two concepts, space and matter without differentiating them. Moreover, in *Republica*, Plato describes the myth of "noble lie": human beings are born inside the Earth. Connecting them directly to land (*Khora*), they become citizens with a specific social hierarchy. This builds a connection between citizens and their land, and, consequently, between citizens and Polis. Plato draws a direct line between Nature (ground and underground), human beings and Polis, that from the Greek point of view represents not just the urban structure but the collective body. As Stuart Elden, within the book *The birth of territory*, explains that the myth is "noble lie can be considered the good medicine, a social *Pharmakos*. In fact, it works with a specific social function: to enhance the Polis' community and keep its social stability.

device used by Alberti to highlight his disappointment with the current political powers in Rome, and showing the virtues and vices of human beings. Unlike his previous ethical works, the narrative is full of insights on architecture. It is a fact that during the same period, Alberti was writing *De Re Aedificatoria*, demonstrating the reason for these connections.

Focusing on some specific paragraphs makes Alberti's idea of Nature and its relationship with the art world even clearer. Some confirm his claims from previous works, whilst others carry the idea yet further.

For instance, the first suggestion comes from the scene that takes place in the heavens. Here, all the other Gods are involved in a contest created by Jupiter's request to add grace to the human world, giving it elegance and worth. Some gods invented different species of animal, Prometheus created human beings, Juno a house, etc. As a result, the human world receives these divine gifts but the beauty and pleasure they create immediately inspire envy in the same gods.

Encouraged by the others, Momus decides to provide his gift: insects and other disgusting animals. Here, Alberti confirms the Nature includes negative aspects as well, as already shown in *Theogenius*, but more than that he emphasizes again the virtues and vices of human beings.

However, what is very interesting is that the entire work is an investigation of human transformative actions: from Jupiter's desire to disrupt the world that he himself designed, to the different places that Momus visits, the city and its public buildings, but also the pristine landscape, and even Charon's realm, the Underworld. These places are crowded with all kinds of human beings, in all their variety and with different social behaviors. The misfortunes and fortunes of human beings are well described by Momus, who spends his exile on Earth discovering their different aspects. He goes to the city directly from the sky and here he tries many jobs to better understand how humans live. He encounters all kinds of characters, giving a description of a wide range of possible human behaviors. As in *Theogenius*, the city is the representation of human corruption, violence, and chaos, except for few places: the temple, that represents a civic and valuable place, where the god Virtue finds a refuge; and the countryside, where two philosophers, Socrates and Democritus, live excluded from the society. Again, the landscape is a mirror of society and, as in the Bucolic tradition, the countryside is a place of virtuous men rejected by a corrupt society.

In another scene, this dialectic opposition between pristine Nature and the city, between Nature and human transformations, reaches a crucial point. Following Gelasto and Charon's journey from the Underworld to Earth, the reader is encouraged to reflect on the idea of Beauty, with both a harmonious

visual dimension and a spiritual one, and the question of whether it belongs to the natural world or the artificial one.

Walking out of the Underworld towards the opposite side of Earth, Charon and Gelasto find themselves in a flowery field surrounded by a rural landscape. Charon is captivated by the smell and the views, which fill him with joy and astonishment. This idyllic scene is immediately brought to an end by Gelasto, who invites Charon to continue their journey in order to admire the human achievements in the city. Gelasto promises to find a place as wonderful as the flowery field: the theatre.

Through this scene, Alberti opens up a critical question: what is the relationship between Nature and Architecture? Is there a difference between the Beauty of Nature and the Architecture's one? The answer is provided in the ensuing theatre scene and will be fully developed within *De Re Aedificatoria*.

Whilst walking towards the city, Charon asks Gelasto about the origin of this natural beauty. Gelasto offers him a philosophical explanation taken directly from Aristotle. Gelasto explains the Formal Cause, which is what gives matter its form, and the Final Cause, which gives a thing its purpose. Through the Formal and Final Cause, Nature reaches the most harmonious result, without contradiction.

Charon is unsatisfied with this explanation, which does not seem to capture the deep beauty of Nature, but rather confines it with theory. As they finally reach the theatre, Charon's judgment is final:

*You neglect the flower: should we admire
the stone? Everything within the flower aims
to beauty and grace. These human works are
a waste of energy.*

L.B. Alberti, *Momus*, 94

Nature's beauty is unique and all-surpassing. However, Alberti enables the reader to discover a more nuanced view in the rest of the book. Two episodes involving Juno and Jupiter are particularly significant. In one episode, Juno asks Jupiter to further adorn her house with luxurious ornaments. This seemingly trivial event is, in fact, highly significant. This is where Alberti starts to divide good architecture from bad architecture, *Aedificandi libido* as defined by Alberto G. Cassani⁸. This is the opposite of civic architecture, which genuinely pursues the public good, as described within *De Re Aedificatoria*. In this sense, Architecture can reach an approximation of natural beauty, offering an optimistic perspective for human beings and their social structure.

⁸ Cassani, *Attraverso lo specchio. Addenda al rapporto Momus/De Re Aedificatoria*, 159.

In the second episode Jupiter, who represents political power and is a metaphor for Nicolo V, is shown as utterly obsessed with the idea of designing a new world that could strengthen his power over human beings. For this reason, he seeks advice from other gods and philosophers but realizes that architects would actually be of far more use to him. This final scene opens up the conviction that Architecture can be more valuable than philosophical thought in the ambition to build a different kind of society. The civic aim of Architecture is drawn. The continuity between *De re Aedificatoria* and *Momus* is now fully understandable, despite the different content.

Up to this point, Alberti's writings have provided an idea of Nature, considering both aspects, more or less emphasised depending on the aim of various arguments of the treatises: external Nature, seen in its physical and theoretical model, and inner or immanent Nature as the essence of living beings. Both can lead to opposite cultural approaches and physical results since the interaction between these two produces human culture and artifacts, affecting the quality of a civic community.

In this sense, it is very meaningful the sentence included within the Preface of *De re Aedificatoria*:

Finally cutting of cliffs, the tunneling of mountains, the levelling of valleys, the containment of sea and lake waters, the emptying of swamps, the construction of ships, the rectification of course of rivers, the excavation of the outlets of waters, the constructions of bridges and ports, he not only resolved problems of temporary circumstance, but also opened the way toward every region of the earth. In this way people can exchange the partake of all that serves the improvement of health and way of life. (...)

L.B. Alberti, *On the Art of Building in Ten Books*, preface

9 Tafuri, *Venice and the Renaissance*, 123.

10 "A Wonderful thing is the power for the common good to assemble coarse men, and unite them in the faith and discipline, secure and tranquil in the cities and fortresses: then with a greater violence done to nature, to cut the rocks, tunnel through the mountains, fill the valleys, dry the swamps, build ships, straighten rivers, supply port, build bridges, and overcome Nature herself, which we have vanquished by lifting immense unlike weights, and satisfying in part the desire of eternity." Barbaro, *The Ten Books of Architecture*, Book 1, 15.

Regarding this paragraph, Manfredo Tafuri, in *Venice and Renaissance*⁹, suggests a comparison between this paragraph and a similar statement by Daniele Barbaro¹⁰, to underline the subtle difference between them.

On the one hand, D. Barbaro similarly recognizes that universal harmony belongs to Nature for Arts. However, he also starts to consider it as a significant obstacle, asserting the importance of human actions over it. On the other hand, Alberti's description of the human artifact's impact on Nature shows the power used to modify ground into inhabited territories. Cutting cliffs is a very strong image in this sense, with their borders, inner shapes, their orography, and their geographical lines modeled directly by new machines and by an extraordinary transformative capacity. As explained

above, this human activity should be not the cause of divisions and exploration, but rather of civil partnership, wealth, and prosperity, in consideration of Nature, not against it.

As a consequence, despite his concerns, Alberti provides here a cultural horizon where Architecture and the city can become the cure for society's ills and the device to build a harmonious society, based on the same harmonious structure of Nature and its translation into a strong theoretical and practical approach and in-depth research.

However, to better understand how Alberti assigns architecture to the civic role, the Seventh, Eighth, and Ninth books of *De Re Aedificatoria* are essential. They are centered on the ornaments on the sacred buildings, both public and private. The Seventh book begins with this statement:

The principal ornament to any city lies in the siting, layout, composition, and arrangement of its road, squares, and individual works: each must be properly planned and distributes according to use, importance, and convenience. For without order there can be nothing commodious, graceful, or noble.

Here, Alberti asserts the importance that the urban structure is based on open spaces and public buildings, and a sort of hierarchy between them: function, importance, and convenience are the principles on which to build this organism and its community as a body or as a natural environment.

This approach can be considered usual and coherent with the character of the book.

However, recalling Alberti's intellectual aim, this approach shows the correspondence between these artifacts and the urban essence, defined by characters, ornaments, shapes, materials, their locations, functions and in relation to their public or private role within the city. These elements and the symbolic location of the building represent here the relevance of the architectural relationships at any scale. The proper meaning and the use of Architecture and its Beauty depend on it.

It is in book Eight that, as suggested by Caspar Pearson in *Humanism and the urban world: Leon Battista Alberti and the Renaissance city*, Alberti develops further this topic. Its content is made up of a description of Alberti walking through the countryside toward the urban landscape. The movement itself is an interesting narrative strategy that emphasizes the structure of the urban space and focuses more on relationships than architectural objects. His journey starts from a view of the countryside, with its roads and houses, and the village is drawn following the natural shape of the terrain.

Alberti's eyes are able to capture its beauty and harmony that arises not just from a system of numbers and proportion, but from the pleasantness of the landscape with the city seen in the distance.

Perhaps the decision to start his walk from here could be interpreted as a reference to Nature as the main model of Beauty and the primary architectural source. However, unlike in *Theogenius* and *Momus*, the conflictual dialectic between the countryside and the city is now dissolved. Through the movement of his walk, Alberti brings together those two landscapes without giving them any positive or negative attributes.

This absence is coherent with a description that attempts to contain few emotions or empathic thoughts. Alberti's judgment is little affected by the environmental atmosphere or by an empirical experience. His ideas are formed through the rational process and are supported by his historical knowledge. This creates a text that is strongly characterized by objectivity and scientific reasoning, and which aims to highlight all the main principles that should characterize a harmonious civic space.

The description is interwoven with different textual content: historical references to validate Alberti's statements; the classifications of all urban elements, e.g. roads, squares; accurate descriptions of mathematical proportions. The result is that the reader does not focus on the author and his movement through the city, but is able to concentrate on the principles described.

Alberti continues on his path, going through the graveyard, still outside the city, explaining their meanings, up to the city limits where he begins to analyze the role of the city gates and the different kinds of road. From this point on, the natural side of the city is left behind.

His entrance into the city is the chance to explain the importance to have three categories of roads: the ones with a specific character and shapes by reason of their uses and connections to their sacred places or public buildings, and those called common roads.

Moving through the description of theatres, amphitheatres, and places for the comitia, he suggests the right shapes, and the proper ornaments. These qualities, like the morphological ones, also have an important role within the urban body.

Moreover, he describes the importance of connecting public buildings with open spaces for pleasure, such as groves and pools. They give dignity to the city. The grove is shown in terms of its symbolic meaning. It represents the harmonious transformation of the territory and is a place where, close to other public buildings, everyday civic life takes place.

The same symbolic emphasis is given to the library. Placed in the center, this building replaces the medieval role of the church. It is the core of the

new humanistic culture, where books are collected along with objects: mathematical instruments, maps and statues of ancient poets.

I shall only observe, that the principal ornament of a library, is the number and variety of the books contained in it, and chiefly their being collected from among the learned remains of antiquity. Another great ornament, are curios mathematical instrument of all sorts, especially if they are like that made by Posdonius, in which all the seven planets performed their proper revolution by their own motion.

L.B. Alberti, *On the Art of Building in Ten Books*, Book VIII, chapter 9, 183

The image of the mathematical instruments with the poets' statues in the library represents the final image of a journey through Alberti's thought. The Renaissance city should be governed by the convergence of rational thought and tools (such as those already found within *De Statua*), but also poetry and other valuable arts, in order to build a peaceful community.

The Ninth book, which is centered on the ornaments of private buildings, contains a full chapter dedicated to the principle of *Concinnitas*. Alberti strongly claims that any artistic process in Architecture should be based on Nature and this principle belonged to it:

Beauty is a form of sympathy ad consonance of the parts within a body, according to definite number, outlines and position, as dictated by Concinnitas, the absolute and fundamental rule in nature. This is the main object of art of building, and the source of her dignity, charm authority, and worth.

L.B. Alberti, *On the Art of Building in Ten Books*, Book IX, chapter 5, 303

In this particular sentence, Alberti shows a deep reverence for Nature as the origin of Beauty. He remarks on the difficulty in capturing this immaterial quality. The *Concinnitas* is described as the main principle, that produces a harmonic composition. This is not just an aesthetic quality, but also provides dignity, authority, and charm.

In this sense, Beauty does not represent just a final result of his theory of aesthetics. As explained at the begging of this essay, his theory does not exist without an ethical aim that should involve a single life and society.

Inheriting the Greek classical approach towards Nature, especially the one described within Timaeus, it is based on the geometrical figures and number. However, Nature is also the essence of life, the cause, a living

organism. This establishes a deep connection between life and harmony: without harmony there is no life and no human beings and consequently Polis, looking at its physical and social aspects.

For this reason, Beauty, described as a result of *Concinnitas*, has the potential to represent the common feature of the two interpretations of Nature and their mutual forms of expression.

Looking at Architecture and Arts as the main origin of a harmonic world, Alberti is able to hold the classical approach—rediscovered introducing the idea of Gaia¹¹—but to open it towards a Beauty that is the result of human transformation.

Conclusion

Looking at various contemporary philosophers and thinkers who deal with ecological issues, they agree that modernity has separated the natural realm from the cultural one, denying the ontological autonomy of those objects that are the products of this blending. This approach, perpetrating up to this century, has deeply affected most of the human contexts, political, economic, etc., characterized by little awareness and care about their effects on Nature and human beings themselves. In recent decades, thanks to ecological movements and many theoretical contributions such as those of Bruno Latour, it has been demonstrated that this separation has been misleading. For this reason, more than ever, Latour¹² asserts an urgent need to define Nature in a different way, since many “natural” objects belong to this blending and no longer to one of the two worlds. All these insights arose from the international issues related to climate change and they seek to identify the ontological origin of this anthropocentric approach, in order to try to modify our cultural perspective. Although Alberti's thought belongs to a different historical period, this does not mean that it is not a valid legacy from which we can still learn. In fact, Alberti's idea of Nature that is not twofold or contradictory, as demonstrated above, appears to be an attempt to maintain the two categories Nature and Culture, looking for balance between human transformative action, which implies selection and separation of elements, and conservation. What Philippe Descola now suggests, namely moving beyond these categories, was part of Alberti's investigations. This is evident from his works and his statements.

Moreover, by elevating Architecture and the city as the place of dignity and charm and underlining its civic role, Alberti assigns a key role to our discipline, proposing fundamental principles and new tools. If there are shortcomings in contemporary theory, these could be addressed

11 James Lovelock, *Gaia* (Oxford: Oxford University Press, 2016).

12 Latour, *Facing Gaia, The instability of the (notion of) nature*, 7.

13 G. Harman claims that there are not-knowable and hidden aspects of objects. Opacity is the term used to describe this feature and surprise is the way in which we can indirectly access the hidden aspects. He invites us to look at architecture as an identified object with independent attributes: "Works of art and architecture are misunderstood if we reduce them downward to their physical components or upward to their socio-political effects, despite occasional attempts within those disciplines to do just that. There is something in these works that resist reduction in either direction, pushing back against the literal paraphrase of which knowledge always consists." Harman, *Immaterialism*, 12.

14 "Chiswick, Blenheim and Kew Gardens are not the simply the translation of the concept of picturesque into the landscaped vistas: as Argan has said, they are microcosms that reflect not the divine cosmos, but the world of human experience. As didactical instruments they are turned towards man, awakening his senses and injecting into them, immediately afterwards, a critical stimulus: Nature by now not a reflection of divine Idea but a structure shared by man, can emerge with the history of the entire human species, showing that the rational course is natural, because it moves (Gian Battista Vico) from the realm of the senses to that of the intellect. Architecture, from absolute object, becomes in the landscaped context, relative value: it becomes a medium for the description of an edifying play. (...) Absorbing art into behaviour excludes the possibility of speaking of painting or architecture as objects: they are, rather, happenings, and in this sense the crisis of historicity of art is linked to the crisis of the objects. Historical links and architectural phenomena are reduced to pure events." Tafuri, *Theories and History of Architecture*, 82–85.

through connections with one of the most transformative human actions: Architecture.

In this civic role architecture should provide a specific theoretical approach. Graham Harman recalls the concept of immateriality¹³, in order to bridge the modern misapprehension of separated realms. For him, Art and Architecture are crucial to demonstrate the new notion of Nature and drawing a new trajectory.

Manfredo Tafuri¹⁴ confirms this key role for Alberti, explaining that, from the Renaissance, the architectural object has been losing its autonomy and its immaterial side. For this reason, Leon Battista Alberti is deserving of greater in-depth research. His approach to the concept of Beauty and his related thinking would particularly repay further investigation into its relevance to addressing contemporary challenges and the new notion of Nature.

Bibliography

- Alberti, Leon Battista. *Theogenius*. Lecce: CreateSpace Independent Publishing, 2012.
- Alberti, Leon Battista. *Della famiglia*. Lecce: CreateSpace Independent Publishing Platform, 2012.
- Alberti, Leon Battista. *Apologhi*. Lecce: CreateSpace Independent Publishing, 2012.
- Alberti, Leon Battista. *Momus*. Lecce: CreateSpace Independent Publishing Platform, 2012.
- Alberti, Leon Battista. *On Painting and on sculpture*. Edited by C. Grayson. London: Phaidon Press, 1972.
- Alberti, Leon Battista. *Delineation of the city of Rome*. Edited by Mario Campo and Francesco Furlan. Tempe, Arizona: Arizona center for Medieval and Renaissance Studies, 2007.
- Alberti, Leon Battista. *On Art of Building in ten books*. Translated by J. Rykwert, N. Leach, and R. Tavernor. London: MIT Press, 1972.
- Carpo, Mario. *Leon Battista Alberti's Delineation of the city of Rome*. Milan: Mrts, 2007.
- Cassani, Alberto G. "Attraverso lo specchio. Addenda al rapporto Momus." In *Leon Battista Alberti*. Rome: Fabrizio Serra publishing, 2010.
- Descola, Philippe. *Beyond nature and culture*. Chicago: University of Chicago Press, 2013.
- Garin, Eugenio. *Medioevo e Rinascimento. Studi e ricerche*. Bari: Laterza, 1960.
- Harman, Graham. *Immaterialism: Objects and Social Theory*. Cambridge: Polity Press, 2018.
- Harman, Graham. *Object-Oriented-Ontology*. Louisiana: Pelican, 2018.
- Jarzombek, Mark. *On Leon Battista Alberti*. Cambridge, MA: MIT Press, 1989.
- Latour, Bruno. *We have never been modern*. New York and London: Harvester Wheatsheaf, 1993.
- Latour, Bruno. *Politics of nature: how to bring the sciences into democracy*. Cambridge, MA: Harvard University Press, 2016.
- Latour, Bruno. *Facing Gaia: eight lectures on the new climatic regime*. Cambridge, UK and Medford, MA: Polity, 2017.
- Elden, Stuart. *The birth of territory*. London: The University of Chicago Press, 2013.
- Tafuri, Manfredo. *Theories and history of architecture*. London: Granada, 1980.
- Tafuri, Manfredo. *Architecture and utopia: design and capitalist development*. Cambridge, MA: MIT Press, 1980.
- Tafuri, Manfredo. *Interpreting the Renaissance: Princes, Cities, Architects*. New Haven: Yale University Press, 2006.
- Worster, Donald. *Nature's economy*. Cambridge: Cambridge press, 1994.

Home/Studio: Rosa Bonheur and The Plein Air Artist

Elena Palacios Carral

0. Introduction

Artists are currently understood as curious figures. Their sites of living and working typically extend beyond a singular fixed location such as the house, towards the studio, the street, the cafe, and the landscape beyond. Their lives are rarely organised around conventional task divisions or family structures and as a result, their practices presage contemporary society's embrace of the nomadic freelancer: a figure who is supposedly no longer bound by the nuclear family or their continuous fixed employment. We may refer to this condition as the *studioification* of the home, or the process by which the home is transformed into the studio. This paper will thereby study the relationship between the two concepts—home and studio—and define their significance to the nineteenth century artist.

While the historic events that led traditional artistic practice towards a precarious existence precede the nineteenth century, this study will focus on the period from the late eighteenth century to the end of the nineteenth century and on the specific region between Paris and the Forest of Fontainebleau in France. It is in this precise location that the idea of the home and studio were institutionalised by the state and the Royal Academy of Painting and Sculpture.

In 1806 artists were evicted from their studios in the Louvre and in the same year, these salons were opened to the general public. These particular events, coupled with the aftermath of the French Revolution and the abolition of the guilds in 1791, produced profound ramifications for the life and work of artists. As such, the figure of the artist endured a paradigm shift and underwent a process of class re-articulation and individualisation: a freelance actor made precarious by the state.

In parallel to these events, individuals and spaces altogether were going through a process of *codification* that were consolidated in the Civil Code (Napoleonic Code).¹ This code reorganised society around principles of private property, class and gender. As such, it extended government from the territory to its subjects.² Artists were set against their *subjectification* and the categorisation of their spaces according to factors such as their routines, activities and gender. In this context, the *plein air* artists and the particular

1 Officially the Civil Code of the French that was established under the French Consulate in 1804.

2 Michel Foucault, *Power: The Essential Works of Michel Foucault 1954–1984*, vol. 3, ed. James D. Faubion (London: Penguin, 2002), 352.

case of artist, Rosa Bonheur can be seen as two distinct forms of artistic practice that emerged out of a very particular idea of the artist and citizen at this time. Through their life, circumstance and practice, both cases present an example of how certain distinctions or categorisations established by the Napoleonic Code may have been enforced or transgressed. The *plein air* artist enlivened a peculiar use of the exterior and introduced the possibility of maintaining a peripatetic existence removed from property and formal training. In contrast, Rosa Bonheur, having been not only an artist but a woman, was conditioned to use the studio as her creative site. Her life and work was therefore bound by an interior and constrained to the social expectations of her gender, whilst the Plein Air artists continued to roam free of such restraint.

I. Codification

The consolidation of the bourgeoisie was in many ways aided by the facilitation of administrative control with the codification of French Society under a unified civil law. The project of legal reform by Napoleon was initiated in 1801³ and intended to standardise forty-two pre-existing legal codes⁴ across the Ancient Regime into a unified system of law and justice⁵ that could be applied to all citizens. Declared during March 1804, the French Civil Code did exactly that, whilst also terminating “ancient class privileges”,⁶ in which no privileges were formerly recognised as a right from birth.⁷ Privileges were no longer assigned to specific groups (the artist being one of them), but to a domestic monarchy. That is to say, a patriarchy or state governed by a father and ruled under the notion of the patriarchal family.

The promulgation of the Civil Code “was the creation of an unforgettable symbolic system.”⁸ so wrote Jean Carbonnier. It fast became embedded in society and immortalised in the paintings and writings being produced at the time. As such, the code irreversibly “entered the memory of the French nation.”⁹ It manifested itself in various ways, from the idea of kinship within the nuclear family as the basic unit of society, to the organisation of space and the methods by which boundaries were drawn. The Western canonical distinctions that we have come to learn as standard and have struggled so much to undo in the last century were part of this categorisation. Distinctions such as private and public, interior and exterior, centre and periphery, male and other, come precisely from the symbolic process by which these, and many other dichotomies were codified, both visually in signs and symbols and in writing through the words of the law.

The promulgation of the Civil Code and the implementation of its historical and symbolic significance permitted the boundaries between alleged

3 Andrew Roberts, *Napoleon The Great* (London: Penguin, 2015), 275.

4 Ibid.

5 Ibid.

6 Ibid.

7 Ibid.

8 Jean Carbonnier, “The French Civil Code,” in *Rethinking France: Les Lieux de Memoire* (London: The University of Chicago, 2001), 337.

9 Ibid., 338.

10 “From 1794 onward, through 1803, 1816, and continuing through the nineteenth century, this line between public and private, men and women, politics and family, became more rigidly drawn.” Lynn Hunt, “The Unstable Boundaries of the French Revolution,” in *A History of Private Life: From the Fires of Revolution to the Great War*, vol. 4 (Cambridge, Mass.: Harvard University Press, 1987), 45.

11 Ibid., 13.

12 Carbonnier, “The French Civil Code,” 342.

13 Michael Hardt and Antonio Negri, *Empire* (Cambridge, Mass.: Harvard University Press, 2001), 104.

14 Ibid.

15 Michelle Perrot, “The Family Triumphant,” in *A History of Private Life: From the Fires of Revolution to the Great War*, vol. 4 (Cambridge: Harvard University Press, 1987), 100.

16 Michelle Perrot, “Introduction,” in *A History of Private Life: From the Fires of Revolution to the Great War*, vol. 4 (Cambridge: Harvard University Press, 1987), 97.

17 This year both the guilds and the Royal Academies would be abolished.

opposites such as those mentioned above, to be formally controlled¹⁰. Lynn Hunt explains, “paradoxically an aggrandising public space and the politicisation of everyday life ultimately may have been responsible for the development of a more sharply differentiated private space in the early nineteenth century”.¹¹ Ironically, the Civil Code was presented as a step towards equality and inclusivity, despite being “fully rooted in the divisions and biases of the French People”. It favoured the triumph of the bourgeoisie¹², who in turn, were presented as the hegemonic model of “the people”. Therefore, the code’s paradox lies in its intention to unify society by drawing differences between them, rather than commonalities. As a result, the concept of society as outlined by the Civil Code, authorised the state to exclude anyone who failed to fit into the code’s perceived order of one hegemonic group, race and class.¹³ As Michael Hardy and Antonio Negri explained, the construction of “the people” only “eclipse(d) any internal differences.”¹⁴ In defining a singular group, the code constructed the idea of the marginal in the same breath and ultimately created marginal subjects.

In addition to the code, the family unit played a fundamental role in the regulation of its subjects. As mentioned previously, by considering the family as the basic unit of society, domesticity came to play—as Michelle Perrot puts it—“the role of a hidden god”.¹⁵ One of the code’s most prevalent spatial manifestations was the way in which domestic spaces were organised around notions of private and public. Divisions were forcefully implemented and spaces became associated and separated by gender and types of people. The production of writings and paintings (perhaps inadvertently in some cases) reinforced the role of the normative and normality: “Prisons and boarding schools, barracks and convents, vagabonds and dandies, nuns and lesbians, Bohemians and toughs, celibate individuals and institutions, often where obliged to define themselves in relation to the family or on its margins. It was the centre; they were the periphery”¹⁶. Such modes of separation instilled by the Civil Code, in addition to the Revolution, urged the repositioned role of art and artists within society.

Prior to Napoleon’s reign and during the year 1791,¹⁷ the Royal Academy of Painting and Sculpture was abolished and the salons subsequently opened up to commerce. Artists resumed their fight with the guilds to maintain a monopoly on Art and were widely considered a privileged body protected by the King. This perceived privilege gave them the status of a “free artist” or an artist of the liberal arts, as opposed to an artisan. The latter of which was considered an inferior position. The artisan’s practice, rather than intellectual, would have been diminutively described as craft or manual work. While the relationship between manual and intellectual labour, as well as the material and immaterial qualities of art production lie beyond

the scope of this essay, it is important to be aware that these conversations were—and still are—fundamental to the definition of “freedom” in art practices.

By the turn of the 1830s and the monarchy of Louis Philippe d’Orleans, or the “Bourgeoise King”,¹⁸ the ideas presented in the code became systemic. Arnold Hauser explained that from this point on, “the bourgeoisie is in full possession and awareness of its power. The aristocracy has vanished from the scene of historical events and leads a purely private existence. The victory of the middle class is undoubted and undisputed.”¹⁹ Sarah Maza argued that while this became the most popular narrative, the Orleanist regime was actually “a crucial moment in the crystallisation of an antibourgeois strain central to the construction of modern French political and cultural identity.”²⁰ This could be one of the reasons why the figure of the Bohemian artist became so popular during the mid to late nineteenth century. Dave Beech explains that the bohemian artist came to represent anti-bourgeois values “the Romantic anticapitalist affirmation of the aesthetics, the myth of the artist as an unbindable and self-governing genius [...].”²¹

The ideas expressed in the Royal Academy of Painting and Sculpture during the French Revolution and those that ultimately lead to the idea of the “artist”, could be dated back to the time of Diderot and his influential writings on the salons. Diderot presented artists in relation to an idea of freedom outside of conventional patronage. However, as the church and King were their biggest patrons, artists had no choice but to respond to the demands of those in power. Patrons such as the King, were in fact “liberating” the artists from the corruption of commerce in allowing them to practice art outside the conducts of the guilds. Freedom from commerce was considered a necessary precondition for the production of art and instilled a hostility to commerce that was encouraged by separating artists from the guilds.²²

Meyer Schapiro explains that for Diderot, the artist’s inner freedom “is the impulsive, unaccountable flow of the pencil and brush, of images and ideas; verve, enthusiasm, spontaneity, and naturalness are its outward signs.”²³ and their “dependence on a commanding patron seemed degrading and incompatible with the artist’s dignity.”²⁴ Schapiro further elaborates that for Diderot, it is the free man of the artist that draws one’s attention and focus to painting and sculpture,²⁵ and that the free citizen can be found in the artist.²⁶ These ideological principles were developed through Diderot’s writings in the mid-eighteenth century and came to present a series of threats to artists. By separating painting from technique, the internalisation of artistic practice around notions of genius was exasperated. In painting, spontaneity and creativity gradually became valuable qualities in their own right and this

18 Sarah Maza, *The Myth of the French Bourgeoisie: An Essay on the Social Imaginary, 1750-1850* (Cambridge, Mass.: Harvard University Press, 2005), 161.

19 Arnold Hauser, *A Social History of Art, Naturalism, Impressionism, The film Age*, vol. 4 (London and New York: Routledge, 1999), 2.

20 Maza, *Myth*, 162.

21 David Beech, *Art and Postcapitalism: Aesthetic Labour, Automation and Value Production* (London: Pluto Press, 2019), 42.

22 *Ibid.*, 38.

23 Meyer Schapiro, “Diderot on The Artist and Society,” in *Theory and Philosophy of Art: Style, Artists and Society* (New York: George Braziller Inc, 1998), 201.

24 *Ibid.*, 204.

25 *Ibid.*, 207.

26 *Ibid.*



1

eventually lead to the notion of art for art's sake. Indeed, rather than receiving a specific commission under the patronage of the King or church, the artist could now operate unrestricted: "freely created art of artists responsible to themselves alone, like the concept of intellectual freedom."²⁷

The bohemian figure of the nineteenth century, which was typically associated with the possibility of social freedom, became uprooted and popularised by authors such as Baudelaire, in *The Painter of Modern Life*. As an alternative lifestyle to that which was imposed by the Civil Code and abided by in mainstream society, the bohemian figure became overworked in writings, paintings and poems. The so-called "art of living"²⁸ was heavily romanticised. Notions of freedom in poverty—which ironically—were only afforded by those with access to property or inherited money from family, were grossly misunderstood. In fact, the image of the bohemian as "marginal" and their alleged "deregulation" became a way of drawing stronger differences between social groups in terms of gender, class and race. We might therefore consider the bohemian artist as a product of the state and capital. Today, the bohemian lifestyle has become highly stylised, manicured and standardised, to such an extent that it is one of the most profitable forms of existence for the real estate market and corporations. An existence whose supposed simplicity is exploited through the present-day idealisation of reduced living, rentable working spaces and minimal infrastructures.

II. Landscape

The proliferation of the bohemian artist figure may be understood through the technological, social and political transformations that collapsed the home and studio into one space. As aforementioned, this essay will focus on two instances: the practices of the *plein air* artists and the case of Rosa Bonheur to elaborate on the conflation of the home and studio. The *plein air* artists characterised the modern free artist and according to Baudelaire, "a man of the crowd". In search of liberation, *plein air* artists moved from painting inside the studio, to painting in the open air. This transition not only departed from the Royal Academy of Painting and Sculpture, the salons, and traditional artistic practices, but from the very space of the studio itself. An extreme example of this shift was the Barbizon members, a group of artists who decided to leave the city altogether and go to the forest of Fontainebleau. The *plein air* artist introduced the possibility to practice art anywhere, without the need of a physical building and/or fixed location. For Bonheur however, an almost opposite condition was endured, where the need for a studio was fundamental for her development as an artist, despite her practicing at the same time as the Barbizon members.

²⁷ Ibid.

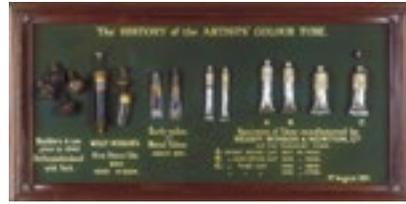
²⁸ In his Book *The Rules of Art*, Bourdieu talks about "The Art of Living" as a condition that defies classification. He talks about this term in relation to the notion of the bohemian artist. Pierre Bourdieu, *The Rules of Art: Genesis and Structure of the Literary Field* (Cambridge: Polity, 1996), 54–57.

1 Gustave Courbet: *The Meeting*, 1854. Source: Musee Fabre, Montpellier, France.



2

- 29 Kimberly Jones, "Landscapes, Legends, Souvenirs, Fantasies: The forest of Fontainebleau in the Nineteenth Century," in *In The Forest of Fontainebleau, Painter and Photographers from Corot to Monet*, 12.



3

- 30 Perhaps *The Meeting*, should be seen in relation to *The Artist's Studio*, a real allegory summing up seven years of my artistic and moral life (1854-55). Here, the studio we see has nothing but spectators watching the artist paint, who has chosen not to make the portraits of any of the subjects present in the room. The model, who represents academic training in this instance, is standing right behind the artist. Rather than posing for the painting, the model is watching him too. Despite being confined inside an interior the artist identifies as his studio, the artist is painting a landscape. A painting that he appears to be drawing from memory, perhaps from his outings as a pilgrim in the landscape.



4



5

- 2 Charles Desavary, *Camille Corot painting outdoors in Saint-Nicolas-les-Arras, before 1875*. Source: Photo (C) RMN-Grand Palais (musée d'Orsay) / Hervé Lewandowski.
- 3 Winsor & Newton, *The History of The Artist's Colour Tube*, 1911. Source: Winsor & Newton.
- 4 Stradanus, Johannes Galle, Phillips, *Painter's workshop*, circa 1580-1605. Source: National Maritime Museum, Greenwich, London.
- 5 Honoré Daumier, *Paysagistes au travail*, 1862. Source: BnF, Estampes et Photographie, Rés. Dc-180b (69)-Fol.

- 31 Charles Baudelaire, *The Painter of Modern Life* (Penguin Classics, 2010), 8.

The wandering existence of the *plein air* artist should be considered alongside the industrial technological advancements that occurred around the same time. Just as the availability of public transport rapidly increased and facilitated the movement of the general public from the city elsewhere, the integration and standardisation of artistic equipment accelerated the artist's atomisation. Collapsible paint tubes became readily available, as well as preselected colours that were set into a portable wooden suitcase. These engineered tools eased the practice of painting and enhanced its flexibility. The appearance of these instruments soon appeared in representations of *plein air* artists in paintings and photographs; some of whom were depicted in the landscape as pilgrims in search of the perfect scene, light and weather to paint. As described by Kimberly Jones when talking about the Barbizon members, the forest operated as a "laboratory in which they examined the subtle shifts in time of day, season, and atmospheric change with an almost scientific rigour."²⁹ In the painting by Gustave Courbet, titled "The Meeting", the artist is carrying his tools in a box he has attached to his back [1].³⁰ Whilst in the photographs of Jean-Baptiste-Camille Corot, we see the artist sitting on a foldable stool in the landscape with a lightweight foldable easel, a box containing paints and his parasol. Images such as these illustrate the modernisation of artists' tools and the ways in which this equipment enabled nomadic artistic practice [2]. The image of the artist was now uprooted from the idea of the studio and that of domesticity, towards a remote existence within the landscape and the actual site of their subject. This way of life presented a radical idea in a moment where the individual was otherwise understood as subordinate to family and private property.

The *plein air* artist and the technologies developed around their practice symptomatically increased the popularity and accessibility of artistic practice [3]. The artist's no longer relied on workshop assistance and the former need of several artisan's knowledge, time and labour to prepare the colours being used in a given painting [4], was all reduced into a single compact suitcase. The reduction of equipment into a portable tool that could be used by any individual anywhere, increased interest in artistic practice and thus gave rise to the amateur artist [5]. As celebrated by Baudelaire in the case of Monsieur Constantine Guys, who "discovered unaided all the little tricks of the trade, and who has taught himself, without help or advice, has become a powerful master in his own way [...]"³¹ Artists no longer required technical knowledge, nor did they need a studio in which to practice. The rise of the *plein air* artists and the symptomatic autonomy of the artist as a result, facilitated the collapse of the studio, not only into the landscape, but into domesticity.

III. Room

In contrast to the *plein air* artists, the expectations of Bonheur were significantly different. Bonheur was not only an artist, but a woman. This meant that she was automatically bound by a set of rules according to her gender. Prior to the abolition of the guilds and the Royal Academy of Painting and Sculpture in 1791, a maximum of four women would have been permitted academic membership. Vignee-Lebrun was one of those four—yet, as Griselda Pollock and Rozinka Parker explained—when the Royal Academy of Painting and Sculpture was refounded as the *Institute des Arts*, both artists were excluded for most of the nineteenth century.³² Following these events, the circumstances and opportunities for women who wanted to practice art deteriorated.

Since the foundation of the Royal Academy of Art and Painting in 1648 in France, women were forbidden to practice life drawing from live nudes, despite this having been a prerequisite and basis for academic training.³³ It is important to note that we are observing a specific type of woman, one of the few who may have had the possibility and privilege to access art. We must therefore not overlook the reality that only the aristocracy or bourgeoisie, as the wives and daughters of male artists, were able to practice art. As pointed out by Linda Nochlin, one of the most common characteristics amongst female artists who managed to succeed, albeit within the parameters allowed for their gender, tended to be the daughters of artists (their father) or women who may have had a close connection with a successful male personality.³⁴ Therefore, it was only a small number of women in specific positions who were able to practice art, and even then, they endured restricted modes of working.

As the Royal Academy of Painting and Sculpture only permitted a maximum number of four women at a time,³⁵ there are a limited number of female artists known to have practiced before the nineteenth century. Of those women, the majority were self-taught middle-class white women, much like Kauffmann or Vignee-Lebrun. Upper to middle class female artists were not only marginalised in terms of their training; they were also expected to produce a type of painting that reflected their “female nature.” Namely, “sweet, graceful, delightful, charming and modest” pieces.³⁶ In some cases, women had to “manipulate the brushstroke to emphasise gender differences.”³⁷

Accordingly, Bonheur was the daughter of a socialist painter of portraits and landscapes, Raymond Bonheur and Sophie Marquis, a musician. Bonheur had three brothers and sisters, all of whom were educated on the technical groundings of painting by their father and later on, by Bonheur. Though it no longer exists, the arrangement of the first studio they had

32 Rozsika Parker and Griselda Pollock, *Old Mistresses: Women, Art and Ideology* (London: I.B. Tauris, 2013), 33.

33 Whitney Chadwick, *Women, Art and Society* (New York: Thames & Hudson Ltd, 2020), 7.

34 Linda Nochlin, *Women, Art, And Power And Other Essays* (NY: Westview Press, 1989), 168.

35 Christian Michel, *The Academie Royale de Peinture et de Sculpture – The Birth of the French School, 1648-1793* (Los Angeles: Getty Publications, 2018), 123.

36 Chadwick, *Women, Art and Society*, 168.

37 *Ibid.*



8

44 Griselda Pollock, *Differencing the Canon: Feminism and the Writing of Arts Histories* (London and New York: Routledge, 1999), 37.

45 Boime, "Case," 386.

46 Somewhat ironically, Bonheur was once stopped by the police because they thought she was a man dressed like a woman, according to: Boime, "Case," 392.

47 Catherine Hewitt, *Art is a Tyrant* (London: Icon Books, 2020), 129.

48 *Ibid.*, 130.

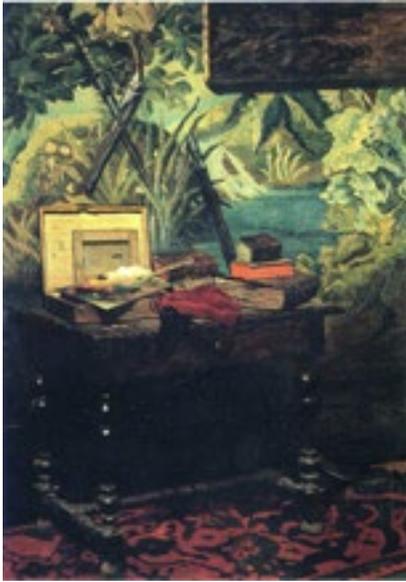
49 See: Mariana Valverde, "The Love of Finery: Fashion and the Fallen Woman in Nineteenth-Century Social Discourse," *Victorian Studies* 32, no. 2 (1989): 169–88.

8 Nicaise de Keyser, *Schools of the 19th Century*, 1878
Source: Museum of Fine Arts of Nice.

However, in the context of the salon, Bonheur's work was first and foremost critiqued on the basis of her gender. In so much that the position of the female artist was ultimately a submissive one. A figure to be shaped and dominated by men and as such, a female artist could only expect her work to be judged and/or celebrated under engendered terms constructed by men. As a result, Bonheur was continually questioned around her role as a woman; "For as a member of the female sex, an artist was subject to the constraints bourgeoisie society was increasingly placing on women's activities and movements".⁴⁴ Bonheur presented a radical and alternative example of a woman who deliberately chose not to marry a man nor have any children. She lived with her partner Nathalie Micas until she died and then later Anna Klumpke. Despite the controversy, Nathalie assumed the role of the "devoted wife and managed their domestic affairs to free Rosa for her professional activities."⁴⁵

In addition to her unconventional lifestyle and success as an artist, Bonheur was a constant subject to gossip because "she dressed like a man." When on-site copying animals, Bonheur tended to wear trousers and disguise herself as a man to avoid being disturbed by men.⁴⁶ Not to mention that men's clothing would have likely been more practical and far more comfortable for working outdoors, suggesting that this choice may have been more so necessary for Bonheur's practice than a chosen preference. In society, a woman wearing trousers was generally considered to be corrupt and "usurping masculine identity" and so, this act was forbidden. An ordinance issued on the 7th November during 1800 stated that, "if a woman wanted to wear trousers, she had to apply to the *Prefecture de police* for a permit."⁴⁷ These permits were issued by the police and were only "valid for six to three months and only during carnival season would cross-dressing without one be tolerated."⁴⁸ In this respect, the conventions of men's and women's clothing were forcefully employed as a further means to separate their gender, class and race.⁴⁹

While Bonheur's preference for wearing clothes that were classified as male may have only been due to practical reasons, previous observations have suggested that Bonheur endured a struggle with her femininity and endeavoured to separate her gender from herself as an individual and artistic output. Bridget Alsdorf's essay, *Painting the Femme Peintre*, explains that when being painted, Bonheur preferred to have her portrait painted by a woman, perhaps an eye more sympathetic to her position than a man's. When she was portrayed as an artist or as part of a group of male artists, Bonheur was intentionally made to look like a man. This is perhaps most obvious in Nicaise de Keyser's portrait, titled *Great Artist's of The Nineteenth-Century French School* (1878) [8]. Here, Bonheur is depicted in the



9



10

50 The exclusion of female artists from group portraits was in fact very common amongst painters. *Homage to Delacroix: Cordier, Durany, Lergos, Fantin-Latour, Whistler, Champfleury, Manet, Bracquemond, Baudelaire, A. De Balleroy* (1864) those by Henri Fatin-Latour who despite being married to the artist Victoria Dubourg, did not include her in the painting. See: M. Laurence and P. Willis, *Women Artists in Paris, 1850-1900* (New Haven: Yale U.P., 2017), 27.

51 Callen, *Work*, 75.

52 F. Davis, "Talking About Sales Rooms: Nostalgia in Green and gold," *Country Life (Archive: 1901-2005)*, 169 (4363), 1981, 870-871.

53 Callen, *Work*, 72.

54 Hardt and Negri, *Empire*, 222.

9 Claude Oscar Monet, *A Corner of the Studio*, Before 1861. Source: Musee d'Orsay.

10 Claude Oscar Monet, *The Studio Boat*, Before 1876. Source: Barnes Foundation

front row but is almost indistinguishable from her fellow painters.⁵⁰ Beyond her unconventional appearance, Bonheur received attention for the masculine qualities found in her subject matter and quality of painting. While Bonheur benefitted from this in her profession, she was ultimately praised under a male gaze and celebrated for her masculinity, rather than her femininity.

IV. Line

During the mid-nineteenth century, artists started to use their *plein air* tools indoors. Claude Monet's painting, *Corner of a Studio* dated 1861 is representative of this paradox. In the painting, we see what looks like the corner of a bourgeoisie living room, where a *plein air* toolbox appears to have been left open and unattended on a cabinet [9].⁵¹ In this painting, the toolbox; as opposed to the room seems to represent the studio. Or rather, the studio as we know it, has been reduced to the artist's equipment. The artist's tools set against a bourgeoisie living room thereby presents a juxtaposing iconography and implements an idea of living *and* working that is flexible. This condition continues to be reinforced in the various paintings produced by Claude Monet in his studio/boat; a rowing boat converted into a floating studio with the addition of a cabin and striped awning.⁵² Paintings such as the *River Scene* (1876) and *The Studio Boat* (1874, 1876) were painted on-site and from a transportable externalised studio and hence reinforce the idea that art need no longer be confined to a room. [10].

The portable boxes of the *Plein Air* artist movement, became particularly appealing to female artists who had to alternate between their domestic lives and their artwork. Anthea Callen explains that in their advertising, companies such as Windsor and Newton were not targeting artists, but amateurs and more specifically, "amateur lady painters"⁵³ due of the "cleanliness and lack of smell". This offered such companies the opportunity to expand their market audience. The entrenchment of this new way of working became so widespread that the involvement of the real estate market was inevitable and eventually lead to a form of architecture that seemed to favour the flexible and liberated working modes of the amateur artist. However, in stark contrast to their customers, these corporations were highly measured, managed and standardised.

The collapse of the home into the studio and vice versa, is arguably part of a process by which the commodification of poverty inevitably left the artist dispossessed of a place to live and/or work. Marx, Hardt and Negri explain how, "capital constantly operates through a reconfiguration of the boundaries of the inside and the outside",⁵⁴ and that it "does not function within the confines of a fixed territory and population, but always overflows

55 Ibid.

its borders and internalises new spaces.”⁵⁵ This is particularly relevant here in order to understand how and why the marketisation of the bohemian artist became so profitable. In real estate terms, this was an essential part of forming the ambiguity presented in the type of spaces artists used for living and working and for the first time, we find the necessity of flexibility as a parameter for living; one that is defined and reduced into something that can be replicated and exploited by the capitalist market. The increased demand for a new type of space that favoured the flexibility of the artist and their supposed ability to work in any condition, extended the artist’s already precarious form of existence by exasperating the potential of everything (and nothing) to be considered a studio and a home.

The studio, room and landscape was idealised through the notion of the “independent genius” and as such, became commodified and profitable. This seemed to strengthen the very differences some artists were fighting to oppose. In fact, the very notion of genius that was conceptualised in the Royal Academy of Painting and Sculpture was sustained around acts of separation rather than the integration of the artist in society. In other words, if social differences had not existed, the independent genius would not be so characteristic today. The subjectivity of the artist that became so popular during the nineteenth and twentieth centuries served to reinforce social differences as well as social groups and classes.

Be that as it may, Bonheur remained outside of these typical polarisations and was caught between two subjectivities at once: that of being women and an artist. Whereby, adhering to one would have resulted in the compromise of the other. This condition is clearly illustrated by the previously mentioned group portrait by Keyser. Here, Bonheur’s subjectivity as part of a group of artists, or rather, “great (male) artists” was only possible through her male characteristics. From society’s perspective, any female trait questioned Bonheur’s “genius” or identity as an artist; risking the value of her work. Equally, Bonheur’s femininity was likely to have been conditioned by her individualism as an artist and her lifestyle choices. Both of which opposed middle class family structures and the traditional role of women within them. However, Bonheur was highly conscious not only of her own struggle, but of what her struggle may represent to women and to the art profession as a whole. This is proven in her deliberate request to only be represented by women in her portrait or biography. In a conversation between Bonheur and Anna Klumpke, the author of the artist’s biography, Klumpke recites, “My feminism and my clothes aren’t meant to surprise you. It will be easy for you to explain the reasons behind them”⁵⁶. In this sense, Bonheur stood on the line between her prescribed characterisations and one might then argue that it is in this position where she found her true resistance.

56 A. Klumpe, Rosa Bonheur: *The Artist (Auto) biography* (Ann Arbor: University of Michigan Press 1987), 79.

Bibliography

Baudelaire, Charles-Pierre. *The Painter of Modern Life*. UK ed. edition. Penguin Classics: 2010.

Beech, Dave. *Art and Postcapitalism: Aesthetic Labour, Automation and Value Production*. Pluto Press: 2019.

Boime, Albert. "The Case of Rosa Bonheur: Why Should a Woman Want to Be More Like a Man?" *Art History* 4 (4) (1981): 384–409. <https://doi.org/10.1111/j.1467-8365.1981.tb00733.x>.

Bourdieu, Pierre. *The Rules of Art: Genesis and Structure of the Literary Field*. Cambridge: Polity, 1996.

Callen, Anthea. *The Work of Art: Plein Air Painting and Artistic Identity in Nineteenth-Century France*. Reaktion Books: 2016.

Chadwick, Whitney. *Women, Art, and Society (World of Art): 1*. New York: Thames & Hudson Ltd, 2020.

Constable, William George. *The Painter's Workshop*. 1st edition. Oxford U.P., 1954.

Davis, F. "Talking About Sales Rooms: Nostalgia in Green and gold." *Country Life (Archive: 1901–2005)*, 169 (4363), 1981.

Foucault, Michel. *Power: The Essential Works of Michel Foucault 1954–1984. Vol. 3*. Edited by James D. Faubion. London: Penguin, 2002.

Fox-Genovese, Elizabeth. *The Origins of Physiocracy: Economic Revolution and Social Order in Eighteenth-Century France*. Ithaca: Cornell University Press, 1976.

Grana, Cesar. *Bohemian Versus Bourgeois: French Society in Nineteenth Century*. Basic Books, 1964.

Hardt, Michael, and Antonio Negri. *Empire*. New Ed edition. Cambridge, Mass.: Harvard University Press, 2001.

Hauser, Arnold. *The Social History of Art. Vol. 4, Naturalism, Impressionism, the Film Age*. London and New York: Routledge, 1999.

Hewitt, Catherine. *Art Is a Tyrant: The Unconventional Life of Rosa Bonheur*. Illustrated edition. London: Icon Books Ltd., 2020.

Klumpe, A. *Rosa Bonheur: The Artist (Auto)biography*. Ann Arbor: University of Michigan Press, 1987.

Laurence, M., and P. Willis. *Women Artists in Paris, 1850-1900*. New Haven: Yale U.P., 2017.

Mainardi, Patricia. *The End of the Salon: Art and the State in the Early Third Republic*. New Ed edition. Cambridge: Cambridge University Press, 1994.

Maza, Sarah. *The Myth of the French Bourgeoisie: An Essay on the Social Imaginary, 1750-1850*. New Ed edition. Cambridge, Mass.: Harvard University Press, 2005.

*I would like to give my special thanks to
Emily Priest for her close reading and
suggestions for this essay.*

Michel, Christian. *The Academie Royale de Peinture et de Sculpture – The Birth of the French School, 1648–1793*. Illustrated edition. Los Angeles: Getty Publications, 2018.

Milner, J. *The Studios of Paris: Capital of Art in the Late Nineteenth Century*. New edition. New Haven: Yale University Press, 1988.

Nochlin, Linda. *Women, Art, And Power And Other Essays*. New York, NY: Westview Press, 1989.

Nora, P. *Rethinking France: Les Lieux de Mémoire. Vol. 1, The State*. Illustrated edition. Chicago: University of Chicago Press, 2001.

Parker, Rozsika, and Griselda Pollock. *Old Mistresses: Women, Art and Ideology*. London: I.B. Tauris, 2013.

Peppiatt, Michael, and Alice Bellony-Rewald. *Imagination's Chamber: Artists and Their Studios*. 1st ed edition. Boston: New York Graphic Society, 1982.

Perrot, Michelle, Arthur Goldhammer, Phillippe Aries, and Georges Duby. *A History of Private Life: From the Fires of Revolution to the Great War. Vol. 4*. New edition. Cambridge, Mass.: Harvard University Press, 1994.

Pollock, Griselda. *Differencing the Canon: Feminism and the Writing of Arts Histories*. London and New York: Routledge, 1999.

Roberts, Andrew. *Napoleon the Great*. 1st edition. London: Penguin, 2015.

Schapiro, Meyer. *Theory and Philosophy of Art: Style, Artist, and Society: 4*. 4th ed. edition. New York: George Braziller Inc. 1998.

Stanton, Theodore, ed. *Reminiscences of Rosa Bonheur*. Cambridge University Press, 2019.

Valverde, Mariana. "The Love of Finery: Fashion and the Fallen Woman in Nineteenth-Century Social Discourse." *Victorian Studies* 32 (2) (1989): 169–88.

Party Line/Line of Flight

Alessandra Ponte

“Imminent danger. Be careful, the slightest line of flight can cause everything to explode.” Thus began Félix Guattari’s account of the closing of Radio Alice, the free antenna of Bologna, outlawed in 1977 by the mayor of the city, Renato Zangheri. In banning the radio, Zangheri, a member of the Italian Communist Party (PCI), governing one of the prominent “red” cities of Italy, was loyally toeing the party line, and actively contributing to the repression of the diverse “autonomies” emerged after the 1972 crisis of the extreme-left. “Autonomies” in the Italian political vocabulary of the time designated the independent mobilization of women, youths, immigrants, homosexuals, and marginals of various kind, groups that refused assimilation and identification in the “class struggle” controlled by the autocratic/bureaucratic machinery of the communist party and the unions. The volatile Italian situation and the dramatic clashes between militants and leaders of the PCI and autonomous assemblages searching for new forms of revolt and resistance were closely monitored by European thinkers and politicians. Leading French intellectuals including Michel Foucault, Gilles Deleuze, and Félix Guattari, actively intervened provoking a number of exchanges and confrontations with prominent figures of the Italian left on the questions of power and revolutionary practices. The paper retraces one of such confrontations.



The Aula Magna in Tolentini (IUAV). Courtesy of Università Iuav di Venezia, Archivio Progetti SBD, Archivio iconografico Iuav.

1 See: "Cronache dai Tolentini: studenti, docenti, luoghi 1964-1975," IUAV, no. 110, 2012.

In 1975, to celebrate the thirtieth anniversary of Italy's liberation from fascism, Carlo Aymonino, member of the PCI (Italian Communist Party) and recently appointed director of the Istituto Universitario di Architettura di Venezia (IUAV), inaugurated the newly restored Aula Magna (Great Hall) at the Tolentini in Venice. Supervised by Carlo Scarpa, the renovation included paintings of famous Venetian artists like Emilio Vedova, Vittorio Basaglia, Mario De Luigi and Armando Pizzinato. The centerpiece of the composition was a panel emblazoned with the first part of the slogan written on the front page of Antonio Gramsci's newspaper *L'Ordine Nuovo* (*The New Order*): "Educate yourselves because we'll need all your intelligence. Agitate because we'll need all your enthusiasm. Organize yourselves because we'll need all your strength."¹ Photographs taken two years after the inauguration show the word "intelligence" in Gramsci's sentence crossed over and substituted with "sharpshooting," a clear invitation to join the "lotta armata" (armed fight), while the white, pristine walls of the Aula Magna appeared insouciantly decorated with images and ironic slogans by the Indiani Metropolitanani (Metropolitan Indians), the "creative and libertarian wing" of the political upheaval of the 1977 *Movimento* (Movement).

Thus, while Venice remained marginal compared to the real epicenters of the 1977 *Movimento* (Rome, Milan and Bologna), IUAV's Aula Magna closely reflected the troubled climate of the time exposing the ever-larger fracture separating the extreme left extra-parliamentary groups from the Communist Party, which, since 1973, under the leadership of Enrico Berlinguer, had been theorizing and negotiating the "historical compromise" with the Christian Democrats. The radicalization of the conflict between the far left and the Communist Party corresponded to a profound transformation of the Italian

CORRI PURE
SERPENTE BIANCO.
CONTE CORRE ORA ANCHE
LA MORTE È LA FINE DELLA
TUA PISTA È ORMAI
VICINA.



- 2 Félix Guattari, *La révolution moléculaire* (Paris: Les Prairies Ordinaires, 1977). Guattari's book collected previously published essays and articles including a text about the closing of the Radio Alice (a free radio) in Bologna, as example of the repression ordered by the mayor of the city the communist Renato Zangari. Guattari's (and Gilles Deleuze) involvement with the 1977 Movimento and the Italian extreme left are well documented in: François Dosse, *Gilles Deleuze et Félix Guattari: Biographie croisée* (Paris: La Découverte, 2007). Interestingly Dosse comments at length about the relation and collaboration between Guattari and Toni Negri underlining their divergences and questioning Negri unrepentant Leninism.

protest movement. Leninist-inspired organizations of 1968, including Potere Operario or Lotta Continua, dissolved to give way to new forms of creative quest or, along a radical diverging trajectory, recourse to terrorism. The intensification of the actions of the left-wing terrorist organization Red Brigades was the epiphenomenon of the last alternative, culminating with the 1978 kidnapping and assassination of the Christian Democrat leader Aldo Moro, in answer to Berlinguer's "historical compromise." What truly characterized the 1977 *Movimento*, however, was the vindication for "autonomy," proclaimed and theorized in various forms: from the structured leftist movement Autonomia Operaia (Workers' Autonomy), led by Oreste Scalzone and Toni Negri, to a heterogeneous assemblage of collectives and groups that systematically refused organization, hierarchy, and any kind of political manipulation. This last area of the Movement found inspiration in the writings of Gilles Deleuze and Félix Guattari, whose 1972 book *Capitalisme et schizophrénie. L'anti-Œdipe* and the first chapter on the rhizome from their *Mille plateaux*, were promptly translated in Italian. Guattari, in fact, became an active and acclaimed participant of the most spectacular demonstration of the 1977 *Movimento*, the three-day protest against repression held in Bologna in September of the same year. There, in the streets of the city, an awestruck Guattari assisted to the unfolding of his anticipated "molecular revolution."²

An echo and a response to these events at the IUAV can be found in a slim volume printed in 1977 by the publishing cooperative of the school of architecture in Venice (CLUVA). Titled *Il dispositivo Foucault (The Foucault Device)*, the book collected the papers presented at a crucial seminar by Massimo Cacciari, Franco Rella, Manfredo Tafuri and Georges Teyssot.

3 Massimo Cacciari, Franco Rella, Manfredo Tafuri, Georges Teyssot, *Il dispositivo Foucault* (Venice: Cluva Libreria Editrice, 1977).

4 Massimo Cacciari, *Krisis. Saggio sulla crisi del pensiero negativo da Nietzsche a Wittgenstein* (Crisis. Essay on the crisis of negative thought from Nietzsche to Wittgenstein) (Milan: Feltrinelli, 1976).

5 See: Andrew Leach and Luka Skansi, "The Foucault Device: Forty Years On," in the book of abstracts of The Tools of the Architect, EAHN conference, TU Delft and HNI, The Netherlands, November 2017, 159. Marco Assennato, "Il dispositivo Foucault. Un seminario a Venezia, dentro al lungo Sessantotto italiano," *Engramma* 156, May–June 2018, http://www.gramma.it/eOS/index.php?id_articolo=%203419. On the vicissitudes of the idea of heterotopy see: Daniel Defert, "Postface 'Hétérotopie': Tribulation d'un concept entre Venise, Berlin et Los Angeles," in Michel Foucault, *Le Corps Utopique — Les Hétérotopies* (Paris: Nouvelles Éditions Lignes, 2009), 37–61.

Rella, quite possibly prompted by Cacciari, convened the meeting.³ Rella had arrived at the IUAV in 1975 after having published a number of texts on Freud later collected in *La critica freudiana (The Freudian Critique)* in 1977. During the academic year 1977–78, Rella taught a seminar on Freud as complement to Tafuri's course on turn of the century Vienna. After being affiliated with *Potere Operaio*, Cacciari — an advocate of "negative thought" and professor of aesthetics at the IUAV — had joined the Italian Communist Party (of which Tafuri was also a member), and published *Krisis. Saggio sulla critica del pensiero negativo da Nietzsche a Wittgenstein (Crisis. Essay on the crisis of negative thought from Nietzsche to Wittgenstein)*.⁴ *Krisis*, together with the 1975 *Oikos: da Loos a Wittgenstein (Oikos: From Loos to Wittgenstein)*, written in collaboration with Francesco Amendolagine, were mandatory reading for the students enrolled in Tafuri's class on Vienna. With the notable exception of Teyssot's contribution, which thoughtfully investigated and tested Foucault's concept of heterotopy, the other participants used the important audience of the seminar (after beginning in Aula Gradoni where usually Tafuri taught his classes, the conference had to be moved to Aula Magna at the Tolentini) as platform to attack not only Foucault but also Deleuze and Guattari in direct connection with the momentous events that were taking place in Bologna.⁵ Cacciari's essay was reprinted, almost untouched, in a special 1977 issue of the philosophy and culture magazine *Aut Aut* titled "Irrazionalismo e nuove forme di razionalità" ("Irrationalism and New Forms of Rationality"). Cacciari then became the center of a notorious controversy about the notion of power attributed by Italian communists intellectuals to Foucault (and by uninformed association extended to Deleuze and Guattari), which found response first in

6 Parts of the exchange between Cacciari and Foucault are reprinted in: Michel Foucault, *Dits et Écrits*, ed. Daniel Defert and François Ewald, 2 vol. (Paris: Gallimard, 2001). The polemic was exacerbated by an infamous article published in *L'Espresso* in November 1978. The authors collected arbitrarily fragments of an interview to Foucault including an allusion to Cacciari. Hilariously Foucault responded stating that he never referred to Cacciari for the simple reason that he was unaware of his works.

an essay published by the French philosopher in *Aut Aut*, and then in a letter addressed by Foucault, in December 1978, to *L'Unità*, the organ of the Italian Communist Party.⁶

In 1976, under the aegis of Aymonino, the Institute for Architectural History at the IUAV, which operated under the direction of Tafuri since 1968, was given more autonomy and renamed Dipartimento di analisi, critica e storia dell'architettura (Department of Architectural Analysis, Criticism and History). The tortuous appellation mirrored the appraisal of Tafuri and his colleagues of the state of the discipline. The establishment of the department included the creation of a new corso di laurea (degree program) in history of architecture that attracted numerous students competing for guidance in the development of their master theses. The aftermath of the colloquium on Foucault marked a distinct reshuffling among members of the department and in the distribution of the students. Cacciari suspended teaching at the IUAV to devote himself full time to politics as member of PCI and began to reflect on Catholicism. Tafuri rather abruptly dissociated himself and his classes from Franco Rella. Ironically, given the substantial presence of students in architecture engaged in Lacanian theory, Rella found himself directing Lacanian theses while Tafuri and Teyssot emerged as leading figures of the department in the following years. Teyssot introduced students not just to Foucault but to the large field of French literature on history of science and technology from Michel Serres and François Jacob to Georges Canguilhem and André Leroi-Gorhan. As for Tafuri he became interested in Carlo Ginzburg microhistory but slowly and inexorably turned his gaze to the Renaissance entrenching himself and his students in a sternly philological approach.



Mural by the Indiani Metropolitani at the Aula Magna in Tolentini (IUAV). Courtesy of Università Iuav di Venezia, Archivio Progetti SBD, Archivio iconografico Iuav. (next page also)

Non-Aligned Third Way: A Chronological Line of Ideological Shifts

Eliana Sousa Santos

1960s Kubler and the Revolution

In the essay “Arquitectura Não Alinhada” (2001)—translated from the Portuguese as “Non-Aligned Architecture”—the architectural historian Paulo Varela Gomes summarizes the reception, and to some extent the instrumentalisation, of the book *Portuguese Portuguese Plain Architecture: Between Spices and Diamonds, 1521–1706* (1972) by the architectural field in Portugal since the 1970s until the early twenty-first century. To Varela Gomes: “the ideological aspiration satisfied by Kubler’s book was, up to a point, allowing us to appreciate in a positive way (strong, full, autonomous, coherent and closed) some buildings or building compounds that could not obviously fit the canonical categories of European historiography, the renaissance, mannerism, the baroque. The ‘poverty’ (constructive, material, decorative, compositional, and of façade design), that seemed to stigmatize so many convents and churches in Portugal, was suddenly redeemed (and simultaneously de-Europeanised) in a decade, the 1970s, in which Portugal was searching for a political autonomy of a peripheral nature.” (2001, 6)

Kubler’s thesis implied that the nature of Portuguese architecture built between 1600 and 1800 did not fit in any of the established categories of art history, since he noted that his main interest in studying the Portuguese case had to do with its difficult categorization following conventional separation by style and time: “The various histories of Portuguese architecture, like most histories of art, all are written on the assumption that period, place, and style are interchangeable: at any given place in any defined period, it is assumed that there exists only one style. Thus, Mannerism is taken as the style of the sixteenth century in Europe; Baroque style fills the seventeenth century. By this venerable system, which is at least as old as Vitruvius and Pliny, one place at one period can have no more than one ‘style.’” (Kubler 1972, 4)

Kubler defined a new category, Portuguese plain architecture, and characterised it as austere, simple, pure, manifesting essential architectural properties. This seemed to have a causal connection with the economic and political context of the time—a period of crisis between spices and diamonds, that is between the two moments that allowed the Portuguese empire to colonise a substantial part of the world—that called for understated buildings, and the optimal use of scarce resources for great effect. More importantly, Portuguese plain was a hybrid between erudite and popular architecture, since “The Portuguese plain style is like a vernacular architecture, related to living dialect traditions more than to the great authors of the remote past” (Kubler 1972, 3). Thus, In the 1970s, Kubler’s book informed retroactively the context of contemporary architectural production, connecting it to a longer genealogy, in which the essential characteristics of architecture were indelibly connected to the Portuguese territory, and to some extent connected to an idea of national architecture.

Despite being published in 1972, Kubler did most of the research work in Portugal between the end of the 1950s and the 1960s. Before this, Kubler had written a thesis about the religious architecture of New Mexico, in the United States—later published as a book in 1940 and reedited in 1972. Thus, it is relevant to note some parallels between these two places, the state of New Mexico and Portugal at the time. When Kubler began the study of their architecture, these two places were relatively recent states in the midst of establishing regional and national identities legitimised by popular art and regional architecture. The State of New Mexico had been admitted to the union in 1912, and the development of a new image is apparent in the architectural and artistic productions of the following decades—Kubler studied and photographed the Franciscan missions of the seventeenth century in the 1930s, a time when these buildings were already part of twentieth century culture and the construction of the image of the state of New Mexico closely connected with the style that would become known as pueblo revival (Wilson 1997). Similarly, in Portugal, the dictatorial regime denominated New State—*Estado Novo*, in Portuguese—was established in 1933 and even in the 1950s, when Kubler stayed in the country, he witnessed a strong propaganda campaign invested in recovering or inventing traditions to promote the image of the country through the arts.

In both places, New Mexico and Portugal, Kubler studied the architectural production, mostly religious buildings erected in the seventeenth century, in which “the lack of resources was used to great effect,” to construct buildings that had a modern character, and that would be analysed in the present to create a cross-cut temporal connection between the historical moment and the present. If in New Mexico, Kubler could see all the pueblo

revival museums and hotels built in Santa Fe that were replicas and iterations of the Spanish Missions. Furthermore, in Portugal, Kubler compared the structural simplicity of historical buildings with twentieth century buildings: “The effect at Jerónimos in Belém, at Arronches, or at Freixo de Espada à Cinta was not unlike the mushroom columns in twentieth-century reinforced concrete construction as used under curved shells” (Kubler 1972, 30).

By studying historical objects brought from the past as the origins of new traditions, Kubler’s case studies allowed him to understand retrospectively the framing of a series of objects that were used as modern revivalist motifs. This perspective allowed him to propose a new classification of art history, as the history of all things, based on seriation of formal sequences that could comprise different durations as well as map the large tapestry of historical connections through time (Sousa Santos 2020). This thesis was published in the book *The Shape of Time: Remarks on the History of Things* (1962), that briefly put Kubler as a cult figure to a new generation of artists in the 1960s such as Robert Morris, Robert Smithson and John Baldessari (Lee 2001).

Notwithstanding most of Kubler’s work about Portuguese plain architecture having been produced essentially in the 1950s and 1960s, the publication of his book was long delayed. This apparent set back allowed for its reception to occur within a different political context, after the toppling of the long dictatorship by the 1974 revolution, thus becoming associated with in Portuguese art historiography with the revolutionary period.

1970s Post-Revolution

Two years after the 1974 Revolution in Portugal the French magazine *Architecture d’Aujourd’hui* dedicated an issue to the architectural production in Portugal. Álvaro Siza is the only architect mentioned in the cover, with the title “La Passion de Álvaro Siza”, presenting him as one of the “great architects of the new European generation

[...] In his modestly dimensioned work, he makes an effort to respect the Portuguese paucity of economic means, without abdicating the refined culture and spatial poetics that not one photograph manages to show”¹ (Anon 1976, 42). In the same magazine, the architect Gonçalo Byrne announces that Siza is the bastion of a new architecture by young people that were trying to clash with the international dominant currents, such as the International Style or Brutalism, through austere and clean spaces (Byrne 1974, 32)² For Byrne, that attitude was already present in Siza’s work, since the adoption of “minimalist poetics”, references to modernist aesthetics of

1 In the original: “... cet homme effacé est certainement un des ‘grands’ architectes de la nouvelle génération européenne. Dans son oeuvre confidentielle de dimension extrêmement modeste, il s’efforce de ‘coller’ étroitement à la pauvreté des moyens économiques portugais, sans jamais abdiquer une culture raffinée et une poétique spatiale dont aucune photographie ne peut rendre compte” (Anon 1976, 42).

2 In the original: “...ces jeunes architectes essaient de rompre avec les courants dominants d’une architecture plus ou moins bureaucratique en dénonçant l’arbitraire des codes architecturaux et des systèmes de normes, par le biais de l’austerité et de l’épuration” (Byrne 1974, 32).

- 3 In the original: "...cette attitude était déjà présente, bien que teintée de romantisme dans l'oeuvre de Siza, chez autres il s'agit d'une méfiance pour le pittoresque et d'une volonté réductrice inhérente à la manipulation critique du discours de la composition. L'utilisation d'une poétique minimaliste préconisée par certains architectes, renvoie à des formes de l'architecture des années 20 curieusement éliminée pendant la dictature salazariste" (Byrne 1974, 32).
- 4 In the original: "Dans une atmosphère qui n'est jamais 'populiste' ou folklorique, il ramène à la pointe la plus arrièrre de l'Europe les citations de la culture Moderne la plus élaborée: celle de Mackintosh et du premier rationalisme de 'l'homme d'Aran'" (1976, 42).
- 5 Some years before this apology by Gregotti, Flaherty's methodologies were challenged by a documentary that exposed the fictional nature of the supposedly documental film (Messenger 2020).
- 6 In the original: "... è travers la participation aux opérations SAAL qui se mettent en place au Portugal, il est possible que Siza puisse s'intégrer à la production de masse et à des transformations urbaines significatives qui, le confrontant à une autre réalité, engendreront chez lui de nouvelles positions méthodologiques" (Gregotti and Bohigas 1976, 42).

the 1920s, that were at the time disconnected from the official architectural principles of the regime (Byrne 1974, 32).³

In the same issue, Vittorio Gregotti and Oriol Bohigas write the apology "La Passion d'Álvaro Siza", a text where they both refer to collage as a design method, and Gregotti compares Siza to Robert Venturi, saying that Siza, in a project for social housing in Caxinas, quotes and refers to the "most elaborate Modern culture: that of Mackintosh and of the first nationalism of *Man of Aran*"⁴ (1976, 42). It is telling that Gregotti refers to a primitivist ethno-fiction film by Robert Flaherty, *Man of Aran* (1934), a film that constructed fictionally, rather than documented, the harsh lives of a fishing community in the Aran Islands in Ireland.⁵ Bohigas finishes his statement by issuing a vote of confidence of the SAAL process—a series of architectural brigades that continued the building of social housing during the post-revolutionary period—as something that could evolve to be integrated with mass housing production and create significant urban transformations (1976, 42).⁶

1980s The Third Way

Unfortunately, Bohigas was far from predicting the future. During the 1980s and 1990s, the urgent quest for building social housing was traded by the necessity of representation, and Álvaro Siza was adopted as the architect who represented Portugal's young democracy.

In 1980, Eduardo Souto de Moura published a text, in the magazine *9H*, in homage to Siza entitled "An 'Amoral' Architect." He summarizes Siza's practice quoting the poet Helberto Helder and presenting the design process as a sequence of actions: "The pencil encloses a space—the site appears. [...] The place is geometry. The project emerges. [...] The difference is conflict. The work is born. We witness 'the resurrection of what was dying, and dies and will die.' Then the place is" (1980, 12). Only four years after the activism of the issue of *L'Architecture d'Aujourd'hui*, Souto de Moura's text presents Siza's work in the abstract field of works of art.

In the same issue of *9H*, Robert Maxwell writes an essay proposing a "third way": "The ideology arises when the wish for assurance exceeds the evidence to provide it. We may suspect that in order to avoid errors which are essentially those of serving the predominant western ideology of capitalism, we shall be offered as alternative a prescription which falls into other errors, the errors which are produced under a marxist or proletarian ideology..." (Maxwell 1980, 31). To some extent, Maxwell predicted the context of the next decades.

If Kenneth Frampton did not formally verbalise, like Maxwell, the correspondence between the third way and Critical Regionalism, he was very

7 The connection between Critical Regionalism, the Third Way and Álvaro Siza's architectural practice is drafted by Nelson Mota in the essay "Between Populism and Dogma: Álvaro Siza's Third Way" (2011).

clear when he proposed: "Architecture can only be sustained today as a critical practice if it assumes an arrière-garde position, that is to say, one which distances itself equally from the Enlightenment myth of progress and from a reactionary, unrealistic impulse to return to the architectonic forms of the preindustrial past" (Frampton 1988, 20).⁷

The rise of Portuguese architecture internationally occurred in parallel with the expansion of third way politics and neoliberal policies, accompanying the end of welfare and social housing policies in Europe. For the architects of the generation of Álvaro Siza, this was a disappointment. In the essay dedicated to Siza, on the occasion of his Pritzker prize award in 1992, Vittorio Gregotti writes about the many disillusionments that were nonetheless met with professional success: "Only five days had gone by after April 28, 1974 (the date of the revolution of the carnations), when, without encountering guards or bailiffs, I entered the office of the new Minister of Public Works, my friend Nuno Portas. Seated in a pompous armchair in that grand office was Alvaro Siza. He started explaining to me the work plan of the SAAL brigades, spontaneous cooperatives of planning and building. The new political opportunity seemed to have transformed his usual patience into great energy. Then, after great hopes came disappointments" (Gregotti 1992).

1990s Kubler Returns

In Portugal, a country where the notions of identity and nationhood were questioned following the toppling of a decade's long dictatorship, the admittance to the European Economic Community (later to become the European Union) in 1987 restored a kind of national nostalgia and the celebration of Portuguese-ness that reverberated in the 1990s. This happened in many fields and guises, in the historiography of architecture it is worth to mention that the edition of the Portuguese translation of Kubler's *Portuguese Plain Architecture* was only published in the late 1980s (Kubler 1988). The idea of a plain architecture as a hybrid between vernacular and erudite models, which fitted in the category of austere, simple, and, to some extent, proto-modernist ways of building merged with the practices of the architects connected to the Porto School in general, and the work of Álvaro Siza in particular, became tacitly implicit in the discourse that reverberates up until the present day.⁸

8 Previously, I have written about the rearrangement of the perception of architectural practices in Portugal following Kubler's *Portuguese Plain Architecture* in the essay "Portuguese Plain Architecture: History Opening a Closed Sequence" (2012).

In 1991, Paulo Varela Gomes was one of the curators of the exhibition *Points de Repère, Architectures du Portugal*, that was part of the Portuguese representation of Europolia arts festival in Brussels. Portugal had been admitted to the European Union a few years before, in 1986, and this exhibition was part of an array of events and exhibitions that were planned to

represent the country to other European nations. Varela Gomes recovered Kubler's thesis about Portuguese architecture, defining the specific characteristics in which the country's architecture had been built throughout the pre-modern era to modernity: "Sobriety, poverty even, buildings based on the concept of solidity, including derivations of traditional models," as well as "a connection between erudite and vernacular architecture" (Varela Gomes 1991, 21).⁹

The recovery of the idea that there was a "Portuguese" architecture, and that it was possible to fit works that used the language of traditional forms with modernist tropes as examples of a contemporary iteration of a type of architecture that survived through time, can be also read as a reaction to the anxiety caused by the international union with other European nations. This reverberated in the last decades, when the discourse of architecture in Portugal became filled with abstract descriptions of a possible Portuguese spatial form.

Initially, Kubler derived the term plain architecture from the historian Júlio de Castilho's use of 16th and 17th century's Portuguese word *chã* as applied to architecture. The word *chã*, or *chão*, literally means flat but it was used to signify unornamented and simple. Castilho had characterized the notion of plain architecture as evidence of the "virtuous character" of Portuguese nobility, their taste for an architecture that was austere and simple—creating a moral aura over the concept of plain (Castilho 1954, 144).

This narrative of noble austerity that was materially manifested in the exteriors of the houses of nobility in Lisbon defined the "austere nature" of the architecture that Kubler perceived as precursor of modernism. However, if we read the whole of Castilho's description, we see that he refers to austere façades, and that those simple exteriors were a camouflage to tiled walls, frescoes, exotic woods and imported tapestries (Castilho 1954, 144–146). The austere character of plain architecture, as defined by Kubler as the innate simplicity that predated modernism only works if we ignore this contradiction: that the narrative of sober and austere taste of the building's exterior was camouflaging extravagant interiors.

Since the 1980s, the solidification of Álvaro Siza's role as the ultimate representative of "Portuguese architecture" occurred simultaneously with the foreign recognition and the internationalization of his practice. Siza's name became synonymous with the idea of a specifically Portuguese and local way of designing and producing architecture. This association emerged as he gradually became the main figure of FAUP—the Porto School of Architecture¹⁰—and the architect who was directly commissioned to design its new campus in the late 1980s and early 1990s. A few years later, Siza's association with the character of national architecture was strengthened

9 In the original: "La sobriété, la pauvreté même, des constructions principalement basées sur le concept de solidité, compris comme dérivations les modèles traditionnels et comme fonctionnalité pratique (...) Proximité entre l'architecture érudite et populaire, tant du point de vue des formes que de son entendement culturel" (Varela Gomes 1991, 21).

10 In his thesis about architecture education in Portugal, Gonçalo Canto Moniz (2011, 58) refers to the description of the "Porto School" written by Manuel Mendes and published in the Dutch journal *Wonen Tabk*. In it, Mendes, characterizes Siza's teaching, started in the 1960s, as one of the main instances of the creation of an identity of the Porto School.

- 11 In an essay about the development of OMA's international architectural practice, Ellen Dunham-Jones makes a parallel between Rem Koolhaas' career and the development of novel financial instruments in the late 20th century (2013). Although the "exuberance" of practices such as OMA's or BIG's, may be easily associated with the ruthlessness of financial markets, other practices, which aesthetically may seem austere, such as Siza's or Peter Zumthor's also thrived in this context.

through the design of the Portuguese Pavilion at the Expo 98, the Lisbon World Exposition.

The path of Siza's international recognition was not much different from other European practices of the late twentieth century which surfed the wave neo-liberal third way politics.¹¹ Following a growing number of projects in the context of an expanding European Union in the 1990s, and beyond in the 2000s—inaugurated with the project for the Iberê Camargo Foundation Museum (1998–2006) in Porto Alegre, Brasil—Siza became one of the most well-known architects working today with a globalised production and long career that has spanned different historical moments. In the last decades, his architectural production reflects the vast changes in the historical context of Portugal, Europe and the world. Some of his projects are particularly relevant to analyse the relationship between architecture with social and financial forces. The Bouça neighborhood, in Porto, initially designed as social housing in the 1970s, was privatized in 2005; the large-scale project of the reconstruction of Chiado, in Lisbon, ongoing since the late 1980s, transformed that area into one of the most coveted zones by the speculative market; finally, the high-rise project 611 West 56th Street, is one of many housing towers built in Manhattan that are almost uninhabited, existing mostly as capital for investment purposes.

Bibliography

Anon. *L'Architecture d'Aujourd'hui*, no. 185 (1976): 42.

Byrne, Gonçalo. "Quelques Prémices Pour Une Architecture Nouvelle." *L'Architecture d'Aujourd'hui*, no. 185 (1976): 32.

Dunham-Jones, Ellen. "The Irrational Exuberance of Rem Koolhaas." *Places Journal* (April 2013).

Frampton, Kenneth. "Towards a Critical Regionalism." In *The Anti-Aesthetic: Essays on Postmodern Culture*, edited by Hal Foster, 16–30. Port Townsend, Wash.: Bay Press, 1988.

Castilho, Júlio de. *Lisboa Antiga: O Bairro Alto*. Edited by Gustavo de Matos Sequeira. 3rd ed. Lisbon: Câmara Municipal de Lisboa, 1954. http://geo.cm-lisboa.pt/fileadmin/GEO/Imagens/GEO/Livro_do_mes/Julio_de_Castilho/Lisboa_Antiga_O_Bairro_Alto/MON_130-P_part_01.pdf.

Gregotti, Vittorio, and Oriol Bohigas. "La Passion d'Álvaro Siza." *L'Architecture d'Aujourd'hui*, no. 185 (1976): 42.

Gregotti, Vittorio. "Thoughts on the Works of Alvaro Siza." Pritzker Prize, 1992. https://www.pritzkerprize.com/sites/default/files/file_fields/field_files_inline/1992_essay_0.pdf.

Kubler, George. *The Religious Architecture of New Mexico: In the Colonial Period and Since the American Occupation*. 4th ed. Albuquerque: University of New Mexico Press, 1972.

Kubler, George. *Portuguese Plain Architecture: Between Spices and Diamonds, 1521-1706*. Middletown, Conn.: Wesleyan University Press, 1972.

Kubler, George. *A Arquitectura Portuguesa Cha : Entre as Especiarias e Os Diamantes, 1521-1706*. Translated by Jorge Pais da Silva. Lisbon: Vega, 1988.

Lee, Pamela M. "'Ultramoderne': Or, How George Kubler Stole the Time in Sixties Art." *Grey Room*, no. 2 (2001): 46–77. <http://www.jstor.org/stable/1262542>.

Maxwell, Robert. "The Judgement of Ideology." *9H*, no. 2 (1980): 31.

Messenger, John C. "Man of Aran Revisited: An Anthropological Critique." *University Review* 3, no. 9 (1966): 15–47. Accessed November 8, 2020. <http://www.jstor.org/stable/25504744>.

Moniz, Gonçalo Canto. "O ensino moderno da arquitectura : a reforma de 57 e as Escolas de Belas-Artes em Portugal (1931-69)." PhD diss., University of Coimbra, 2011.

Mota, Nelson. "Between Populism and Dogma: Álvaro Siza's Third Way." *Footprint*, 8 (2011): 35–58. doi:10.7480/footprint.5.1.731.

Sousa Santos, Eliana. "Portuguese Plain Architecture: History Opening a Closed Sequence." *Revista de História Da Arte*, no. 10 (2012): 176–87. <http://hdl.handle.net/10362/16825>.

Sousa Santos, Eliana. "Prime Objects and Replications: George Kubler's New Mexico." *Revista de História Da Arte / Journal of Art History*. Life Outside the Canon (2020).

Souto de Moura, Eduardo. "An 'Amoral' Architect." *9H*, no. 2 (1980): 12.

Varela Gomes, Paulo, ed. *Points de Repere: Architectures du Portugal*. Brussels: Fondation pour l'Architecture, 1991.

Varela Gomes, Paulo. "Arquitectura Nao Alinhada." *JA Jornal Arquitectos*, no. 200 (2001): 4–9.

Wilson, Chris. *The Myth of Santa Fe: Creating a Modern Regional Tradition*. Albuquerque: University of New Mexico Press, 1997.

**Lines of Action and
Readymade Stones:
Lev Rudnev's Monument to
the Victims of the Revolution¹**

Markus Lähteenmäki

“Petersburg streets
possess one indubitable
quality: they transform
passers-by into shadows”

Andrey Bely, *Petersburg*, 1913²

“The one who was nothing,
will become everything.”

The Internationale³

2 Andrey Bely, *Petersburg*, trans. R.A. Maguire and J.E. Malmstad (Bloomington: Indiana University Press, 1978), 22.

1 The monument has later been also referred to as the Monument to the Fighters of the Revolution.

3 “Кто был ничем, тот станет всем.” The Internationale translated into Russian by Arkady Kots was the national anthem of Soviet Russia 1918–1944. Translations from Russian to English author’s throughout unless otherwise noted.

4 Michał Murawski, “Actually-existing success: economics, aesthetics, and the specificity of (still-) socialist urbanism,” *Comparative Studies in Society and History* 60, no. 4 (2018): 907–937.

5 Eric Naiman, “Introduction,” in *The landscape of Stalinism: the art and ideology of Soviet space*, ed. Evgeny Dobrenko, E. A. Dobrenko, and Eric Naiman (University of Washington Press, 2003), xi–xvii (xiv). Other important sources of inspiration and points of reference to this study include: Katerina Clark, *Petersburg, crucible of cultural revolution* (Cambridge: Harvard University Press, 1995) and: Katerina Clark, *Moscow, the fourth Rome* (Cambridge: Harvard University Press, 2011).

6 Nancy Stieber, “Space, time, and architectural history,” in *Rethinking architectural historiography*, ed. Dana Arnold, Elvan Altan Ergut, and Belgin Turan Ozkaya (London: Routledge, 2006), 171–182, 179.

Introduction – Approach and Contexts

The architecture of the Soviet Union has often been deemed as a failure, incapable of answering the needs of the system, unsuccessful in creating its own specific space to contribute to the revolutionary process and new political system.⁴ In this, I will contend otherwise. Taking my cues from recent histories of the Soviet Union turned to space and the study of “spatial dynamics of ideology” to use Eric Naiman’s words,⁵ as well as from what Nancy Stieber has called architectural history’s strength and need to “reinsert formal analysis of the visual into the problematic of social space,”⁶ I will closely study a specific monument in order to elucidate the spatial and formal qualities and mechanisms of architecture to take part and advance the revolutionary process in Russia during the year of revolutions of 1917 and soon after. Focusing on the Monument to the Victims of the Revolution by Lev Rudnev, tracing its history of design, construction, the meanings related to it, its roles in revolutionary festivities and its formal and spatial qualities, I will show how it singularly and specifically played an important role in spatially and formally constructing and articulating revolutionary myths and ideals during the early years of the revolution, and how it more generally exemplifies the ways in which art and architecture took part in the revolutionary process. I analyse the monument both as an important early project that acted as a model for future monuments as well as an example of some tendencies and mechanisms of Russian revolutionary art that go beyond debates on specific styles or idioms of art.

I chart the lines along which architecture can be political and take part in processes of modernization, the quality of these lines as marks on the ground as much as lines of action on and above ground. I question the possible relationships of these lines to the surrounding city as well as the people that inhabit it, their bodies and actions through which architecture and its meanings can be performed.

Before starting with the story of the monument itself, I will briefly layout key contexts for my discussion. Firstly, setting the monument within the context of the debates in between the “left” and “right” artists, as the Futurists and other Modernists, and the traditionalists were respectively called at the time, will allow me to discuss the complex questions of modernity and revolutionary ideology in relation to architectural form. I will show how modernity and revolutionary ambitions were not only related to the forms considered “Modernist” by the historiographies of architecture, but how in particular in the quintessentially neoclassical city of St. Petersburg, rethinking of the “classical” could prove equally, if not more, powerful than the disruptive means of “Modernism” in reinventing and dismantling the spatial and formal power structures related to the city, its architecture and its myths, and in forging new ones. Another key context for this discussion is the revolution. I will consider the monument in the context of the history of Russian revolutionary movement and the events in which it culminated in 1917. I will explore the context of the myths the revolution carried with it, fulfilled and created, and in particular the myths of “the demonstration” and “the strike”. If not already before, since the beginning of the 1905 revolution on the Bloody Sunday of January 9⁷ when striking demonstrators were met with bullets on St. Petersburg’s Palace Square, these myths were solidified as the foundational pillars and motivational forces of the Russian revolutionary movement. According to Marshall Berman, the “demonstration of January 9 is a form of modernity that springs from Petersburg’s distinctive soil.”⁸ It summoned together and made visible the shadows of the city who had been pushed to the fringes and into its huge industrial zone that by 1905 circled the city, into attics and basements of the crammed courtyards of the city centre, now to demand simply recognition of their human value. Such dynamics and duality had been a running theme in the city’s literary tradition for a long time and perhaps most powerfully embodied in Dostoyevsky’s antiheroes and the “underground man,” but it was in January 1905 as the demonstrators took to the streets in St. Petersburg, and following that all around the country, that this demand materialised and the myth figured in real flesh and space of the city. This experience and its representations engraved the strike and demonstration, the occupation of public space and the public sphere as its extension as the essential myth of the Russian revolution. I contend that this was also essentially present as a motive force in the design of public space and monuments following the revolutions of 1917.

Berman’s notion quoted above also mentions the third essential context for my discussion: the city itself and its “distinctive soil”. Since its founding by its namesake Peter I, Petersburg essentially acted as an extension of the emperor’s body. Its neoclassical edifices, palaces and monumental squares

7 The dates used are according to the calendar in use at the moment referred to. The Gregorian calendar was in use in Russia until February 1918, when the days 1–13 were dropped out. To illustrate: the October revolution took place on October 23 1917, but its anniversaries were celebrated on November 7.

8 Marshall Berman, *All that is solid melts into air: The experience of modernity* (New York: Verso, 1983), 251.

9 See chapter: Michael Cherniavsky, "The Sovereign Emperor," in *Tsar and People: Studies in Russian Myth* (New Haven and London: Yale University Press), 72–100, in particular 84–90.

10 Yuri M. Lotman, *Universe of the Mind: a Semiotic Theory of Culture*, trans. Ann Shukman (Bloomington: Indiana University Press, 1990), 202.

11 Bely, *Petersburg*, 22.

strongly represented and embodied imperial power and the state apparatus, which in Russia, even more than in the rest of Europe, were inseparable in their perception.⁹ Not only was the image of the emperor embodied in the city, but Petersburg's reality at large is particularly inseparable from its myth and literary "text", prompting one of the most notable authors on this myth, Yuri Lotman to characterize the city as "a place where semiotic models were embodied in architectural and geographical reality".¹⁰ This means that in many ways the physicality of the city is inseparable from a set of meanings given to it in literature and lore, its "myth", its "text"—something true perhaps for any city, but particularly so for Petersburg. From Pushkin's poems to Dostoyevsky's or Gogol's stories, Petersburg is a city where the life of its inhabitants takes place under the duress of strong and severe monuments and architecture representing power. This is the city that Andrey Bely describes as one whose "streets possess one indubitable quality: they transform passers-by into shadows" in his quintessential modern depiction of the city and iteration of its myth.¹¹ In Bely's novel set in the turmoil of 1905 and first published in 1913, a group of anarchists plot against the figures power. These anarchists, and the "shadows" of the city more generally, inhabit its fringes—the suburbs on the islands, the basements and attics. In the novel the only result of the anarchists' plot is a small vacuum, a temporary movement of the figure of power. And so it was with the revolution of 1905, it achieved some temporary freedoms and changes, but resulted into little in the long run. Yet it had forever changed the perception of the space of the city as a site for the shadows to become flesh and reverse the order of the city. The space of city was left changed, no longer innocent, but charged with a new potential.

I will analyse the lines along which the Monument to the Victims of the Revolution reflects and articulates these tensions in the space of the city and how it filled this charged space after the revolution turned things upside down. Asserting the myth of the city and the meanings that so strongly relate to its architecture as an essential context for the design, I will show how the monument dismantles the power-structures related to Petersburg's "distinctive soil" and how it spatially fused the myths of the city to those of the revolution. Tracing the marks on the ground as well as the lines of action through which these myths materialised and were performed, I will elucidate the spatial dynamics of ideology as well as the ideological poetics of the Russian revolution.

The Story of the Monument

The story of the monument begins in February 1917 when, exhausted by the World War and sick and tired of the monarchy, the people of Petersburg

12 The name of St. Petersburg was "russified" at the outset of the First World War in 1914 and again renamed as Leningrad in January 1924. I will use the name used at the time spoken about, but use "Petersburg" when speaking of the city in general.

13 For a good descriptions of the events, see: Orlando Figes, *A people's tragedy: A history of the Russian revolution* (New York: Viking, 1997), 339–345.

14 Figes, *A People's Tragedy*, 348.

15 For the minutes and reports of other debates on the topic at the Petrograd Soviet, see: *Petrogradskij sovet rabochikh i sodatskikh deputatov v 1917 godu: dokumenty i material'y*, vol 1. (Leningrad: Nauka, 1991) 91, 143–146, 151–152, 158, 180–182, 193–194, 196, 230, 242–244, 257–258.

16 Clark, *Petersburg*, 57–65.

17 A.A. Smirnova, "Natsional'ni'e pokhorni'e zhertv Fevral'skoy revoliutsii i deiateli russkoy kul'turi," 28. Boris Kolonitskij, *Simboly vlasti i bor'ba za vlast'* (St. Petersburg: Liki Rossii, 2012), 48; Il'ya Orlov, *Traur i prazdnik v revoliutsionnoy politike Tseremoniia 23 marta 1917 g. V Petrograde* (St. Petersburg: Smolny Institute, unpublished MA dissertation, 2007).

18 V.P. Lapshin, *Khudozhestvennaya zhizn' Moskvyy i Petrograda v 1917* (Moscow: Sovetskiy Khudozhnik), 78; On the commission in general, see op. cit. 74–100.

renamed Petrtoograd some years earlier,¹² once again took to the streets. This time, after a week of demonstrations and clashes, and after the army took the side of the people, the monarch gave in and abdicated the throne on March 3.¹³ The promise of the myth had been fulfilled. The people on the streets got their recognition and freedom, the city and the country were theirs as the Provisional Government seized power in order to establish a democracy. But what happened to the city itself now that it had been taken over, how did the new rule figure in its spaces? Stripping down and destroying monarchic symbols had been an important feat of the revolution itself,¹⁴ and marking the victory in public space continued right after the seizure of power, as within days a decision was made to bury the victims of the revolution in the centre of the city. The monument that is the topic of this article is the monument that marks these graves, but there were still steps to be taken before the monument could be built. The site was heavily debated at the Petrograd Soviet, a democratic forum that had existed since the aftermath of the 1905 revolution and was revived and reinforced by the February revolution. Here, the high came in touch with the low as cultural elites clashed with the regular people, workers and soldiers.¹⁵ The first was largely dominated by a group of men aptly titled by Katerina Clark as "Preservationists", who harnessed a cult of "Old Petersburg" and to whom cherishing and reviving the classical image of the city had already been their leitmotif for two decades.¹⁶ The latter were the people previously pushed away to the fringes, to whom the city represented an image of oppression and dominance rather than that of purity. The Palace Square advocated by the workers as the central open space of imperial power and the symbolic scenery of the tragedy and sacrifice of the Bloody Sunday in 1905 was selected as the site of the burial, but the decision was reconsidered and eventually overruled because the Preservationists thought the historic space and its architecture should not be interfered with and the existing ensemble would not allow a new monument to be built there.¹⁷ Instead, the self-assembled commission of arts headed by Maxim Gorky, but manned mostly by the Preservationists such as the artists Alexander Benois, Mstislav Dobuzhinsky, the architect Ivan Fomin and the opera singer Fyodor Shalyapin,¹⁸ proposed two alternative sites: the square in front of the Kazan Cathedral, and the Field of Mars, the latter of which was eventually chosen.

Located a stone's throw away from the Palace Square and part of the sequence of the central monumental spaces of the city, this square might not have been symbolically as powerful a site as the Palace Square, but it was a fine second: as the parade grounds of the military it was a key space of the power of the empire, but it was also here, where the earliest shots of the February revolution had been shot, and it was the soldiers of the adjacent



1

19 See: V. S. Izmozik and N. B. Lebina. *Peterburg sovetskij «novyj chelovek» v starom prostranstve. 1920-1930-e gody* (St. Petersburg: Kruga. 2010), 72–76.

20 Izmozik and Lebina, *Peterburg*, 76.

21 As far as is known, the drawings have not survived but the minutes of the meeting have a detailed and lively description of them. See: *Petrogradskij sovet*, 243–244. For another account of the event, see: Alexander Benois, diary on 10.3.2020 (23.3. new style), available online on <https://prozhitto.org/> (accessed on 7.11.2020).

22 Figes and Kolonitskij, *A People's Tragedy*, 31.

23 Smirnova, "Natsional'ni'e pokhorni'e" 27.

1 A postcard showing the burial in Petrograd on March 23, 1917.

barracks of the Pavlovsky Regiments who were the first to shift their allegiances to the revolution's side during the February days. Moreover, the site had not only a military but also a civilian and civic history: it had especially, since the late 19th century, acted as a site for fairs and celebrations as well as recreational activities, hosting an ice skating rink during winters and various seasonal festivities round the year.¹⁹ There had also been plans to place the building for the parliament—the Duma—on this site since it was established in 1906, and even an architectural competition had been organized towards this end in 1913.²⁰ These were also the arguments for the site as presented by the cultural commission: the graves of the victims of the revolution could here be joined by a new house of parliament to be built on the field, and together they would form a new monumental ensemble commemorating the Russian revolution, its victims and heroes, dedicated to the new power. The argument was presented to the assembly of the Soviet by the architects Ivan Fomin and Lev Rudnev with large drawings featuring a fantastic proposal where the graves were joined to the parliament by monumental porticoes with galleries of sculptures.²¹ Even if driven by preservationist ideals, such a proposal also illustrates the fact that the empty field did better work as a space to project the future fantasies and aspirations of the revolution. Even if marking and rededicating the Palace Square with the graves might have been a more powerful gesture towards taking over the old, the empty space of the Field of Mars allowed building something new that not only symbolically, but also actively took part in building the future society. With this decision the Field of Mars was to become “the main public space of commemoration, the altar of the cult of revolution” to use the words of the historians Orlando Figes and Boris Kolonitskij, and the contours and lines that made this altar could be drawn more freely.²² The first act towards this end was the burial itself. [1]

It took place on March 23, 1917. Evoking references to French revolutionary festivals, also staged on Paris' Field of Mars from 1790 onwards, the burial took the form of a massive march with hundreds of thousands of people taking part. The event evoked and rehearsed the myths of the strike and demonstration translating them into a practice of building a future society. The choreography of the burial was planned to follow the lines of action of the demonstrations, with large groups of people moving from a set of important places in the suburbs of the city, such as the sites of major factories. Lev Rudnev, the young architect who had presented the fantastic plans for the site's future with his teacher Ivan Fomin was put in charge of the decorations for the event.²³ They were made in a rush, simple and consisted of red flags, which had become the main symbol of the revolution and coffins painted red playing a leading role together with improvised banners.

More important was the action itself, turning the mythical tools of the revolution—the strike and the demonstration—into a celebration that would turn the city itself inside out, permanently rendering it anew. The movement of the people from the suburbs to the centre and the laying of the victims to rest on the Field of Mars turned this central space of the city into a permanent reminder and monument to the new order. The space was no longer charged with the tensions of oppression or marked with blood, now it was charged with and marked by the free presence of the people. Alexandre Kollontai, then a representative of the Social Democratic Labour Party, and later an influential Bolshevik, wrote about the event on the day: “Today sees the completion of the first stage of the revolution, the stage which consists of the destruction of the old.” According to her, now it was the time to “hurry” in order to “create the new!” Her words bear witness to the fact that the burial of the victims played a double function, firstly, it solidified and permanently marked a victory and the new type of presence of the people in the centre of the city. On the other hand, the event also defined a referential point: the graves were a re-enactment of something that had been, but they were also a beginning and the rehearsal for something new, a first step towards the creation of a new reality. This was something that had also been reflected in the debates about the site of the burial as Maxim Gorky’ had spoken for the Field of Mars as the site to build a new Bolshevik culture and for a series of new revolutionary festivals.²⁴ These dynamics were also to be reflected in the monument itself: it was to be an altar, but also a stage—to set the foundational lines towards building a new culture, not only through actual building, but also through action and performance.

24 Petrogradskij sovet, 193-194.

25 Timeline and factual notions about the project are based on a description given in: *Iz Istorii*, 206; and chapter in the book that gives a general description of the site, its history and the surrounding buildings: V. S. Shvarts, *Arkhitekturni’j ansambl’ marsova polja* (Leningrad: Iskusstvo, 1989), for the post-revolutionary developments, see 159–180 and: Izmozik and Lebina, *Peterburg sovetskiy*, 67–100.

Readymade Stones

The competition for the monument organised shortly after the burial was won by Lev Rudnev, with a proposal titled *Readymade Stones* (“Gotovye Kamny”).²⁵ Writing about the monument in 1935, Rudnev described its genesis in reference to the event of the burial in March 1917:

“Standing in the square, I saw thousands of proletarians passing, saying goodbye to their comrades, and each organization, each factory leaving their banners, sticking them into the ground. I got an image—again, from all over the city, inspired by one feeling, the proletarians of Leningrad brought with them blocks of stone adding plaques with heroic inscriptions on suitable places. That was it. The idea had been



2



3



4

26 "Стоя на площади, я видел, как тысячи пролетариев, проходя, прощались со своими товарищами, и каждая организация, каждый завод оставлял свои знамена, втыкая их в землю. У меня возник образ - так же со всех концов города, воодушевленные одним чувством, пролетарии Ленинграда привезли камни-глыбы и на соответственных местах поставили плиты с героическими надписями. Вот и все. Идея найдена. Никаких колоннад, никаких сооружений в виде пропилеи. Решение дал первый порыв чувства, простой, но сильный." Lev Rudnev, "Tvorcheskij otchet," *Arkhitektura SSSR*, no. 6 (1935): 31. Reproduced in: *Mastera Sovetskoy Arkhitektury*, vol. 1, 518. See also: *Arkhitektor Rudnev* (Moscow: Gos.Iz. literatury po stroitelstvu, 1963).

27 V. Khazanova, *Iz istorii sovetskoy arkhitektury 1917-25: dokumenty i materialy* (Moscow: Izdatel'stvo Akademii Nauk, 1963), 206. In an early phase, also marble slabs from the Winter Palace garden were considered (Izmozik and Lebina, *Peterburg*, 96.)

29 Smirnova, "Natsional'ni'e," 30.

28 For a manifestlike outline of the vision, see: Alexander Benois, "Zhivopisniy Petersburg," *Mir iskusstva* 7 (1902): 1-5. See also: Clark, *Petersburg*, 58-60.

found. No colonnades, not building any propylaea. The decision gave a first blow of feeling—simple, but strong.”²⁶

His proposal reflects and translates this vision into a permanent monument. The monument consists of simple, rough granite blocks stacked on top of the graves stepping up in four layers forming in their section a flat ziggurat. In plan they make four straight angles forming a monumental open square in the middle of the field. The gables of each of the L-shaped blocks have a large cubic block the height of the whole monument and are elevated on two capital-like forms that support them at each corner. The gables are adorned by short poems written by the minister of enlightenment of the new administration Anatoly Lunacharsky. The granite blocks used in the monument—the “readymade stones”—were exactly that, granite from the foundations of the neoclassical Imperial Salt Magazines designed by one of the Preservationists’ favourite architects Jean-Francoise Thomas de Thomon in 1805–07 and demolished in 1914.²⁷ The form of the staggered stones marking the corners of a square presents a simple, austere interpretation of a classical order based on platonic solids and simple tectonics. It refers to the experiments of French revolutionary architecture, but also offers a genuinely new and inventive reinterpretation of the classical idiom in a similar spirit to Peter Behrens’ German Embassy completed in Petersburg a few years earlier—a new, rethought and abstracted classical architecture. [2-4]

The monument on one hand appeased and executed the ideals of Rudnev’s preservationist peers in resonating with their vision of St. Petersburg: it subtly and quietly embraced, reflected and reiterated its characteristic horizontality, severeness and austerity—the key qualities attributed to the city by the preservationists.²⁸ The Society of the Architects-Artists in charge of the competition had directly outlined that the monument should be “simple in its character, without any monumental structures”.²⁹ Thus, the form of the monument can be seen as an articulation of the vision of the city’s characteristics as it was seen by the dominant preservationist circles while also seeking to formally create a new kind of monument arising from these principles. On the other hand, the form of the monument can be construed along the lines of the myth of the demonstration itself. The symbolism of the readymade stones, moved from the fringes to the centre, as Rudnev himself emphasized, rehearses the lines of movement of the workers making the idea of the demonstration and the inversive promise of the revolution an inherent part of the monument. Moreover, the use of the granite blocks, so essentially related to Petersburg’s imperial past as a kind of spolia, shows an appropriation of the imperial heritage, repurposing and taming the city as an extension of the imperial body. The third distinctive quality of the monument

2-4 Postcards depicting completed the monument. ca. 1920s–1930s.

30 “Не жертвы – герои / лежат под этой
могилой / не горе а зависть / рождает
судьба ваша”. Original written in stone.

31 Smirnova, “Natsional’ni’e,” 28–29.

32 Shvarts, *Arkhitekhiy*, 175–176. The assassination of Uritsky was taken very seriously and the Palace square was renamed after him and now as Uritsky Square from 1918–1944. The burried also included, among others, six leaders of the Finnish Communist Party who were shot by a other Finns in a competing fraction of the party in Petersburg in 1920 in the so called “Kuusinen Club incident”. An exhaustive description of the individual burials is given by: Izmozik and Lebina, *Petersburg*, 85–96.

33 Izmozik and Lebina, *Petersburg*, 83.

was its open form, reflected both in its plan and in the form of the staggered stones themselves. In both qualities the monument makes a distinctly open gesture, one that makes space and gestures potentiality. The open nature and the quality of gesturing and creating space rather than closing or imposing a monumental presence on space, together with its “foundational” and “corner-stone-like” quality, signify the possible rather than the past or the existing. It takes the forms and the materials of the past and translates it into the potential of the new system. The open character of potentiality is further reflected in the poems written by Lunacharsky for the gables of the stones. “No victims—heroes / lie beneath this grave / not grief but envy / gives rise to your fate”³⁰. More than just an altar, the monument rightfully usurped the past and acted as an open arena for defining the future. Yet it took years for the monument to be finished. In the meantime, it was through celebration, action and performance that the site and the monument became perceived as meaningful. In them, the lines imagined on the paper and marked on the ground by the graves, were turned into lines of action that rendered the space of the city anew.

Performing the Monument

Already when arguing for the placing of the graves on the Field of Mars instead of the Palace Square, Maxim Gorky had spoken of the potential of the graves on the Field of Mars to turn the site into a centre for a new culture of the proletariat, a space for festivals, concerts and celebrations—to which one of the workers had cried in reply: “instead of a pile of rubble, the great uprising needs a foundation”.³¹ This meaning—the monument as a foundation for the uprising—was perceptually etched into the site via the massive celebrations regularly taking place there. It was one of the main sites for the celebrations of the first large revolutionary festival to follow the February revolution and the event of the burial itself—the First of May in 1917—and for all subsequent revolutionary festivals after the October Revolution. The construction of the monument began in the spring 1917, but only the foundations were completed. Although the monument had been conceived to commemorate the victims of the February Revolution, it was soon after the October revolution, when the Bolsheviks seized power from the Provisional Government, that it became a general revolutionary monument. Burial of several martyrs of the October revolution and the civil war that followed, including well-known party functionaries such as Moisei Uritsky after his assassination in 1918, solidified its status as a revolutionary pantheon³² and the use of the site itself for inspections of the officers of the Red Army laid a further claim to the space.³³ But it was during the revolutionary festivities

that its meanings were made most visible as it was temporarily completed and reimagined in different forms. These decorations gave Rudnev, who was in charge of the decorations of the site for most of the festivities, a possibility to rehearse, experiment and play with the monument and its meanings.

In an article titled “The Immediate Tasks of the Soviet Government” written in March-April 1918, Lenin outlines that now the Bolsheviks have “convinced” (*ubedit’*) Russia, “won the rich for the poor, from the exploiters for the working people”, and now the task is to move to “the principal task of administration” (*upravliat’*, highlights are Lenin’s).³⁴ This meant re-organizing production, the state and the economy, and moving from convincing with words and promises to convincing with actual deeds. “A certain amount of time will inevitably pass before people, who feel free for the first time” Lenin wrote, “will understand—not from books, but from their own *Soviet* experience—will understand and *feel*” the revolutionary ideals and measures. There is an ambiguity to what Lenin refers to here. On one hand, it is the lived experience of the new system through which people will feel the new freedom, but, as the new system was still being developed and the on-going civil war was interrupting everyone’s lives, the project of “convincing” went on but was enhanced with a focus on feeling. This further evokes Lenin’s dual conception of media that he had already outlined in his 1902 pamphlet *What is to Be Done*,³⁵ making a divide between the “agitator” and the “propagandist”—the first focusing on oral propagation to the masses and the latter on written argumentation directed to the urban middle classes.³⁶ It was in the festivals and other means to make the new order visible and felt in public space, a venue where the agitator could meet the propagandist and convincing could meet feeling. The public space of the city taken over by the revolution served as the site and means to bring the words to the surface—to the skin—and as such turned them into visceral sensations proffered by the new system. The festivals as re-enactments and physical rehearsals of the myths of the revolutions served just that: together with Lenin’s Plan for Monumental Propaganda, which outlined a project erecting monuments to revolutionary heroes in public space, and with the projects of the *Rosta* state news agency to turn shop windows and public space at large into displays of posters, pamphlets and other state propaganda, the public space was hence saturated with information that could both be read and felt.

The beginning of the process of re-imagining the city as a socialist one and as a site for both propagation and agitation were outlined in a decree “On Monuments to the Republic” on April 12, 1918.³⁷ It set forth the ambition to purify the space of the city of imperial monuments, and a call for new ones together with revolutionary festivals beginning on the First of May 1918. The plan clearly joins the massive action and performances with

34 V.I. Lenin, “The Immediate Tasks of the Soviet Government,” published on April 28, 1918 in Pravda No. 83 and Izvestia VTsIK No. 85; Published according to the text of the pamphlet: N. Lenin, *The Immediate Task of the Soviet Government*, 2nd ed., Moscow, 1918, collated with the manuscript. Source: Lenin’s Collected Works, 4th English Edition, Progress Publishers, Moscow, 1972 Volume 27, pages 235-77. Accessed through: <https://www.marxists.org/archive/lenin/works/1918/mar/28.htm>. Russian version: “Ocherednye Zadachi sovetskoy vlasti,” *Lenin: Pol’noe sobranie sochineniy*, vol. 36, 165–208.

35 Lenin, *Collected Works*, vol. 5 (Moscow: Foreign Languages Publishing House, 1961), 347–530. Also available on Marxist Internet Archive: accessed 7.11.2020, <https://www.marxists.org/archive/lenin/works/1901/witbd/>.

36 Frank Ellis, “The Media as Social Engineer,” in *Russian Cultural Studies*, ed. C. Kelly and D. Shepherd (Oxford: Oxford University Press), 192-222 (198).

37 “Decree of the Soviet of People’s Commissars, ‘On Monuments of the Republic,’” translated in: *Street Art of the Revolution*, 39. In Russian in: *Dekrety Sovetskoy Vlasti*, vol. 2 (Moscow, 1958), 95–96.



5

38 Ibid. The former translates "chuvstv" as "moods" but I think "feelings" is better fitting.

39 Lunacharsky "Lenin o Monumental'nom Propagande," *Literarnaia Gazeta*, no. 4–5 (1933). Reproduced in: *Lunacharsky, Vospominaniia i Vpechatleniia* (Moscow 1968), 198–199.



6

40 TsGAKFD SPb, Gr-104. 1.5.1918 on Field of Mars. Photo by Bulla.

41 *Velikaia godovsh'ina proletarskoy revoliutsii* (1918), 14.

42 "List of places to be decorated in Petrograd, compiled by the Festival Committee for the First Anniversary of the October Revolution of the Petrograd Soviet of Workers' and Soldiers' Deputies," *Severnaja Kommuna* (Northern Commune), 23.10.1918. Translated in: Vladimir Pavlovich Tolstoy, Irina Mikhaylovna Bibikova, and Catherine Cooke, eds., *Street art of the Revolution: festivals and celebrations in Russia, 1918–33* (New York: Vendome Press, 1990), 69–70. "Report by the Petrograd Soviet," *Petrogradskaya Pravda*, no. 75, 25.4.1919. Translated in: Tolstoy, Bibikova, and Cooke, *Streetart*, 86–87.

5 A photograph showing the monument on the First of May, 1918.⁴¹

6 Natan Altman's decorations of the Alexander Column on Palace Square on the first anniversary of the revolution.⁴³

43 *Krasni'y Petrograd* (Petrograd: Gosudartvennoe izdateslto, 1919), 24.

a more permanent aim to render anew the space of the city. It serves as a vision to turn the city into a field of active political communication, the term "Monumental Propaganda" itself clearly describing the double aspect of the plan, the propaganda and the political message communicated on a monumental scale in the city. The decree shows how the performative, physical and permanent, as well as the convincing and feeling were to work hand in hand. The festival was not only a means to temporarily reimagine the city, but to also change it permanently, as part of it was "to replace inscriptions, emblems, street names, coats of arms etc.," continuing that the new ones should reflect both the "ideas" ("idey") as well as the "feelings" ("chuvstv") of the revolutionary Russia.³⁸ This mixing of the performative and the permanent and the feelings with the ideas worked with all the monuments to be erected. Lunacharsky later emphasized the importance of the unveilings of all monuments calling each a small revolutionary celebration of their own.³⁹ The new decree made the completion of the monument topical again, and with the new revolutionary festivities, it continued as one of the central sites for them to take place. Photographs from the celebrations of the First of May in 1918 show crowds of people gathered by the monument. Only part of the stones defining the first level of the monument are in place, the remainder of its lines marking the graves filled with spruce branches. In the middle can be seen a cubical ziggurat-like monument topped with flying flags, doubling as a tribune and podium, from where speeches were orated.⁴⁰ [5] These festivals turned the monument from a grave into an altar of agitation as it literally serves as the lines marking not only the graves, but organising the collective body of people and elevating them above the ground to be heard. They also gave Rudnev, who was put in charge of decorations for the Field of Mars during the first years of the revolutionary celebrations, to rehearse the form, qualities and meanings of the monument.⁴²

Besides the First of May, the anniversary of the October revolution was the most important day of celebration. During the first anniversary in 1918, the whole centre of the city was decorated with flags and canvases, stages and temporary structures hung and erected across the city. On Palace Square Natan Altman designed and inserted large geometric forms on top of arches, facades and most famously around the pedestal of the gigantic Alexander Column in the middle of the square. These cubist and futurist planes with geometric forms, staggering rhythms and collaged compositions sought to disrupt and contradict the lines that dominate the space of the city [6]. The form of Rudnev's interventions on the neighbouring square, which fulfil his still unfinished monument, on the other hand, worked with and along these lines in harmony. But, at the same time and while working with the old, he pushed towards something completely new. His decorations with the



7

44 The drawing is kept at the collections of the State Russian Museum in SPB and was exhibited at the exhibition "Iskusstvo v Zhizn' 1918–1925" (17 Aug – 27 Nov, 2017), but not included in the catalogue of the exhibition: Irina Afanas'eva, ed., *Iskusstvo v Zhizn' 1918–1925* (Petersburg: Palace Editions, 2017). Unfortunately, due to the Covid-19 outbreak, it has been impossible to order reproduction for this publication.

45 The drawing is reproduced in: V. E. Khazanova, *Sovetskaja Arkhitektura Pervoy Piatiletki Problemy Goroda Budushchego* (Moscow: Nauka, 1980), 162.

46 *Krasnyj Petrograd*, 24. See also another photograph, Archive of Kino-Foto Documents in St. Petersburg: TsGAKFD SPb, Gr-62826.

7 A photograph showing the built monument with during the first anniversary celebrations.⁴⁶

monument, quite literally growing behind them, not only reflects the horizontal lines that dominate the space of the neo-classical city, but essentially appropriates it, reinvents it and charges it with a new meaning. It joins the horizontal lines with the revolutionary idea of the collective body, the movement of the workers from the fringes and the inversive power of the revolution. This can be seen expressed as lines on paper in a general plan of the field sketched out by Rudnev in free hand for the decorations. It shows the interplay of the solidity of the monument, the corners of which are marked with black ink, and the free flow of people marked in light green watercolour with small black spots indicating the crowds within this flowing mass.⁴⁴ The strict geometry and the rigidity of the lines marking the four corners of the monument in the middle of the sheet together with the green flowing line of the crowd that naturally curves across the field, past the monument from one corner to the other spreading in two different paths across and along the river Neva, together complete the meaning of the monument. The flow of the crowd as well as the monument are highlighted and accentuated with red ink and watercolour marking the temporary gates, arches, flags and posters along the route of the crowds, an obelisk standing in the midst of the monument, and a temporary wall that surrounding it. The drawing seems to carry some of the aspirations that the temporary decorations, the planned monument, and the presence of the celebrating masses were to bring to the site. Its juxtaposition of the strict geometry of the monument to the joyous line marking the stream of people, the lightness of touch present in the watercolour to the dark ink, the different playful scripts of annotations around the drawing, the loose application of watercolour and the speed and the lightness of touch give the drawing an enthusiastic appearance where flow and movement meets solidity. These lines on paper representationally deliver a complimentary act to those on the ground as the monument is performed through action.

Another study by Rudnev for the same event shows the monument itself, surrounded by a temporary wall with an obelisk in the middle—its unfinished stone structure is turned into a wall of moving people. Action and the movement of the collective body of the people takes the place of the stones, rehearsing and underlining the point that the monument solidifies the presence of this body in the centre of the city, while also making a continuation of the present demonstrators to the victims and heroes' past revolutionary actions that lie in the graves beneath it.⁴⁵ [7] Even if so different in their form and allegiances, there seems to be a fundamental similarity in Rudnev's and Altman's decorations for the anniversary. They both employ artistic form and its spatial implications in facilitating a dynamism between

the newly empowered collective body of the workers and the imperial city, and this is the essence of the novelty of both of their works.

The monument's fulfilment came with its unveiling on the second anniversary of the revolution, where the symbolic act of the workers' movement from the suburbs to the centre was once again performed. This time the monument was not covered with temporary edifices, but now completed to its full height, was to be adorned and part of the festival as such. Poems written by Lunacharsky on each of the gables of the L-shaped blocks are an essential part of the monument. Photographs from the second anniversary of the revolution and the unveiling of the monument show that the texts were then painted and carved in their current form later.⁴⁷ The texts are the same, but their layout on the gables and the typograph is livelier in the painted versions—the height and size, shadowing, typography and spacing of lines varying greatly, whereas the carved poems have only some variation in the height of lines. The painted words dance in accordance with the rhythm of language and rhythm of movement, wanting to be read aloud and perceived as part of a dynamic experience, not merely as words carved in stone. They complete the monument as an altar and a tribunal—a stage for commemoration, oration and gathering of the crowds. They are an example of the way the early Soviet monuments sought to find a new synthesis of arts and to function on multiple levels of conveying revolutionary ideas. In fact, it was a deliberate part of Lenin's Plan for Monumental Propaganda that such poetry and slogans written by contemporary poets would be part of any monument erected as part of the plan as well as spread in the city on special plaques beyond monuments.⁴⁸ The idea was broadly embraced by the artists and poets alike and the monument here acts merely as one example, albeit perhaps the most powerful. When Vladimir Mayakovsky famously claimed on the front page of the journal of the Leftist artists *Iskusstvo Kommuny* (Art of the Commune) in early 1918 that “Streets are our brushes / Squares our palettes”, it expressed the same ethos—to take the arts and put them into the use in the space of the city, take over and redefine the city with art.⁴⁹

Similar thoughts can be seen in the contemporary actions of the Moscow Imaginist poets to rename the streets of Moscow as an act of poetry or make monumental paintings on the walls of the old city,⁵⁰ and across the cultural field at the time. What is essential, is that through the active role of artistic and architectural interventions, the city not only becomes a site for inventing the past myths and histories of the revolution, but also for defining its meaning in the present and in the future, through both *convincing* and *feeling*, through words and slogans as well as theatre, performance and rituals in-built in the form and idea of the monument.

47 TsGAKFD SPb, Gr-41326, Gr-4101. It is often said that Vladimir Konshevich was in charge of the placing and painting of the text on the Monument to the Victims of Revolution, and sometimes it added that Nikolay Ti'rsa too played a part. See e.g.: Khazanova, *Sovetskaia*, 160; V. E. Khazanova, *Iz istorii sovetskoy arkhitektury 1917–25: dokumenty i materialy* (Moscow: Izdatel'stvo Akademii Nauk, 1963), 206; and Sankt-Petersburg Encyclopedia <http://www.encyspb.ru/object/2805470579>, accessed 7.11.2020).

48 V.E. Khazanova, *Sovetskaia Arkhitektura Pervoy Piatiletki Problemy Goroda Budushchego* (Moscow: Nauka: 1980), 161–162; Khazanova, *Iz Istorii*, 132.

49 “Улицы—наши кисти, площади—наши палитры,” *Iskusstvo Kommuny*, no. 5 (Jan. 5, 1919).

50 Tomi Huttunen, *Imaghist Mariengof: Dendi. Montazh. Ciniki* (Moscow: NLO, 2007), 28–29.

Miraculously Modern

What then can we say about the formal and spatial politics and poetics of a monument, whose form on one hand seems to abide by the ideals of conservative preservationists dictated by ambition and vision of a classical Petersburg of bygone times, yet—as I have contended—serves as a crucial expression of revolutionary dreams? What can we say about the agency and intention of a monument built during one regime and adopted by another? The monument, in short, seems classical and accidental. At the same time, it clearly is “modern” in the sense Marshall Berman defines as the common ground of modernity and its works of art as something that are “moved at once by a will to change—to transform both themselves and their world—and by a terror of disorientation and disintegration”.⁵¹ Not only “modern,” but the monument is “revolutionary” too, embodying the revolution’s myths and its dynamic and forward moving nature. At the same time it is thoroughly classical with its form dictated by the idioms and forms of the surrounding imperial city. I contend that instead of making it weaker, this contradictory character makes it stronger as a monument to the revolution. Moreover, it is for these contradictions that it also so well can illuminate the history of the Russian revolutions and the formal and spatial implications of art related to them. After all, as Berman continues to state, that “to be modern is to live a life of paradox and contradiction”. I believe that the monument is a prime example of how modernity unfolded in the immediate years following the revolutions of 1917 on the “native soil” of Petersburg. It is, I contend, a vital expression of revolutionary ambitions and myths in that its shape, form and materiality, it symbolically and overtly embodies and expresses the foundational myths of the revolution, but also manages to offer a framework for building towards a future revolutionary culture and subject still somewhere in the future. It exemplifies the many ways rethinking urban space through art and architecture was an essential process of modernization, and how this process of modernization was not by any means always tied to what has later been titled “Modernist” architecture.

Setting the monument into the context of the debates on art that followed the festival decorations, as well as the monuments erected as part of Lenin’s Plan for Monumental Propaganda, will illuminate this further. Writing about the celebrations of the First of May in 1918 in the form of a debate between two fictional characters the artist Dobuzhinsky ironizes and summarizes the debates between the “left” and “right” artists. In the story, a “left” artist directs his words against the “right’s” love of the city’s historic image: “there is now a rebellion in art too against the hypnotic idea of “austere harmony” that has been so adored and extolled by poets and artists before us,”

51 Berman, *All That is Solid*, 13.

52 Mstislav Dobuzhinsky, "A bomb or a firecracker: a conversation between two artists," *Novaja Zhizn* (New Life), no. 93, May 4, 1918; translated in: Tolstoy, Bibikova, and Cook, *Streetart*, 51–53.

53 Kazimir Malevich, "Nerukotvornye pamjatniki," *Iskusstva Kommuny*, no. 10, 9.2.1919, 2. English translation: K. S. Malevich, "Monuments Not Made by Human Hands," in *Essays on art*, vol. 1 (Copenhagen: Borgen, 1968), 65–67.

54 Malevich, "Monuments," 67.

55 In the commentary of the Russian edition of Malevich's collected works Alexandra Shatskikh connects the use of this term to Pushkin's lines of verse engraved on the pedestal of a 1880 statue to him in Moscow. See: Kazimir Malevich, *Sobranie sochineniy v piati Tomakh*, vol. 1 (Moscow: Gilea, 1995).

something against which the "left", now with its interruptive and dynamic decorations, has "dropped a bomb". To this the "right" artist replies that the architecture is stronger and can stand against such action of "randomly sticking up patches and plasters" and dismisses the bomb merely as "a frog attacking an ox!".⁵² Rudnev's monument, by taking its form from the "austere harmony" of the surrounding city represents exactly what the "right" wanted—it intensified and reiterated the monumentality of the city to this new era. But, on the other hand, it comes close to some of the attitudes and ideas of the "left". Even if its form on the outside did not interrupt the visual idiom of the surrounding city, yet, through other formal, spatial and symbolic means, still dismantle and reconstruct the space and meanings of the city. Looking at another piece commenting on the Plan for Monumental Propaganda helps to understand this. In an article published in September 1919 and titled "Monuments Not Made by Human Hands" (*nerukotvorni'e monumenti'*) the important figure of the "left" arts Kazimir Malevich attacks the figurative sculptures and monuments built as part of the plan. Malevich writes that instead of simply conveying a likeness of the figures, the monuments should aim to convey the systems of thought and the lives of those figures.⁵³ For Malevich, "before the sculptor lies a system which must be turned into a monument".⁵⁴ In fact, this seems to be, in more than one way, exactly what Rudnev's monument does. Instead of imposing a hero or a figure, it offers a foundation, strong in itself and its symbolism, but most of all strong in encouraging and supporting the contemporary revolutionary life. Through abstraction, open gestures and appropriation, it turns the past into a potential for a revolutionary future. Rather than imposing a body of a singular hero in the form of a statue, it makes space for the body of the collective, expressing a system of values through spatial and formal gestures just like Malevich calls for. It does not enclose space with its presence, it seeks to re-define an open space meant to be filled with the presence of people.

The space it marks within itself forms a distinctive space, elevated by the monument into something extraordinary: an altar, a tribunal, a sacred space, a stage of the revolution delineated by the monument. This form is strengthened by the symbolism related to the stones and to the site itself as the graves of the heroes of the revolution and the idea of it as a collective effort, which also resonates with the title of Malevich's article. Malevich used the term "nerukotvorni'y" as a derogatory term,⁵⁵ but written in quotation marks, and given Malevich's often ambiguous use of language and his tendency towards a certain kind of mysticism, it also invites another connotation to the so called "acheiropoieta", or a tradition of miraculous icons not made by human hand, and like the statues he criticizes, often copied after one another. The idea of a the miraculous system of "archeiropoeita" also



8

56 Malevich, "Monuments," 67.

57 Malevich, "Monuments," 66.

58 Rudnev was an active participant in the artistic debates and member of the collegium on arts where many issues at this time was decided and which the journal where Malevich's above quoted article was published reported on. See e.g.: "V kollegii po delam iskusstva i hudozhestvennoj promyshlennosti," *Iskusstvo Kommuny*, no. 7, 19.1.1919., 4. It thus seems presumable that Rudnev also read the journal, which was the main public artistic platform of the time in the city.

59 Izmozik and Lebina, *Petersburg*, 9.

8 Postcard showing the monument from above with the park around it completed. ca. 1920s-1930s.

seems to strongly resonate with Malevich's ideas of monuments as conveyors of systems of belief themselves manifesting through a particular system of art, which, like he writes, should leave "no place for anything internal or individual," no explanations of this is how "I understood" the task.⁵⁶ Furthermore, these ideas strongly resonate with and obtain another, thoroughly modern translation in the idea of the Monument to the Victims of the Revolution as the miracle of god is replaced by a miracle of a collective effort. Behind the form of the monument lies a system which rethinks the classical idiom. Thus, the monument, in both form and meaning symbolically, and through active spatial gestures, embodies the revolution's myths and ideals and utilising reinvented classical idioms translates them into architectural form and into the space of the city. Through its form it replicated and enforced the message of the revolution's ideals while simultaneously making room for the actions that served to further define revolutionary politics and reality. Through a new formal system the monument reflects and embodies a parallel system of values and beliefs, "now turned to contemporary lived life" just as Malevich called for.⁵⁷ The similarities of Malevich and Rudnev don't solely remain in the ideas of a new kind of monument that elevates life itself on the pedestal instead of images of heroes, but the simplified form of Rudnev's monument, and its attempt to establish a new order, also bears a similarity to Malevich's architectural experiments, which similarly sought to create a "new order" for architecture based on abstract, platonic forms. There is no recorded interaction between Malevich and Rudnev, although they undoubtedly were aware of each other, and coming from the very different sides of the artistic field, opposed to one another's views.⁵⁸ But rather than a question of influence, it serves as evidence that similar processes of modernity were unfolding through monuments of both "classical" and "Modernist" formal means; similar revolutionary mechanisms can be seen at play behind and beyond the formal means of expression themselves.

The story of the monument continues beyond the first years of the revolution covered in this article. Half-a-year after its unveiling, during the first Soviet "subbotnik"—a voluntary Saturday of work—sixty thousand plants were planted on the square surrounding it by thousands of volunteers completing the Field of Mars as a park, and once again revealing the performative and miraculous power of the collective.⁵⁹ The design of the park, done by Ivan Fomin, is a combination of classical rigidity emulating the form of the city around it, but notably, the wider pathways that break its symmetry follow exactly the light green water colour line on Rudnev's designs for the festive celebrations, and make the facilitating of the collective body a clearly visible aspect of the design. In this completed form the site continued to serve as the "altar of the revolution" and the site for revolutionary

festivities for decades to come. It also became one of the iconic sites and emblems of the city, reproduced in numerous postcards and books on the city. The principles it established with its reinvented classicism used to make space for the collective body of workers had long-lasting impacts as similar approach can be seen repeated in numerous Soviet monuments that followed it. Moreover, it has here revealed unexpected similarities between “classical” and “Modernist” interventions in the city. Even if different in their visual idiom, during the early period following the October revolution, the idea of architectural and artistic form as an active facilitator between the city and the newly empowered collective body of the workers, was at the heart of rethinking the city. Art and architecture actively took part in articulating and constructing the myths of the revolution, forging shared ground for a new revolutionary culture and subject to come. This often took place when looking for new kinds of synthesis in the space of the city, joining through lines on paper—whether lines of verse or designs for action or monuments—translated and materialized into inscriptions on the ground and in stone, made stronger through the lines of action that they play a part in.

The purpose of this article has been to show that Rudnev’s monument represents a particular kind of revolutionary modernity borne upon the soil of Petersburg during times of revolution. The monument draws a line on the square rededicating it and making space to the collective body of the workers. This reflects and replicates the horizontality of the surrounding city, but lowers the cornice into a pediment, forming a foundation for another future. It marks a space within, a space for oration, a space for performance, and charges the surrounding space, transforming it into space for anyone. It’s simple but severe form re-calibrated the relationship of the city’s forms with its people, modernized it, revolutionized it, turned it inside out, abstracting and dismantling the myths and power related to it through its idea and form. If the classical form of the city once turned the passers-by into shadows, now, appropriated, rededicated and reinvented, the strong horizontal lines instead make them seen, heard and felt, giving them a body with weight, turning those who were nothing into those who were everything.

Bibliography

Afanas'eva, Irina, ed. *Iskusstvo v Zhizn 1918–1925*. Petersburg: Palace Editions, 2017.

Arkhitektor Rudnev. Moscow: Gos.Iz. literatury po stroitelstvu, 1963.

Bely, Andrey. *Petersburg*. Translated by R.A. Maguire and J.E. Malmstad. Bloomington: Indiana University Press, 1978.

Benois, A. N. "Zhivopisniy Petersburg." *Mir iskusstva* 7 (1902): 1–5.

Berman, Marshall. *All that is solid melts into air: The experience of modernity*. New York: Verso, 1983.

Cherniavsky, Michael. *Tsar and People: Studies in Russian Myths*. New Haven and London: Yale University Press, 1961.

Clark, Katerina. *Moscow, the fourth Rome*. Cambridge: Harvard University Press, 2011.

Clark, Katerina. *Petersburg, crucible of cultural revolution*. Cambridge: Harvard University Press, 1995.

"Decree of the Soviet of People's Commissars, 'On Monuments of the Republic.'" Translated in *Street Art of the Revolution*, 39. Original in *Dekrety Sovetskoy Vlasti* (Moscow, 1958), vol 2. 95–96.

Ellis, Frank. "The Media as Social Engineer." In *Russian Cultural Studies*, edited by C. Kelly and D. Shepherd, 192–222. Oxford: Oxford University Press.

Figes, Orlando. *A people's tragedy: A history of the Russian revolution*. New York: Viking, 1997.

Huttunen, Tomi. *Imazhinist Mariengof: Dendi. Montazh. Ciniki*. Moscow: NLO, 2007.

Izmozik, V. S., and N. B. Lebina. *Peterburg sovetskiy: «novyj chelovek» v starom prostranstve. 1920–1930-e gody*. St. Petersburg: Kriga, 2010.

Iskusstvo Kommuny. Petrograd: Otdel Izobrazatel'ni'kh Isusstv Komissariata Narodnogo Prosveshcheniy, 1918–1919.

Khazanova, V. E. *Iz istorii sovetskoy arkhitektury 1917–25: dokumenty i materialy*. Moscow: Izdatel'stvo Akademii Nauk, 1963.

Khazanova, V. E. *Sovetskaia Arkhitektura Pervoy Piatiletki Problemy Goroda Budushchego*. Moscow: Nauka, 1980.

Krasni'y Petrograd. Petrograd: Gosudartvennoe izdatesl'tvo, 1919.

Kolonitskij, Boris. *Simvoly vlasty i bor'ba za vlast'*. St. Petersburg: Liki Rossii, 2012.

Lapshin, V.P. *Khudozhestvennaya zhizn' Moskvi' i Petrograda v 1917*. Moscow: Sovetskiy khudozhnik, 1983.

Lenin, V.I. "The Immediate Tasks of the Soviet Government." Published on April 28, 1918 in Pravda No. 83 and Izvestia VTsIK No. 85; Published according to the text of the pamphlet: N. Lenin, *The Immediate Task of the Soviet Government*, 2nd ed., Moscow, 1918, collated with the manuscript. Source: *Lenin's Collected Works*, 4th English Edition, Progress Publishers, Moscow, 1972, vol. 27, 235–77. Accessed through: <https://www.marxists.org/archive/lenin/works/1918/mar/28.htm>. Russian version "Ocherednye Zadachi sovetskoy vlasti" *Lenin: Pol'noe sobranie sochineniy*, vol. 36. 165–208.

Lotman, Yuri M. *Universe of the Mind: a Semiotic Theory of Culture*. Translated by Ann Shukman. Bloomington: Indiana University Press, 1990.

Lunacharsky, Anatoly. *Vospominaniia i Vpechatleniia*. Moscow, 1968.

Naiman, Eric. "Introduction." In *The landscape of Stalinism: the art and ideology of Soviet space*, edited by Evgeny Dobrenko, E. A. Dobrenko, and Eric Naiman, xi–xvii. Seattle: University of Washington Press, 2003.

Malevich, K.S. *Essays on art*. Copenhagen: Borgen, 1968.

Malevich, Kazimir. *Sobranie sochineniy v piati tomakh*. Moscow: Gilea, 1995.

Murawski, Michał. "Actually-existing success: economics, aesthetics, and the specificity of (still) socialist urbanism." *Comparative Studies in Society and History* 60, no. 4 (2018): 907–937.

Orlov, Il'ya. "Traur i prazdnik v revoliutsionnoy politike Tseremoniia 23 marta 1917 g. V Petrograde." MA dissertation, St. Petersburg: Smolny Institute, 2007.

Petrogradskij sovet rabochikh i sodatskikh deputatov v 1917 godu: dokumenty i material'y. Vol 1. Leningrad: Nauka, 1991.

Rudnev, Lev. "Tvorcheskij otchet." In *Arkhitektura SSSR*, no 6, 1935, 31. Reproduced in *Mastera Sovetskoy Arkhitektury*, vol. 1.

Shvarts, V.S. *Arkhitekturny ansambl' marsova polja*. Leningrad: Iskusstvo, 1989.

Smirnova, A. A. "Natsional'ni'e pokhorni'e zhertv Fevral'skoy revoliutsii i deiateli russkoy kul'turi." *Vestnik SPBGIK*, no. 4. (2016). Accessed 7.11. 2020. <https://cyberleninka.ru/article/n/natsionalnye-pohorony-zhertv-fevral'skoy-revoljutsii-i-deyateli-russkoy-kulturny>.

Stieber, Nancy. "Space, time, and architectural history." In *Rethinking architectural historiography*, edited by Dana Arnold, Elvan Altan Ergut, and Belgin Turan Ozkaya, 171–182. London: Routledge, 2006.

Tolstoy, Vladimir Pavlovich, Irina Mikha lovna Bibikova, and Catherine Cooke, eds. *Street art of the Revolution: festivals and celebrations in Russia, 1918–33*. New York: Vendome Press, 1990.

Velikaia godovsh'ina proletarskoy revoliutsii. 1918.

Re-Drawing Javanese Building Practice

David Hutama Setiadi

Drawing Through Colonization: Epistemic Imposition

According to Rosalind E. Krauss, the notion of the new in the art field is epitomized by the Avant-Garde Movement. In *The Originality of the Avant-Garde*,¹ Krauss argues that the movement disrupts traditional art by imposing the existing structure with a new structure of reality. An originality. The disruption is not only a revolt against tradition and an absolute dissolution from the past but a literal origin, a beginning from ground zero.² “Only he is alive who rejects his convictions of yesterday.” pronounced Kazimir Malevich, the Russian avant-garde artist and theorist.

To conduct their mission, the avant-garde artist conceives this notion of originality from a ground of repetition and recurrence. The prominent instrument that emerges from such operation is the grid. The grid operates in silence, and yet, is hostile to any narrative. Its presence destroys hierarchy and centre.³

The Grid is one of the most effective and common instruments for drawing a new structure, to conceive an “an originality.” James C. Scott in *Seeing Like a State*⁴ argues that such utilitarian logic works hand in hand with labour productivity in colonization.⁵ Nevertheless, instead of artists, the proponent of this agency is a society of which Scott called “the high-modernist society”. This society embraces technology and science as their world view and way of life. They might not have good literacy and familiarity with science and/or technology. Yet, they have a strong belief that both are the only way to be progressive and modern. Therefore, according to Scott, instead of practical intervention, the exercised imposition is an ideological one.⁶

The new lines of colonization are drawn by imposing another world view or system of knowledge—an epistemic imposition. Such imposition, in the context of colonization, operates similarly with the case presented by Kraus. “Modern” is a politicized term embedded with the notion of new, especially within colonization,⁷ it is also the Avant-garde’s propaganda of Originality. The colonist deemed to displace the existing structure of subjugated land as a disruption signifier between the old way and the new way.

This redrawing operation in the context of colonization comes in various forms. Rudolf Mrazek called building projects as the Tower, recalling

1 Rosalind E. Krauss, *The Originality of the Avant-Garde and Other Modernist Myths*, Paperback ed. (Cambridge: MIT Press, 1986).

2 Ibid., 6.

3 Ibid., 7.

4 James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*, Veritas paperback ed. (New Haven: Yale University Press, 2020).

5 Ibid., 61-2.

6 Ibid., 4-5.

7 Fredric Jameson, *A Singular Modernity: Essay on the Ontology of the Present* (New York: Verso, 2013), 17-8.

- 8 Rudolf Mrázek, *Engineers of Happy Land: Technology and Nationalism in a Colony* (New Jersey: Princeton University Press, 2002), 41.
- 9 The area of the Dutch East Indies was approximately 50 times larger than that of the Netherlands. See: Nusa D. Lombard, Jawa: *Silang Budaya* (Jakarta: Gramedia Pustaka Utama, 1990), 12.



10 Eric Hobsbawm and Terence Ranger, eds., *The Invention of Tradition* (Cambridge: Cambridge University Press, 2012).

11 Hobsbawm defines "Inventing Tradition" as "a process of formalisation and ritualisation, characterised by reference to the past..." He further elaborates that the Inventing Tradition instrumentalises a set of practices commonly ordered by obviously or tacitly rule, a ritual or symbolic nature to imply continuity with the past. In other words, the Inventing Tradition uses historical past as a platform to insert new practice. See: *Ibid.*, 1.

1 Comparison between the area of the Netherlands (left: white area) and the Malay Archipelago (right: white area). Source: Author.

their function as a landmark of Modernity; As an edifice, the monumentality of a building is the strong voice of colonization as a project. Therefore, establishing good buildings and cities are inevitable to claim the success of a project.⁸

In the case of the Dutch East Indies, to impose this new structure the Dutch encountered a significant challenge. The vast area of the archipelago and completely different climate and geography were two hurdles overwhelming the agenda.⁹ However, another factor that contributed to the rough process of Dutch colonization was that it could be perceived as ad-hoc ventures.

Approximately 350 years in the history of Dutch ventures in the Malay Archipelago, trading was the only agenda. The archipelago was the "gold mine" for the Netherlands, especially in the 19th century. This fact set an internal obstacle to shifting their trajectory from a mere trading enterprise to a more holistic and programmatic venture-like Colonisation. Notwithstanding the intricacy of the history of Dutch colonization in the Malay Archipelago or the Dutch East Indies, discussion about the matter is beyond the scope of this discussion.

The coming of architects to the colony at the beginning of the 20th century CE was a prominent intervention in the context of establishing a new structure in a colony. The differences in climatic conditions and topography staged a pursuit among Dutch architects to conjure new practices. Additionally, different systems in the field of construction between the Dutch and the indigenous population made the situation far from easy.

In this essay, I aim to discuss two modes of epistemic imposition that was exercised by Pont and Karsten on Javanese building practice. As part of the endeavour of establishing a new way of architectural practice in the Dutch East Indies, both architects reinterpreted the Javanese Building practice to serve their interests. In this reading operation, epistemic imposition takes place.

The Epistemic Imposition and the Mētis

Erik Hobsbawm in *the Invention of Tradition* asserts that not all so-called traditions we know today are old.¹⁰ Many were invented not too long ago. Such operation is crucial to prevent extreme disruption in a society when new meanings are introduced. Hence, an invented tradition uses forms or attributes from the past as a vehicle to impose a new structure.¹¹

In this sense, an invented tradition works like that of the Grid of the Avant-Garde or James C. Scott's epistemic imposition operates as a framework to instil a new reality. However, not all of these interventions worked

12 Scott, *Seeing Like a State*, 4.

13 *Ibid.*, 22.

14 Hobsbawm and Ranger, *The Invention of Tradition*, 1-2.

15 Scott, *Seeing Like a State*, 315.

16 *Ibid.*, 313.

17 *Ibid.*, 315.

18 *Ibid.*, 317.

smoothly and successfully. Scott argues that in terms of colonization, such displacement operation often meets as failure. The primary reason for this failure is due to the inability of the colonist to grasp the existing knowledge of the indigenous people in the colony.¹² Scott frames epistemic imposition as a reactionary attempt to comprehend the illegibility of indigenous knowledge, or *Mētis*.¹³

Metis as a type of knowledge operates differently.

If the episteme operates by structuring and organizing information into a coherent system, *Metis* operates by unifying the information into a singular entity. This nature of *Metis* echoes Hobsbawm's concept of custom. According to Hobsbawm, the custom is the actual engine of a community. Custom is a pack of accumulative integrative knowledge which is inherited from one generation to another. If the custom is still embraced by society, they would have an ability to adapt and adjust themselves throughout changes. Hence, variants, as an effect of adaptability, are expected in custom.¹⁴ According to Scott, *Mētis* has four characteristics:

1. *Mētis* cannot be simplified into deductive principles because the environments in which it is exercised are complex and non-repeatable (each occasion is a unique case).¹⁵
2. *Mētis* is a knowledge and practice, which demonstrate in a procedure that requires hand-eye coordination and a capacity to make an appropriate adjustment, as necessary.¹⁶
3. *Mētis* lies in the space between the realm of genius, to which no formula can apply, and the realm of codified knowledge, which can be learned by rote.¹⁷
4. The knowledge and practice of *Mētis* are always local.¹⁸

Javanese building practice is also inseparable from Javanese cultural custom. To exercise the practice, a complete comprehension of Javanese cultural custom is necessary.

The Javanese Building Practice as the *Mētis*

This section briefly explains the Javanese cultural custom as a form of *Metis*. Elaborating upon Javanese building practice as a part of Javanese cultural custom serves to clarify the existing system of the indigenous practice. This elaboration will help us understand later in what way Dutch architects re-drew this system for their interest.

Sri	(the Goddess Sri)	house	(V)
Kitri	(garden)	pavilion, social hall	(II)
Gesa	(the God Ganesa)	mosque, prayer house	(III)
Layu	(work)	kitchen	(III)
Pitah	(broken)	stables	(IV)
Sri	(the Goddess Sri)	house	(V)

The association of God's virtue (first and second column) with location in a house (third column).

East	silver	Legi	(I)
South	surwasa, pitchbeck	Pahing	(II)
West	gold	Pon	(III)
North	iron	Wage	(IV)
Centre	platinum	Kliwon	(V)

The association of wind directions (first column) with type of metals (second column) and market days (third column).

Legi	East	all-encompassing	takes on all tasks	(I)
Pahing	South	greedy	wants everything	(II)
Pon	West	flaunting	wants to show off high possessions	(III)
Wage	North	tight	unbending	(IV)
Kliwon	Centre	a speaker	eloquent	(V)

The association of five market days (first column) with the wind directions (second column), and characters (third and fourth column).

2

19 Th. G. Th. Pigeaud, "Javanese Divination and Classification," in *Structural Anthropology in the Netherlands: A Reader*, ed. P. E. de Josselin de Jong (Dordrecht: Foris Publications, 1983).

22 Pigeaud uses the term "correspondences" to explain by which the Javanese structures their knowledge. Ossenbruggen echoes Pigeaud explanation elaborating that the Javanese creates their system of knowledge by which he called as "the Organization of Perception." See: *ibid.*, 66. See also: Ossenbruggen, "Java's Monca-Pat: Origins of a Primitive Classification System," 35-45.

24 Theodore G. Th Pigeaud, *Literature of Java: Catalogue Raisonné of Javanese Manuscripts in the Library of the University of Leiden and Other Public Collections in the Netherlands*, vol. 1, ed. Land-en Volkenkunde Koninklijk Instituut voor Taal and Bibliotheek Rijksuniversiteit te Leiden (The Hague: Martinus Nijhoff, 1967-1980), 15.

20 F. D. E. Van Ossenbruggen, "Java's Monca-Pat: Origins of a Primitive Classification System," *ibid.*

21 Pigeaud, "Javanese Divination and Classification," 64.

23 Pigeaud, "Javanese Divination and Classification," 75-7.

25 *ibid.*, 2. Discussion about Serat and Kawruh see: Revianto B. Santosa, "Tentang Risalah Bangunan: Sekilas Tentang Tradisi Tekstual Arsitektur Jawa Pada Masa Kolonial Akhir," in *Simposium Nasional Naskah Arsitektur Nusantara: Jelajah Penalaran Reflektif Arsitektural* (Surabaya: Fakultas Teknik Sipil & Perencanaan ITS, 1999), 88, 90.

2 Tables of some Javanese associative knowledge system that is compiled by Th. G. Th. Pigeaud. Source: Th. G. Th. Pigeaud, "Javanese Divination and Classification," in *Structural Anthropology in the Netherlands: A Reader*, ed. P. E. de Josselin de Jong (Dordrecht: Foris Publications, 1983), 65, 67, 71.

26 Santosa, "Tentang," 90-2.

Javanese cultural knowledge has been discussed by Th. G. Th. Pigeaud in *Javanese Divination and Classification*¹⁹ and F.D.E. van Ossenbruggen in *Java's Monca-Pat: Origins of a Primitive Classification System*.²⁰ Pigeaud noted that Javanese cultural knowledge is an illegible knowledge for the Western scholar. In Western worldview, knowledge or episteme operate through data categorization and organization. Hence, knowledge is apprehended as a system of structured information.²¹

According to Pigeaud and Ossenbruggen, Javanese cultural knowledge is another form of structured information.²² The problem in comprehending Javanese cultural knowledge is the preconception of the notion of "structured" where it tends to refer to data organization that is ordered hierarchically.

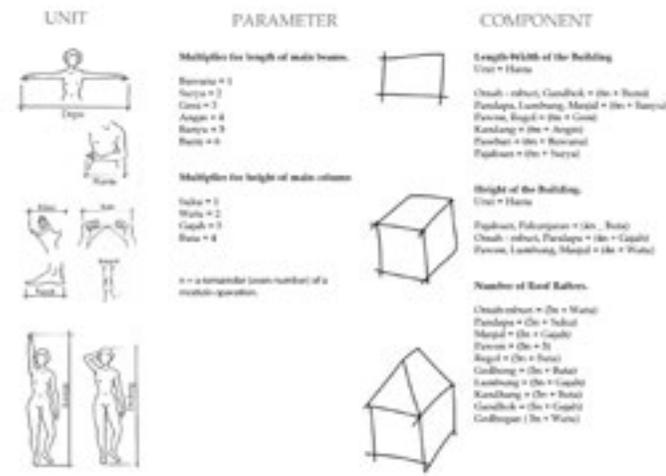
Both scholars argue that Javanese knowledge is built upon association. Hence, it is a completely different nature from that of the episteme of the Dutch. If the episteme structures information by demarcating, the Mētis structures information by inclusion and integration. Therefore, Javanese cultural knowledge works also as a cosmological view; it connects all matters from the ideological matters to everyday life practices [2].²³ Dissemination of Javanese cultural knowledge is an oral tradition. The knowledge is passed from one generation to another, one person to another through a specific event or an exclusive ritual.²⁴ In short, the nature of knowledge is always elite and never for the public.

In the 19th century CE, the Javanese court began to transcribe this oral-based knowledge into a written one. Generally, there are three main written forms produced in the period: 1. *Primbon* (large compilation of cultural prose), 2. *Serat* (poetry), and 3. *Kawruh* (educational/practice manuals).²⁵ *Primbon* is considered as the main source. It compiles all the knowledge and guidance to many occasions and incidents in Javanese everyday life. Slightly different from that of *Primbon*, *Serat* addresses a relatively specific subject in forms of tales or poems. What is considered as Javanese building knowledge is written in a form of *Kawruh*.

Javanese building practice is integral to Javanese cultural knowledge. In this sense, building practice is just one way to apply cultural knowledge within everyday life. *Serat Centhini* is considered the earliest written form that elucidates such knowledge. Another written form that is commonly referred for this subject is *Kawruh Kalang*. Nevertheless, principally both are espousing similar information. Their differences are in the kind of language style that was used. The former is written using Javanese high language, meaning it is written only for a very educated society or aristocratic circles. The latter, on the other hand, is written using Javanese low language or everyday language implying the document is for practical use.²⁶



3



4

27 In the *Kawruh Kalang* (1882), the knowledge of building practice begins with describing type of trees—their practical benefit and cultural values, types of roofs, and concluding guidance to implement the associative structure for the building practices. See: Scott Robertson, “Significant Pavilions: The Traditional Javanese House as a Symbolic Terrain,” Appendix D (Sidney: University of NSW, Australia, 2012).

30 Josef Prijotomo, *Petungan: Sistem Ukuran Dalam Arsitektur Jawa* (Yogyakarta: Gadjah Mada University Press, 1995), 98.

3 Illustration of Javanese associative knowledge system from tables in [2]. Source: Author.

4 Figure 4. Application of the formula above in calculating building components. Unit is part of a user’s body that is used to calculate the ‘n’. The parameter is the ‘p’ value. Source: Author.

31 *Ibid.*

32 *Ibid.*, 104-5.

33 *Ibid.*, 108.

34 *Ibid.*

Resembling the Javanese cultural knowledge based on associative structure are *Serat Centhini* and *Kawruh Kalang*, which organises the knowledge in that system. All practical information would require having a specific associative value for justifying its practical usage.²⁷

In the worldview of a Javanese person, a building is not merely a shelter but also a spiritual sanctuary, as was evident particularly in the *Kawruh Kalang*. The Javanese carpenter/builder applies a special method, which Pigeaud called “a numerical divination calculation”, to ensure that the house’s construction is in sync with the cosmic order.²⁸

The *Petungan*, the Javanese word for this method, assigns a numerical value (*Pasaran*) as an index for every aspect of life—for instance, site, colour, wind direction, materials, and many others. Pigeaud explains that by using *Petungan*, the inhabitant can make predictions about events in their everyday experience such as when to marry, when to harvest the rice, and the like. Ossenbruggen corroborates Pigeaud’s explanation, also mentioning that *Petungan* is also applied to determine the venue and day of communal markets. It thus works as a medium that integrates daily life into the cosmic order, including the marking of time [3].²⁹

In constructing a building, the *Petungan* works by integrating a numerical value derived from the future owner—obtained usually by measuring a particular part of their body, such as hand or foot—with other relevant *Pasaran* values. Using this information, the relation between length and width, or the height of the timber columns, or the number of rafters required could be identified [4]. Joseph Prijotomo summarises from many Javanese building practice manuscript this operation as follows:³⁰

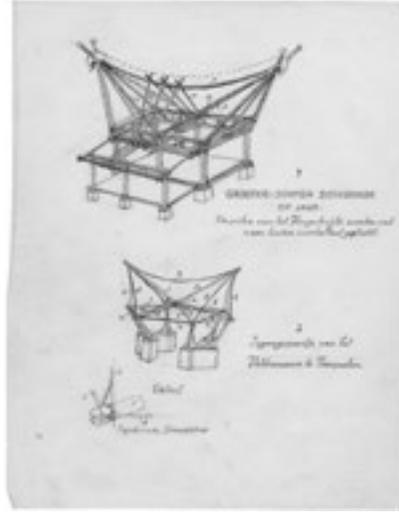
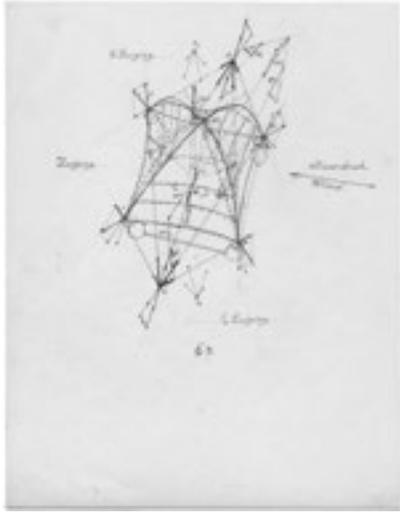
$$Y = Xn + p$$

“x” is a specific constant value (3, 4, 5, or 6) for each of the main construction components.³¹

“n” is a remainder (even number) of a modulo operation. The total length of a timber beam is divided by number obtained by measuring the owner’s hands/feet. The remainder of this calculation is “n”.³²

“p” is a registered value/parameter relating to that particular room or building function and rank.³³

Thus, for instance, an “x” value of 6 is used to produce the dimensions for width and length, an “x” value of 4 gives the height of the columns, and the “x” value of 5 determines the number of roof rafters. Some typical “p” values were 3 for a *Pawon* (kitchen) or *Regol* (a small house with a porch door) and 4 for a *Kandang* (stables).³⁴



7

7 Structural calculations for 'Indies Gothic' as contained in Maclaine Pont's 1951 essay on 'Equilibripetal Construction'. Source: Maclaine Pont Archive at Het Nieuwe Institute, Rotterdam, Netherlands.

39 Maclaine Pont noted that such a principle was not unknown in European engineering. Formula for calculating beams using that method could be found in common engineering handbooks; this made it even more intriguing that such suitable earthquake-proof construction method was not used by most of the Dutch architects and engineers in the Dutch East Indies. According to Helen Jessup, prior to using the constructional system in Trowulan, Maclaine Pont had built a few prototypes in the yard of his house. See: *Ibid.*, 45–6.

44 Herman Thomas Karsten was born in the Netherlands on 22nd April 1885 and came to be acknowledged as a deep thinker by his colleagues. Karsten studied at TH Delft between 1905 and 1909.

38 Pont, "Javaansche Architectuur," 47.

40 *Ibid.*, 47.

41 *Ibid.*, 52.

42 Helen Ibitson Jessup is probably the earliest scholar who studies extensively about colonial architects and architecture of the Dutch East Indies. Her MA Thesis at the Courtauld Institute of Art in 1975 examines works of the architect Maclaine Pont, a critical figure in the development of Dutch colonial architecture in Dutch East Indies. She expanded the study for her PhD dissertation at the same institution in 1988. Although these works are unpublished, Jessup has written many papers and essays about this matter.

43 Based on a list in the Maclaine Pont Archive at the het Nieuwe Insituut, he lodged 4 patents for this research in America (Inverted Gothic no. 2.545.556, 20th March 1951; Web Building no. 2.592.465, 8th April 1953; Ballfoot Columns no. 2.705.928, 12th April 1953; and All-Prefab Rafter Principals, patent applied under serial number 342.879) and also a further 2 patents in Canada (Ballfoot Columns no. 515.637, 16th August 1955; and All-Prefab Rafter Principals, patent applied for under serial number 644.530).

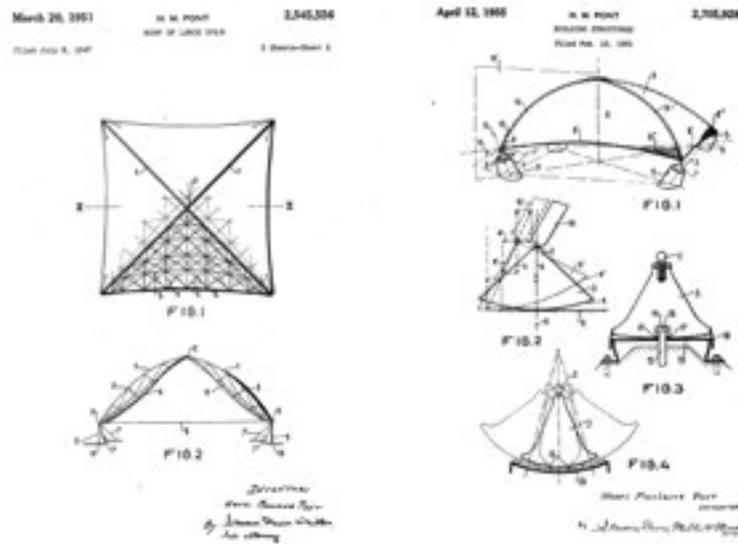
would need to be—whereas in Javanese construction, it was possible within certain limits for all beams to have the same weight irrespective of their span.

2. In the Javanese house, the timber columns were distributed outwardly in a specific order, playing a vital role in managing the deflection of the timber beams above caused by tensile force. The distance between columns affected the flux of tensile force in these beams: if the force was increased too much, then the potential deflection was reduced, hence making the structural system work ineffectively; whereas if the force was too low than the potential deflection rose and, consequently, the induced tensile force spiked in the beams above. Therefore, by carefully managing the distance between columns, the tensile force could be kept approximately equal.³⁸

Using these observations, Maclaine Pont argued that this tent-like Pendopo construction was highly suitable for a place like the Dutch East Indies where storms and earthquakes were common phenomena.³⁹ Given this, the flexible and relatively lightweight timber structural system made dwellings more durable in facing shocks from natural forces.⁴⁰ Maclaine Pont thus concludes that Javanese construction was “unnatural” (tegennatuurlijk). What he meant was that its tectonic system worked in contradiction to Western building logic which relied upon heavy, bulky and unyielding forms for its stability. In their alternative approach, Javanese houses achieved structural stability by using the opposite method to European building practices. Maclaine Pont called the system Inverted Vault Construction (Omgekeerde Gewelfbouw).⁴¹ He formulated two types of roof construction: the first he called “Equilibripetal”, or “Indies Gothic”, and took the form of a cupola-shaped tension structure; while the second typology was the aforementioned traditional gable roof, or the “Great Sunda” roof [7]. Helen Jessup⁴² concludes that the engineering principles of these experimentations led to Maclaine Pont’s cupola experiments, thus becoming the basis for the design of Equilibripetal roofs for which he planned to apply for the patents [8].⁴³

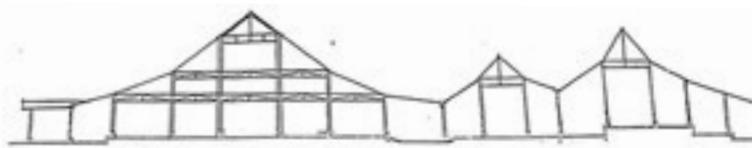
Re-Drawing 2: Javanese Architecture as a Social Place Maker

Herman Thomas Karsten’s⁴⁴ first direct interaction with traditional Javanese architecture was when commissioned to renovate the living areas for the Mankunegaran Royal Court in Surakarta. His main task for the Mangkunegaran Royal Court was to renovate its main Pendopo. Prince Wedono wanted to enlarge this space so he could invite more people and organise



8

45 Helen Ibbitson Jessup, "Netherlands Architecture in Indonesia 1900–1942," (London, UK: Courtauld Institute of Art, 1988), 230. See also: Joose Coté and Hugh O' Neill, eds., *The Life and Work of Thomas Karsten* (Amsterdam: Architectura & Natura Press, 2017), 221–43.



9

8 Figure 8. (Left) Pont's patented detail for Large span roof structure. (right) Pont's patent for Building structure. Source: Pont, Henri Maclaine. "Roof of Large Span." edited by United States Patent Office. US, 1951. & Pont, Henri Maclaine. "Building Structures." edited by United States Patent Office. US 1955.

9 Figure 9. Diagram showing the articulation of floor levels to maintain the desired proportions of the gallery spaces in the palace. Source: Helen Jessup, *Netherlands Architecture In Indonesia 1900–1942*, 1988.

46 Jessup, "Netherlands Architecture in Indonesia 1900–1942," 270.

47 Herman Thomas Karsten, "Van Pendopo Naar Volksschouwburg," *Djawa*, no. 1 (January–April 1921).

better events. There was no precedent in vernacular dwellings to have such a wide-span structure, especially perusing traditional materials. In his design, Thomas Karsten used the approach common to Dutch architectural practice, albeit carefully controlling the ambience, colour, and the palette of materials so that they "fit in". Karsten urged that the traditional symbolism in Javanese architecture—as expressed in ornamentation, colour and proportion—had to be maintained so as not to lose the core characteristics of the spaces.

Karsten's sensitivity to this connection between spatial proportion and its effect on social practices was well demonstrated in his design for the palace's galleries. He did not want to make these galleries look too low after they had been extended to provide the necessary additional space for Prince Wedono's parties. Yet, improving the proportion of the galleries by raising their ceiling height would then create a distraction from the *Dalem* (the inner court)'s hierarchical status as the most sacred place within the complex. With this problem in mind, Karsten suggested lowering the floors of galleries by 30 centimetres—it was an alteration that solved the issue of visual hierarchy and at the same time it created a more harmonious relationship between the levels of the inner section of the Agung Pendopo [9] and its surrounding areas. The involvement of Thomas Karsten in this project was not merely concerning architectural matters. A letter dated 13th September 1920 implies that he was also choosing tiles, fabrics, lamps, carpets, furniture and even the type of ornaments—not to mention designing the gardens in the courtyard that enclosed the palace compound.⁴⁵

"Wisselwerking (Interaction)" between a building and its given program was always the key aspect in Karsten's projects, as exemplified in the Sobokarti Theatre in Semarang [10]. This theatre was part of an initiative of the Java Institute, an organisation that he had founded to propel the modernisation of Javanese culture. In a letter dated 9th May 1919 from Thomas Karsten to then the ruler of the state Mangkunegaran, Mangkunegara VII, his eclectic approach was noticeable:

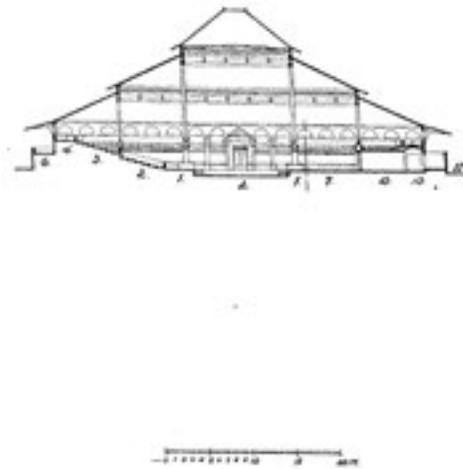
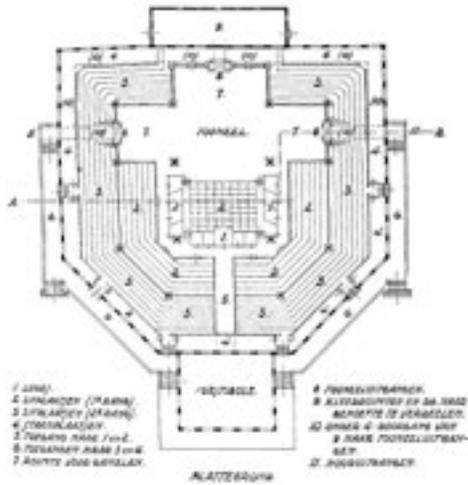
"... I have an idea about building a Javanese theatre, space for the Javanese, in a way, that feels good... [and] can listen to the gamelan, watch wayang: seated, sheltered, with a good view, with a scene, set not in European but in Javanese style. The Pendopo is the place one should proceed for such a building"⁴⁶

Karsten elucidated his concept of the project in an eight-page essay, "Van Pendopo naar Volksschouwburg (From Pendopo to Folk Theatre)".⁴⁷ As in many countries, a theatre in the Dutch East Indies had always been seen as



48 Ibid., 21.

10



11

49 Ibid., 24.

50 Ibid., 23–4.

51 Ibid., 24.

52 Ibid., 25.

10 The main entrance to the Sobokarti Theatre, Semarang, as seen in 2103. Source: Author.

11 The conceptual plan and the section of the Sobokarti Theatre. Source: Herman Thomas Karsten, “Van Pendopo Naar Volksschouwburg,” *Djawa*, no. 1 (January–April 1921): 21–9.

a social space where people interacted: “it was a spiritual expression of the life of a society’, in Karsten’s words. Each class in society had their form of theatre, therefore, it was in theatre design that architecture worked best as a facilitator between the play and society, between fiction and reality. Accordingly, a social and political function was always inherent in a theatre building.”⁴⁸

This characteristic of a theatre prompted a sense of architectural experimentation for Karsten; he hoped it would provide a place to unify all people in the Dutch East Indies, and thus a place where all classes could meet. The traditional form of the Javanese Pendopo was chosen for two reasons. Firstly, Karsten argued that Pendopo was the most original feature of traditional Javanese architecture, therefore, he used the form that would connect emphatically with all its people. Secondly, the use of the Pendopo layout offered an open spatial configuration that would be suitable for many Javanese plays [11].⁴⁹

Karsten argued that there were three main distinctions between a typical Western theatre and a Javanese theatre. Firstly, in a Western theatre, the separation between the performance space and the audience was always clearly defined, whereas in a Javanese theatre they were inseparable. Secondly, in a Western theatre, the play could generally only be seen from a singular frontal direction, whereas in a Javanese the play was visible from all sides. Thirdly, in terms of staging a play, the Western theatre tended to play with a sense of depth on the stage, but in a Javanese production, it played more with the width thereof.⁵⁰ According to Karsten, this spatial distinction was due to the cultural differences that formed varied perspectives on how to appreciate theatrical plays.

In other words, in Western theatre there was a clear distinction between the fictional and the real, engaging a specific social behaviour among the audience. During the play, all the attention was on the stage and to the individuality of the spectators was diminished. Hence the interplay between fiction and reality occurred in the intervals between acts.⁵¹

Instead, Javanese theatre—which in his writings Karsten generalised as Eastern theatre—there was a conception of the separation between fiction and reality. The tangible and the intangible were all seen as part of reality. During the play, the audience became a part of it, and vice versa; an interaction between the two realms was anticipated. Therefore, as Karsten pointed out, Eastern theatre encouraged the audience to embrace the play in a personal and intimate way.⁵²

Thomas Karsten further experimented with this idea of “interaction” in his design for the Johar Market in Semarang, a design constituting three reinforced concrete buildings placed next to one another in a linear



12

12 Photograph from 2013 of the Johar Market (Pasar Djohar) in Semarang. Source: Author.

arrangement. Each of these two-storey blocks had a rectangular plan with an elevated, almost-flat deck. Inside there was a vast void along the centre of the block connecting both its floors, thus enabling a multi-layered interaction between market traders and customers, or between one trader and another.

The structure was supported on a series of “mushroom” concrete columns [12]. Cross-ventilation was achieved by placing openings in the roof and jalousie-screen windows in the upper storey. Configuring the interior space in this way, Karsten said he wanted to reconstruct the informal atmosphere of a traditional Javanese market that typically happened in an open-air field. The insertion of the mezzanine enabled vertical separation that split the “dry” and the “wet” areas in the market for the sake of hygiene.⁵³

Conclusion: Re-Drawing Javanese Building Practice

Maclaine Pont and Thomas Karsten believed that indigenous buildings in the archipelago were the key sources to establish a suitable architectural practice in the colony. Both had a deep interest in Javanese building and culture although each had specific interests on the subject. Notwithstanding their appreciation towards Javanese culture and practice, what they construed was an appropriation. Pont and Karsten compartmentalized Javanese building practice and opted to the parts they thought could benefit their usual practices. Given this, both complied with Scott’s supposition about the nature of high-modernist society. Their undertaking on the Javanese building practice was an act of miniaturization. According to Scott, miniaturization, like that of the Avant-Garde’s grid, enforces a new reality on a complex object; to generalize and deconstruct the illegible one. While the grid empowers repetition as a rationalistic system, miniaturization operates by disintegrating the object into autonomous categories (i.e. structure, function, and form).

Maclaine Pont’s scrutiny of Javanese tectonics broadened the ground for discourse on indigenous building practices throughout the archipelago. His studies helped redefine Javanese architecture into a suitable subject also for European audiences. Maclaine Pont’s emphasis on structural analysis served to compartmentalize Javanese buildings into neutral, disconnected parts. The building structure was consequently uselessly presented as a separate layer to that of the cultural layer, meaning that, instead of embracing a deeper knowledge of Javanese architecture.

Thomas Karsten tried to utilize traditional Javanese vernacular architecture to construct a syncretic meeting of indigenous and European building practices. Karsten’s interest in the social aspect of architecture tended however to make his designs more conceptual and abstract as part of his efforts to reinvent New Indies Architecture. For Karsten, Javanese architecture

53 Herman Thomas Karsten, “lets over De Centrale Pasar,” *IBT Locale Techniek* 7, no. 2 (1938).

is an embodiment of the Javanese social construct—to organize rituals and everyday activities.

The appropriations by Pont and Karsten drew a different picture of Javanese building practice. Like the artists of Avant-Garde described by Rosalind E. Kraus, Pont and Karsten redrew the Javanese building practice into a new “drawing”. The epistemic imposition was conducted by both architects. Both architects undoubtedly brought new meanings and practices to local building practices, although in the end what they did were essentially similar in that they theorized and objectified Javanese architecture without allowing Javanese people to voice their views on the matter.

Nevertheless, Scott added that miniaturization might happen due to the inherent complexity of the nature of indigenous knowledge or *Mētis*. As Scott further explains, the only way to comprehend *Mētis* is through keen observation and rote. It is a knowledge that is mastered through embodiment. It is a time-consuming learning process. Therefore, such nature is a complete contradiction to the fast-paced capitalistic system that was underpinned by episteme.

Accordingly, from the vantage point of the colonist, this epistemic imposition was inevitable and even considered as a noble venture. By conducting such endeavours, they reinvented the Javanese practice. Their writings, presentations in various events had transformed the Javanese building practice into a Javanese architecture, a term that was more familiar to a broader European audience, especially the community of architects.

Hence, the Javanese architecture of Pont and Karsten was a product of reinvented tradition. Their interpretation and reconstruction of the Javanese building practices operated by subtracting and adding lines from the existing painting. The preconceived framework worked as a superstructure, as a grid, directing the new composition. As lines that mobilize distinction and construct direction.

Bibliography

- Jameson, Fredric. *A Singular Modernity: Essay on the Ontology of the Present*. New York: Verso, 2013.
- Jessup, Helen Ibbitson. "Maclaine Pont's Architecture in Indonesia." London: Courtauld Institute of Art, 1975.
- Jessup, Helen Ibbitson. "Netherlands Architecture in Indonesia 1900–1942." London, UK: Courtauld Institute of Art, 1988.
- Karsten, Herman Thomas. "Iets over De Centrale Pasar." *IBT Locale Techniek* 7, no. 2 (1938): 63–6.
- Karsten, Herman Thomas. "Van Pendopo Naar Volksschouwburg." *Djawa*, no. 1 (January–April 1921): 21–9.
- Krauss, Rosalind E. *The Originality of the Avant-Garde and Other Modernist Myths*. Paperback ed. Cambridge: MIT Press, 1986.
- Lombard, D. *Nusa Jawa: Silang Budaya*. Jakarta: Gramedia Pustaka Utama, 1990.
- Mrázek, Rudolf. *Engineers of Happy Land: Technology and Nationalism in a Colony*. New Jersey: Princeton University Press, 2002.
- Coté, Joost, and Hugh O'Neill, eds. *The Life and Work of Thomas Karsten*. Amsterdam: Architectura & Natura Press, 2017.
- Ossenbruggen, F.D.E. Van. "Java's Monca-Pat: Origins of a Primitive Classification System." In *Structural Anthropology in the Netherlands: A Reader*, edited by P.E. de Josselin de Jong, 32–60. Dordrecht: Foris Publications, 1983.
- Pigeaud, Th. G. Th. "Javanese Divination and Classification." In *Structural Anthropology in the Netherlands: A Reader*, edited by P.E. de Josselin de Jong, 64–82. Dordrecht: Foris Publications, 1983.
- Pigeaud, Theodore G. Th. *Literature of Java: Catalogue Raisonné of Javanese Manuscripts in the Library of the University of Leiden and Other Public Collections in the Netherlands*. Edited by Land-en Volkenkunde Koninklijk Instituut voor Taal and Bibliotheek Rijksuniversiteit te Leiden. Vol. 1. The Hague: Martinus Nijhoff, 1967–1980.
- Pont, Henri Maclaine. "Javaansche Architectuur." *Djawa* III, no. 4 (1923): 112–27.
- Pont, Henri Maclaine. "Javaansche Architectuur." *Djawa* IV, no. 2 (1924): 44–73.
- Prijotomo, Josef. *Petungan: Sistem Ukuran Dalam Arsitektur Jawa*. Yogyakarta: Gadjah Mada University Press, 1995.
- Hobsbawm, Eric, and Terence Ranger, eds. *The Invention of Tradition*. Cambridge: Cambridge University Press, 2012.
- Robertson, Scott. "Significant Pavilions: The Traditional Javanese House as a Symbolic Terrain." Sidney: University of NSW, Australia, 2012.
- Santosa, Revianto B. "Tentang Risalah Bangunan: Sekilas Tentang Tradisi Tekstual Arsitektur Jawa Pada Masa Kolonial Akhir." In *Simposium Nasional Naskah Arsitektur Nusantara: Jelajah Penalaran Reflektif Arsitektural*, 87–100. Surabaya: Fakultas Teknik Sipil & Perencanaan ITS, 1999.
- Scott, James C. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. Veritas paperback ed. New Haven: Yale University Press, 2020.

Bus-Aula

**Alejandra Celedón,
Francisca Gómez**



1

1 *Aula* is the Spanish word for “classroom.” Despite the fact that that “*sala de clase*” (classroom) is also commonly used, “*aula*” has a rhetorical and historical significance that identifies the room as part of a political and territorial project.

2 This essay is part of a research project titled “La Sociedad Constructora de Establecimientos Educacionales: Sistemas, Tipologías, Modelos. 1968-1978” funded by the Chilean Government through the Ministry of Cultures, Arts, and Heritage. FONART Nacional 2020 Folio 549651. (Fondo Nacional para el Desarrollo Cultural y de las Artes). It addresses some questions explored in the one-year workshop of the Master in Architecture “Las Escuelas” at the School of Architecture of the Pontificia Universidad Católica de Chile.

3 *Pobladores* are people who live in makeshift communities (*población*); often they squat on land that is not theirs. The *poblaciones* or *campamentos* take on the life of a neighborhood or small town.

4 See: Amy Conger, *Bienvenido a Nueva Habana, Santiago de Chile, 1972–1973* (Colorado: Nolvído Press, 2010). Conger published a book of her photographs in 2010, recording her visits to the *población Nueva La Habana*.

1 **Bus-Aula interior**
Uncertain origin. Available at: Santiago Nostalgico, <https://www.flickr.com/photos/stgonostalgico/48027916117/>.

5 Illegal occupation of land.

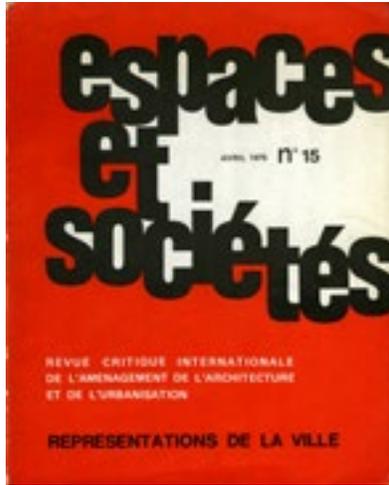
Bus-Aula : The School as a Political and Territorial Project²

I. A Picture, One Story in a Thousand Words

The woman in the foreground of the image [1] cannot tell who took this photo that recorded her daily work as a teacher in charge of about forty children in the Nueva Habana *población*³ in Santiago de Chile. The woman in the photo was a student-in-practice assigned to the school. It wasn’t a regular assignment, since the classes took place in dismantled buses in a very poor neighborhood that had recently formed on the outskirts of the city.

Founded on November 1, 1970, as part of the “Unidad Popular” political project, it was renamed as “Nuevo Amanecer” after the coup in 1973. In an educational and social experiment, thirty-eight children seated at their desks are accommodated in a classroom that was once a public bus. It was part of a political project that, while empowering citizens, also developed into an environment where dissent, in her own words, could be dangerous. The photographer who took the photo is unknown, but there is speculation as to whom it may have been. Amy Conger, a North American teacher and photographer, visited the *campamento* from October 1972 to 1973, taking more than 150 photographs of the place, and the photo could likely be attributed to her.⁴ Professor René Urbina, who at that time was the director of the Institute for Housing, Urbanism and Planning (IVUPLAN), was also interested in documenting the experience in the *campamento* and gathered vast materials to do so. Others attribute the image to an Italian photographer, Romano Cagnoni, who spent time in Chile in 1971 before going to Argentina. Cagnoni is the author of canonical images of Nueva La Habana such as Fidel Castro’s visiting to the *población*.

Formed to the east of the current Quilín roundabout, Nueva La Habana was made up of a group of about 2.500 families, approximately 9.000 residents, who were transferred from three different land takeovers (“*tomas*”⁵ Ranquil, Magaly Honorato and Elmo Catalán). Organized by the authority in charge, their solution was to relocate the residents onto the lands of the



2

- 6 The North American directors Tom Cohen and Richard Pearce created the documentary "Campamento Nueva Habana" in 1970. The film describes the life of Nueva La Habana through an organization by frentes de trabajo or commandos comunales (work fronts or communal commands). The film was exhibited in ONU Hábitat Conference in Vancouver in 1976. Available at: <https://www.youtube.com/watch?v=shRx7kbb-x4>. A second documentary is "Macho, un refugiado lationamericano" developed by a Swedish citizen. In 2005 Manuel Paiva exhibited "Campamento Nueva Habana, para volver a soñar" film that collects old photographs. Available at: <https://www.youtube.com/watch?v=EpnVpABLxhs>.

- 7 Christine Castelain, "Histoire du 'campamento Nueva Habana (Chili)," *Espaces et Sociétés*, no. 15 (1975): 117-132.
- 8 Christine Castelain, "Enquête sociologique sur le bidonville Nueva Habana—Chili—1970-1973: Rapports entre transformations des pratiques sociales, des représentations idéologiques et intervention politique dans un mouvement revendicatif urbain" (These de troisieme cycle, École pratique des hautes études, Paris, 1976).
- 9 Between 1970 and 1973, the years this experiment lasted, a series of prominent works of Marxist approach were produced regarding the city, which will form a new branch of study to the critique of capitalism based on spatial processes. Between these years Henri Lefebvre published *La révolution urbaine* (1970) and *La production de l'espace* (1974); Manuel Castells published *La question urbaine* (1972) and *Social justice and the city* was published by David Harvey in 1973.

- 2 Magazine Cover. *Espaces et Sociétés* N°15. See: *Espaces et Sociétés : revue critique internationale de l'aménagement, de l'architecture et de l'urbanisation*, no. 15 (1975).

former Los Castaños farm in La Florida. There were many people involved in the creation of the camp, including Corporación de la Vivienda-Housing Corporation (CORVI), professionals and students from the Universidad of Chile and Universidad Católica, and leaders of the camp's residents who were fundamental supporters in beginning the transformative path from temporary solutions into permanent housing. The Movimiento de Izquierda Revolucionaria-Revolutionary Left Movement (MIR) had an important presence and influence, with a high degree of organization and self-management capacities among the residents and visitors.

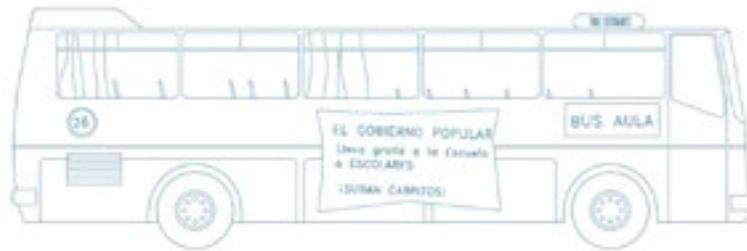
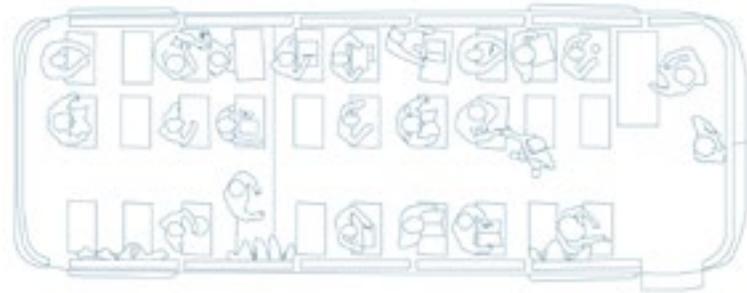
Población Nueva La Habana attracted international attention, as many other aspects of the local political period in Chile did. The neighborhood was frequently visited, photographed and filmed. Teachers, students, political party militants (mainly MIR) and residents were continually assisted and interviewed by various study groups and the local press, and amid the tensions of the Cold War, attention also came from countries as distant as France and Russia. Several documentaries⁶ about the camp were created at the time, also attracting the interest of academics such as French philosopher Henri Lefebvre. *Espaces et Sociétés* [2], the interdisciplinary scientific journal of geography, architecture and town planning, founded by Lefebvre, dedicated its publication in April 1975⁷, entitled "Representations of the city" to an article about Nueva La Habana. It was written by Christine Castelain, a student from École Pratique des Hautes Études in Paris, who dedicated her thesis to the history of the camp, and submitted it in the following year in 1976.⁸ The *Bus-Aula* became a case study in which the social appropriation of the processes in the production of the city developed along the materializing of political ideals, confirming the city as a necessary space to produce concrete utopias.⁹ Castelain testifies to a process in which MIR worked with the residents, producing a diagrammatic internal organization structured by a grid of blocks named with letters (A, B, C...), each with its own leaders and representatives. Such a diagram was aimed at strengthening the residents to overcome urban struggles such as fighting for a piece of land, for their own homes, for their own educational content, and developing a revolutionary but above all collective consciousness. Space became a medium for politics, and the camp became the most direct translation of politics into territory. The historian Boris Cofré describes the experiences lived by the residents in Nueva La Habana (pobladores) as "revolutionary politicization": the process by which problems that were previously perceived and solved individually from 1970 began to be faced collectively, and as a result impacted the consciences, identities, relationships, ways of life and types of organization in the community. In Nueva La Habana politics directly translated into space. Just as political strategies and decisions impacted the spatial dimension of



3



4



5

10 *Campamento Nueva Habana*, directed by T. Cohen and R. Pierce, Op. Cit. Minute 15:27.

3 Teachers of the school at *campamento Nueva La Habana*, Santiago, 1971. See: Boris Cofré, "Historia de los pobladores del campamento Nueva la Habana durante la Unidad Popular (1970-1973)" (Undergraduate thesis, Universidad Arcis, Santiago, 2007), 161.

4 Students of the school at *campamento Nueva La Habana*. See: Amy Conger, *Bienvenido a Nueva Habana, Santiago de Chile 1972-1973* (Colorado: Nolvado Press, 2010).

5 Drawing of one of the buses refurbished as classrooms based on photographs.

11 Alejandra Celedón, "The Chilean school: A room for upbringing and uprising," *AA Files* (2020): 76.

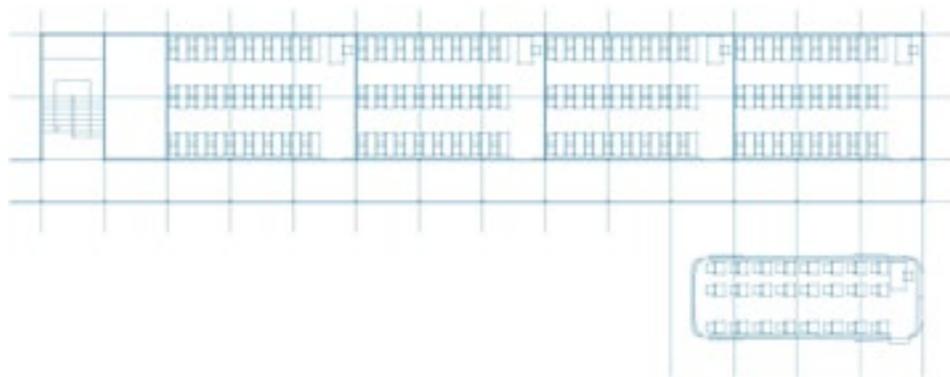
the camp, any spatial modifications had ramifications in the political organization as well.

The anonymous photograph of the bus transformed into an *aula* crystallizes that radical process at a time when the school was transformed into a series of classrooms scattered throughout the country, registering the intensity and coincidences between the social, political and educational explorations. The pedagogical environment installed in decommissioned buses became a place where the school and the city merged as part of the same problem and solution. Despite the fact that the terms "city" and "urban fabric" are used to describe the school as an open field, they do not reflect the material and social realities of the *campamento*. In terms of scale, material infrastructure, and services these neighborhoods can hardly be called a piece of city, however in terms of their networks and the organization of their inhabitants, they can truly be considered urban fabric. [3-4]

II. The Bus-Aulas, Ideological Building-Blocks

The SCEE aimed to address the educational needs of the new shantytowns emerging in the city as pilot-camps [5]. 254 buses were decommissioned from the *Empresa de Transportes Colectivos del Estado* (State Collective Transport Company). Out of circulation and abandoned in a parking lot, they had been totally discarded until the SCEE foresaw their potential. Once refurbished, they were used as transportable classrooms into various shantytowns on the outskirts of Santiago receiving about 20,000 children daily. One of the documentaries recording the experience describes: "Abandoned buses were hot in the summer, cold in the winter, but full of children all year long."¹⁰ It was a response—as is common in Chilean history—engineered from urgency and scarcity. The *Bus-Aulas* synthesize a specific social reality of a place and time, mainly the "do-it-yourself" mentality and sense of close community, typical of self-organization. At the same time, this was revolutionary and caused international interest in the context of the social, political and structural economic transformation that was promoted by the Unidad Popular under President Salvador Allende.

The SCEE in those years, had been working with systemized buildings, both at the level of design and construction processes, implementing prefabricated systems to allow for easy transportation to extend educational facilities across the national territory. The best example of a classroom building system developed by the SCEE in Chile was a system named the MC-606 (also called the "stamp-plan") and was distributed throughout the country.¹¹ It consisted of an ordinary single-floor, prefabricated steel structure with a gabled roof that in terms of size and simplicity did not differ much from the



6

12 According to Vladimir Pereda, architect from Universidad de Chile part of the SCEE, in a presentation given to “Las Escuelas” Studio at the Master in Architecture (MARQ) in April 2019, further interviewed by Alejandra Celedón on August 2020.

13 The word “cancha” comes from the Quechua “kancha” meaning enclosure devoted to sports.

6 Bus and MC, Drawing of MC-606 by Felipe Pizarro and Nicolas Navarrete.

space of a bus. However, they were radically different in terms of the definition of its borders. The MC-606 school buildings were composed on a site as a series of classrooms along a corridor next to a pavilion building. The Bus-Aulas operated as autonomous pieces of furniture without attachment to a building; they used the city as their edifice. The policy did not plan for the mobility of the buses, but indeed saw it as part of their potential. After all, the *aulas* were driven to the sites where they were installed in the city’s periphery. The fact that the *aulas* were mobile and ready-made, made them ideal as the emergency solution in response to the creation of new neighborhoods out of informal settlements. However, the autonomous form of the bus did not allow for easy attachment of any extensions or added pieces to the *aulas*. [6] The unusual response of using buses as classrooms was also probably related not only to the ease of their dismantlement, but also to the industrial imaginary (based on the studies of airplanes, buses, trains and ships) that was already circulating internationally and locally in architectural circles, and that were commonly employed as references for the projects¹² within the SCEE. The buses, despite their technological simplicity, probably represented the arrival of an expected social progress, embedded in the industrial and socialist productive imaginary of the 20th century.

Along with the arrival of the eleven buses to Nueva La Habana, an important self-governance system was being instituted around an ideal of community life. The organization consisted of a president, seven leaders, a board of directors and the work-fronts (*comandos comunales* or coordinating committees) for: health, surveillance, workers, supplies and education. This successful self-management strategy allowed the camp to take shape, and to gradually take on the *pobladores*’ other demands related to quality of life and ideals beyond housing. The Bus-Aulas were part of the programs beyond housing, whose outcomes were meant to foster activism within the community, capable of articulating political and social forces including the city in the process.

Near the buses in Nueva La Habana there was a small booth for the person in charge from the School Sector. One of the buses became a library, the existing “cancha”¹³ became the school sports field, and the cultural space in the middle of the neighborhood acted as a stage for public events. A former student of the buses remembers this period of his upbringing with the same intensity:

“The distribution of the neighborhood was by blocks from A to Z with a stage as a cultural center in the middle of the camp: the center of everything. On



7



8



9



10

7 The school out of bus-classroom. See: Amy Conger, *Bienvenido a Nueva Habana, Santiago de Chile 1972-1973* (Colorado: Nolvido Press, 2010).

8 The school out of bus-classroom. See: Amy Conger, *Bienvenido a Nueva Habana, Santiago de Chile 1972-1973* (Colorado: Nolvido Press, 2010).

9 Informative comic from the Unidad Popular government about the Bus-Aulas as an educational solution. The author was Hernan Vidal, known as "Hervi", Chilean artist. See: Hervi et al., *La Sociedad Constructora de Establecimientos Educativos y otras interesantes* (Santiago: Quimantú, 1970).

10 Students inside the Bus-Aula. Amy Conger, 1971. See: Boris Cofré, "Historia de los pobladores del campamento Nueva la Habana durante la Unidad Popular (1970-1973)" (Undergraduate thesis, Universidad Arcis, Santiago, 2007), 164.

14 Interview with Manuel Inostroza, Bus-Aula student in *campamento Nueva La Habana*. June 2019.

15 The Editora Nacional Quimantú was closed after the 1973 coup by the new authorities, and many of its books were burned.

16 Paulo Freire, *Pedagogía De La Esperanza: Un Reencuentro Con La Pedagogía Del Oprimido* (Buenos Aires: Siglo Veintiuno, 2002), 35.

weekends, well-known bands from the time visited us: *Illapu*, *Inti Ilimani* and the great Víctor Jara.”¹⁴

Beyond adapted machines, the buses managed to trigger a larger territorial system of social relations: as the school spread in the territory it also diluted the physical and temporal limits of its teaching. Such emergency strategy inevitably carried out an ideological tactic (in this case led by MIR) that can be seen as a laboratory of collective life where those involved were also gaining agency over their own destiny. [7-8]

Such new political consciousness and sense of collectivity was promoted and transmitted through education from the government to the people. By the end of 1970, the workers of a well-known local publishing house *Zig-Zag*, stopped their activities and integrated the company into the State (as many other industries also did). Renamed as *Empresa Editora Nacional Quimantú*, the public publishing house produced books and sold them at low prices, making culture accessible to the people, but also ensuring a tool for indoctrination.¹⁵ [9] The comics, for example, are part of this effort, in which an entire cartoon was dedicated to communicating and explaining the Bus-Aulas to the community. The didactic and promotional strategy behind cartoons and documentaries worked quickly. Brazilian educator Paulo Freire visited Chile twice during the Unidad Popular government, interested in the concrete ideas of the class struggle as expressed in varied forms. He delved into the work of mobilization and pedagogical-political organization developed by MIR, ending up in Nueva La Habana: [10]

“I had the opportunity to spend a night with the leadership of the Nueva La Habana population who, after obtaining what they claimed, their homes, continued to be active and creative with countless projects in the field of health, justice, education, security, and sports. I visited a series of old buses whose bodies donated by the government, transformed and adapted, had become beautiful and renovated schools that cater to the children of the town. At night those bus-schools were filled with literate students who learned to read the word by reading the world. Nueva La Habana had a future, although uncertain, and for this reason the climate that surrounded it and the pedagogy that was experienced in it were those of hope.”¹⁶

The teaching style developed in a diluted hierarchy between teachers and parents, one of the popular forms of distributing power which developed in the camp at that time when the traditional school-family separation found



11

- 17 Camila Silva, "Para una historia social de la educación: la construcción histórica de la escuela popular: una mirada desde el movimiento de pobladores (1957-1973)" (Master Thesis in History, Universidad de Chile, 2013), 260.
- 18 Aníbal, father of two sons. In the documentary "Nueva Habana" shows how the leaders of the *campamento* directly approach the Ministry of Education to demand that the government support their ideals, that they do not want a traditional education. Op. Cit. minute 13:05.
- 19 Ociela Toloza et al., "La educación hace treinta años: vivencias de diversos actores," *Revista Docencia*, no. 20 (2003): 69.
- 20 Alejandra Araya, "De pobladores, miristas y la Unión Demócrata Independiente. Dos momentos de politización en el movimiento de pobladores de Santiago (1970 y 1984)," (Master Thesis in History Universidad de Chile, 2017), 87.
- 21 Interview with Rafael Larraín, architect from Universidad de Chile that participated in the workshop and lived from March to October in *campamento* Nueva La Habana. October 2020.

new definitions. Teaching content was decided jointly between parents, representatives of the blocks, and the teachers who ensured the minimum teaching requirements with a few books that had been distributed by the Ministry of Education. Children were taught the history of miners, peasants and settlers in Chile, the concept of class struggle and the idea of popular power.¹⁷ As one father describes his intentions for the program:

"We don't want them to tell us what to do (...) We want support to establish our own thoughts, we are not interested in Enrique VIII's lovers, we are more interested in the importance of Che-Guevara in the liberation of the proletariat."¹⁸

Another teacher from Universidad de Chile working in the *Bus-Aulas* recalls his experience from 50 years ago:

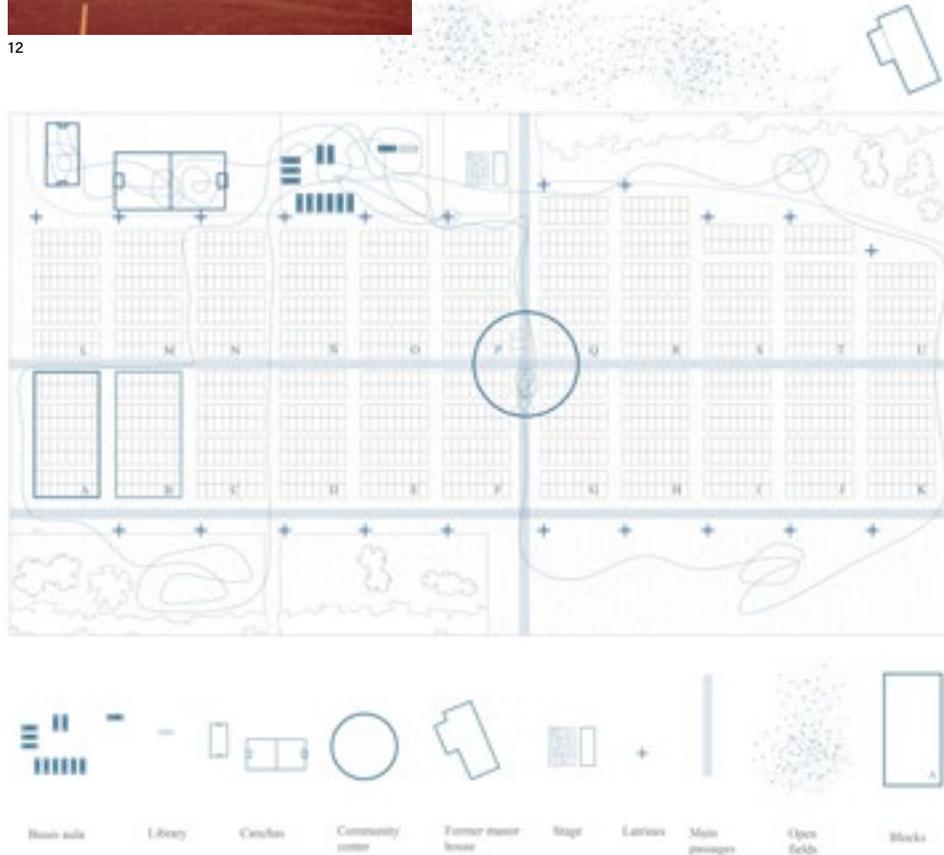
"In 1970 I was seventeen years old and was just entering Universidad de Chile, to "Pedagógico". For me pedagogy, at that time, was a total commitment, not only to students but to the community. We could not conceive of pedagogy separated from social change."¹⁹

At night, the buses also received adults in charge of a Literacy Commission:²⁰ A strong commitment to the project ensued. While some teachers moved to live in the población, students also did for a period of time. Urbina, a professor of architecture at Universidad de Chile, organized a vertical integrated studio (students from different levels in the same design workshop) in 1971 that lived in the neighborhood for a term, and helped the residents with a master plan for green spaces based on fruit-trees that was finally presented at the Facultad de Arquitectura.²¹ The *Bus-Aula* (and the problem of education) opened up you mean in the context of the design workshop? to the city fabric and positioned itself as the building block for the educational system; this was not the case for the construction of modular school-building as it has been traditionally defined by the SCEE. For the SCEE the classroom was the building block of the schools they constructed: the buildings were generally understood as a sum of *aulas*. Together then, the *aulas* were more than just a spatial construction; they were an ideological proposition. This instrumentalization of the bus became the rhetorical building block of an "open school" for the neighborhood. [11]

11 Open school in The Netherlands 1956. Available at: <https://www.messynessychic.com/2016/03/15/classrooms-without-walls-a-forgotten-age-of-open-air-schools/>.



12



13

12 The buses in Nueva La Habana.
Source: Boris Cofré: "Historia de los pobladores del campamento Nueva La Habana durante la Unidad Popular (1970-1973)", 163.

13 Bus-Aulas in their context.
Buses-Aula / Canchas / Community Center / Library / Stage / Blocks / Passages / Toilets / Patronal Houses / Camp.

III. The School, Neither Building nor Institution

The Nueva La Habana Bus-Aula school was born out of eleven classrooms set in buses, and the need for culture within a community, that generated something new. Together with the support network and the need to appropriate other spaces in the camp, the buses caused a disengagement of the systems that make up a school, disrupting the traditional concepts of education and architecture. The explosion of the basic pieces of a school caused a piece of the city to become a school, generating a new ideal of pedagogy without physical and formal limits in an expanded education with greater scope.

The buses had an impact as soon as they arrived. They generated a new layout, producing different movement patterns, and creating new invisible lines within the space of the neighborhood. The boundary between school and camp gradually started to dissolve, forming a new territorial order around education. As the buses provided the minimal means possible for an educational facility, the rest of the functional spaces that a school would normally need had to be met by the camp itself. The buses were part of a constellation of urban spaces, open space, and simple constructions. Other spaces were dispersed but always within walking distance, completing the necessary and required needs for education. Thus, the buses established a new architectural condition for their context, managing to reinvent themselves and provide a massive educational solution to one of the most vulnerable sectors of the Chilean population. [12-13] While the school hours were the same as that in conventional schools, in the Bus-Aulas, the children were taught an alternative education to the institutional one. In Nueva La Habana the traditional school building programme exploded into the city as an archipelago of discrete sites, where not only the idea of a school building was put into crisis but also its image as an institution. Luis Parraguez, a teacher at the school describes the learning process:

“From here up there were wheat fields, in math classes we spent most of the time outside, the children learned to count, to see perimeters, areas, everything on the ground, in nature. Two or three times a week we would go up the Quebrada de Macul, we would go up, with boiled eggs, including the mothers of the children, with sandwiches and we would go up, collect insects, collect leaves, bring them back. Learning by doing allowed it, our youth allowed it too, the support [of the parents] also allowed it. A lot of work, work outside the classroom, work outside the walls, a lot of work. It was common that the kids

- 22 Interview with Luis Parraguéz, teacher at Nueva La Habana in December 2011. Interview by Camila Silva, historian, in: *La Infancia y el Movimiento Popular Chileno: una aproximación desde la escuela* (2013).



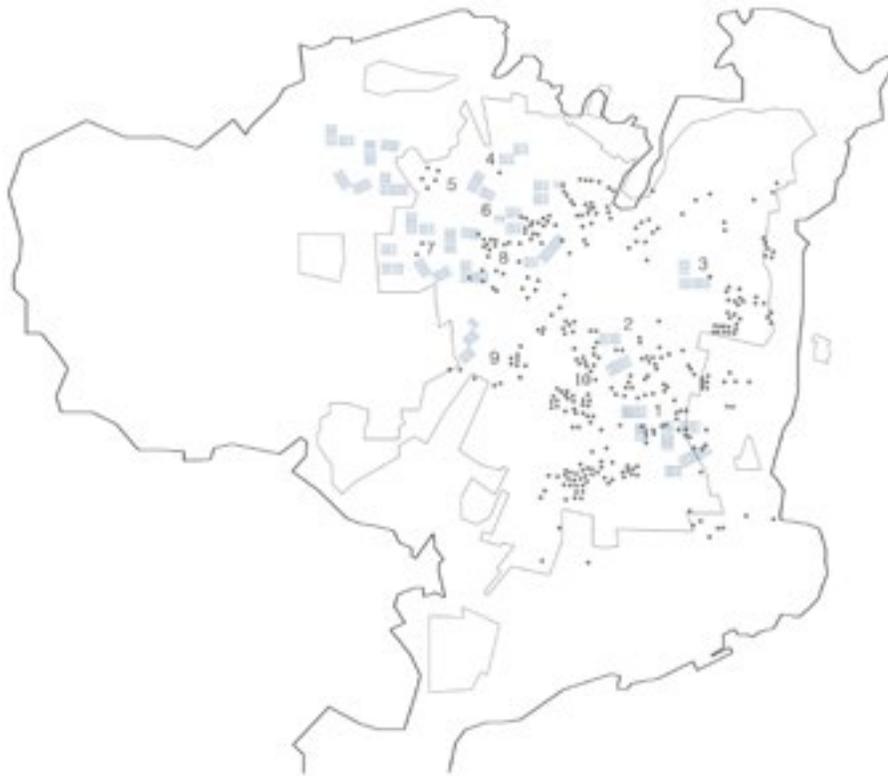
14

arrived completely muddy, that the teachers arrived completely muddy, when we suddenly celebrated whatever we created, “Water Day” for instance. Then we all hosed ourselves in a little pool there that was in the grass.”²²

The bus began to be part of a larger system tracing yielding other networks within the camp. Their educational methods dissolved the concrete spatial limits of a typical classroom to carry out their essential pedagogical goal: to raise children who learn from each other, from their parents, from work, and from the world outside the classroom. The school activities outside the buses were even more important, creating a new concept of school without this being its main objective. Such examples of the activities outside the classrooms were in the community center and neighborhood blocks. Each block, numbered from A to Z, had a chair where decisions of the 64 families of each block were discussed. The community center, located in the heart of the town, attended various activities, including the General Assembly, where the entire community met to discuss the most relevant issues. A stage in the centre of the neighborhood was one of the most important spaces for the education and culture of the inhabitants, where presentations and debates took place. On the outskirts of the camp, the former manor house was left uninhabited, and part of the visits with the children. The main corridor of the camp, Avenida La Higuera, besides being used as a play area for the children, also became like a patio and an informal meeting space to gather. Megaphones hung around the space allowing the children and all residents to be informed of what was happening in the neighborhood. Next to the Bus-Aulas located on one the fringes of the camp were open fields. Another space within this constellation of structures was understood as one of the most important courtyards of the school. One of the buses was refurbished as a school library, and the same latrines that served the community were the spaces that the children used in their class schedules.

The bus changed its role by being installed as an urban-building within the camp, becoming activator in the community. The school occupied a central place in the popular political and social movements, part of a self-organized project promoted by its own inhabitants that became one of the most radical examples of political autonomy of its time. [14]

14 Screenshots from the following documentaries on Nueva La Habana: “Nueva Habana” by Cohen and Pearce and “Macho, un refugiado latinoamericano” developed by Jan Lundberg editor.



15

15 Plan of Santiago de Chile showing camps and some of the hundred Buses-*Aula* that were distributed in the city outskirts by 1970. The inner limit show's Santiago urban limit by 1960, the outer perimeter corresponds to 1979 limit's expansion and liberation. Here are some of the towns that had buses or classrooms. Drawing based on Cristina Castelain's plan of camps.

1. La Florida (Nueva la Habana, Unidad Popular, Los Copihues)
2. Nuñoa
3. La Reina
4. Conchali
5. Renca (El Salvador)
6. Cerro Navia (Puro Chile)
7. Pudahuel
8. Lo Prado (Che Guevara, Bernardo O'higgins)
9. Maipu (Cuatro Alamos)
10. San Miguel

23 Alejandra Araya, "De pobladores, miristas y la Unión Demócrata Independiente. Dos momentos de politización en el movimiento de pobladores de Santiago (1970 y 1984)" (Master Thesis in History Universidad de Chile, 2017), 87.

24 Interview with Boris Cofré, historian scholar who lived in Nueva La Habana until his thirties and has studied and written widely on the topic of the housing problem in Chile.

IV. Nuevo Amanecer

After the 1973 coup the panorama in the camp changed radically, as in many other towns. The camp was raided on the same day, September 11, and its name was changed to *Nuevo Amanecer*: New Dawn. The raids resulted in the arrest of the leaders, the resistance of its inhabitants and the repression of the State apparatus. When school life came back weeks after the coup, the School Sector had appointed a new director. Since then the militant residents of the Revolutionary Left Movement (MIR) had to go underground. Some teachers disappeared the following days, others went into exile abroad over the course of weeks and months, and others were relocated to other schools—and did not return either. During 1974, new students arrived as interns from the School of Pedagogy of Universidad Católica to Nuevo Amanecer School, in a more conventional school work environment. The buses were gradually replaced by classrooms made of light construction. In October 1973, the planned construction of houses for the community passed from CORVI to the hands of a private construction company which coordinated the delivery of houses according to a system of minimum fees for application. In the process of this handover, not all the families of former Nueva La Habana received their home.²³ By 1977, the privatization of the housing formula meant, in part, the dismemberment of the camp. Some of the lots and sites in the camp were handed over to the military, however, through the years and well into the 80s, the school remained as a place where such social and political differences could still disappear for the children.²⁴ By the time of the writing of this essay, on November 2020, the Nueva La Habana celebrated its 50th anniversary of its establishment. The *Bus-Aula*, at the core of the neighborhood's foundation, was a policy and an emergency solution. It above all became an experiment, which replicated through the periphery of Santiago de Chile, irrigated the urban landscape and transformed, for a few years, the idea of a school building as a series of atomized classrooms into a network of social infrastructure. The physical impact of the *Bus-Aulas* was the informal production of educational spaces within the campamento, turning the community into an open field of education. [15]

Bibliography

- Araya, A. "De pobladores, miristas y la Unión Demócrata Independiente: dos momentos de politización en el movimiento de pobladores de Santiago. (1970 y 1984)." Master Thesis in History, Universidad de Chile, 2017. http://repositorio.unab.cl/xmlui/bitstream/handle/ria/5319/a120213_Araya_A_De_pobladores_miristas_y_la_2017_Tesis.pdf?sequence=1&isAllowed=y.
- Biblioteca Nacional de Chile. "Escuelas Normales en Chile (1842-1974)." *Memoria Chilena*. <http://www.memoriachilena.gob.cl/602/w3-article-100627.html>.
- Castells, M. *La question urbaine*. François Maspero, 1972.
- Catelain, C. "Rapport entre tranformation des pratiques sociales, des representation ideologiques et intervention politique dans un mouvement revendicatif urbain (enquete sociologique sur le bidonville Nueva Habana, Chili 1970-1973)." These de 3eme Cicle, Ecole pratique das hautes estudes, Paris, 1976.
- Cofré, B. "El movimiento de pobladores en el Gran Santiago: las tomas de sitios y organizaciones en los campamentos. 1970-1973." *Tiempo Histórico*, no. 2 (2011).
- Cofré, B. *Campamento Nueva La Habana, el Mir y el Movimiento de Pobladores, 1970-1973*. Concepción: Escaparate, 2007.
- Cofré, B. "Historia de los pobladores del Campamento Nueva La Habana durante la Unidad Popular (1970-1973)." History and Social Sciences thesis, Universidad ARCIS, 2007.
- Cohen T., and R. Pearce, dirs. *Nueva Habana*. 1971; Chile. <https://www.youtube.com/watch?v=shRx7kbb-x4>.
- Conger, A. *Welcome to Nueva Havana. Santiago, Chile, 1972-1973*. Colorado: Nolvido Press, 2010.
- Fiori, J. "Campamento Nueva La Habana: estudio de una experiencia de autoadministración de justicia." *EURE* 24, no. 72 (1973).
- Freire, P. *Pedagogía De La Esperanza: Un Reencuentro Con La Pedagogía Del Oprimido*. Buenos Aires: Siglo Veintiuno, 2002.
- Gómez, F. "300 buses - 300 aulas: la Nueva Habana como escuela." Master Thesis in Architecture, Pontificia Universidad Católica de Chile, 2020.
- Harvey, D. *Justicia social y ciudad*. Geogia University press, 2010.
- Lefebvre, H. "La Production De L'espace." *L'Homme Et La Sociéte* 31, no. 1 (1974).
- Lefebvre, H. *La révolution urbaine*. Paris: Gallimard, 1970.
- Leiva, S. "De la toma de terrenos a la toma del poder : el campamento 'Nueva La Habana' y una nueva óptica para la movilización poblacional." *Revista de Historia Social y de las Mentalidades*, no. 6 (2002).
- Lundberg, J., dir. *Macho, un refugiado latinoamericano*. <https://vimeo.com/84969036>.

Tolosa, Ociela, Florentino Rojas, Rodrigo Vera, María Eugenia Lorenzini, Nieves Bermalinovic, and Hugo Miranda. "La educación hace treinta años: vivencias de diversos actores." *Docencia journal*, no. 20 (2003). <http://revistadocencia.cl/web/index.php/ediciones-anteriores/26-docencia20>.

Rojas-Dunlop, I. "Campamento Unidad Popular (1970-1973): Movimiento De Pobladores Y Poder Popular En La Zona Sur-oriente De Santiago." *Izquierdas*, no. 45 (2019). https://scielo.conicyt.cl/scielo.php?script=sci_arttext&pid=S0718-50492019000100079.

Silva, C. *Escuelas Pobladoras: Experiencias educativas del movimiento de pobladoras y pobladores: La victoria, Blanqueado y Nueva La Habana. Santiago, 1957-1973*. 2018.

Silva, C. "Para una historia social de la educación: la construcción histórica de la escuela popular: una mirada desde el movimiento de pobladores (1957-1973)." Universidad de Chile, Faculty of Philosophy and Humanities, 2013. <http://repositorio.uchile.cl/handle/2250/116043>.

Boundary-Work: Scale, Fragment, and Totality

William Orr

“The universe is an infinite sphere with its centre everywhere and circumference nowhere.”

Blaise Pascal, *Pensées*

1 “For in fact what is man in nature? A Nothing in comparison with the Infinite, an All in comparison with the Nothing, a mean between nothing and everything. Since he is infinitely removed from comprehending the extremes, the end of things and their beginning are hopelessly hidden from him in an impenetrable secret, he is equally incapable of seeing the Nothing from which he was made, and the Infinite in which he is swallowed up.” Blaise Pascal, *Pensées*, trans. W.F. Trotter (New York: P.F. Collier, 1910), 27.

2 Manfredo Tafuri, *The Sphere and the Labyrinth*, trans. Pellegrino d’Aciero and Robert Connolly (Cambridge, Mass.: MIT Press: 1990), 27.

3 Manfredo Tafuri, “Toward a Critique of Architectural Ideology,” trans. Stephen Sartarelli, in *Architecture Theory since 1968*, ed. K. Michael Hays (Cambridge Mass.: MIT Press, 1998), 10.

4 Tafuri, *The Sphere and the Labyrinth*, 32.

This famous line from the posthumously published *Pensées*, of seventeenth century polymath Blaise Pascal, expresses with perfect succinctness, the disorienting prospect opened up by new scientific approaches to cosmology in the early modern period. Pascal’s subject finds themself caught between two scalar extremes, the atomic and the cosmic, between which the human body marks an ambiguous “mean.”¹ Without the certainty of an ordered relation between micro and macrocosm, the subject is left with ambiguity: “What will he do then, but perceive the appearance of the middle of things, in an eternal despair of knowing either their beginning or their end.”

A century later, the etchings of Giovanni Battista Piranesi express a similarly disorienting prospect, this time, in the architectural terms of a deliberately deranged classicism. What Manfredo Tafuri described as Piranesi’s “systematic criticism of the concept of ‘centre’”² finds its most literal expression in the mass of architectural forms “pitilessly absorbed and deprived of all autonomy”³ within the fragmentary “map” of the Campo Marzio. Transposing Pascal’s terms onto Piranesi’s, we find that, “the city is an infinite sphere, the centre of which is everywhere and the circumference nowhere”. For Tafuri, this transposition would come with a new social dimension best expressed in the “machine universe” of the Carceri d’invenzione (Imaginary Prisons). Not only is God’s creation infinitely beyond human understanding, but so too increasingly is the *human* creation, a world of social and technical “institutions” extending beyond the bounds of subjective comprehension and dissolving any organic connection to the “natural” world.⁴

Another century and a half later, Archizoom’s No-Stop City (1969) raises the same provocation to new polemical heights. The ordering of the whole (can we even say “city”?) in the infinite grid of commercial infrastructure becomes visible when the pretence to the architectural scale is abandoned. Those heavier line-weights in the Campo Marzio, which identify the outlines of distinct structures (difficult as they are to identify) disappear. Only a universal field of columns and disjointed squiggles remains within the overarching mega-interior.

All three of the above examples feature a disorientation of the medium scale between two extremes: the incomprehensible totality, and the dislocated fragment. In Pascal's thought, what we might call this "antinomy of scale" expressed the alienness of the material universe as uncovered by early modern science, the breakdown of the purported link between microcosm and macrocosm, and in general a crisis of divine and homocentric cosmology. In the work of Piranesi, it carries forward a similar theme of alienation, this time pointing, as Tafuri argued, to the self-alienation of modern society as it underwent increasing rationalisation and industrialisation in the eighteenth century. For Pascal, the human subject stood between clear extremes, in Piranesi it is more complex. Most obviously the subject is dwarfed by structures and systems beyond reasoning or control; however, equally, the subject is confronted by a world of objects, columns, stairs, apparatuses, and artefacts which normally submit to human utility, but now fill the "machine universe" with a kind of alien litter. In Archizoom, the dissolution of the medium scale appears to be complete, with nothing mediating between the objects—air-conditioners, furniture, motorbikes—that litter the floor, and the world-container stretching endlessly to the horizon. From the infinity of consumer products to the infinite scale of the market in which they circulate, the architectural object had been eliminated and the architectural subject appeared to be trapped between two scalar extremes, neither of which amenable to disciplinary intervention.

I have chosen this series of examples for two reasons: first, because it expresses a modern existential crisis in increasingly disciplinary terms as a crisis of the architectural object and the architectural scale. Second, it represents the existential crisis in increasingly material terms as deriving, not merely from modern scientific ideas, but from changes in the political-economic structure of society. Taken together, these two aspects suggest that modern material anxieties can appear in disciplinary terms through the problem of "scale". Not only is scale capable of expressing the de-centring of the human subject from the social and technical world of capitalism, it confronts the architect with the de-centring of their discipline from the modern production of the city. For Archizoom's Andrea Branzi, this de-centring had to be accepted and even embraced. Within the emerging rational order of the late capitalist world, the intermediate scale of architecture was no longer relevant.⁵

Here we encounter the controversial notion of the "death of architecture", which, as Diane Ghirardo argued, appeared to be discredited in the following decades by the enormous success of the "starchitects".⁶ Archizoom had certainly taken this problematic to the extreme, farther even than their colleagues in the loose community of Florentine "Radical

5 Pablo Martínez Capdevila, "An Italian Querelle: Radical vs. Tendenza," *Log*, no. 40 (Spring/Summer 2017): 74.

6 Diane Y. Ghirardo, "Manfredo Tafuri and Architecture Theory in the U.S., 1970–2000," *Perspecta* 33 (2002): 39.

Architecture”. No-Stop City represents a kind of *reduction absurdam*, a logical projection of tendencies which, one must admit, never played out in the literal manner imagined. Other projects of the same era suggest different, perhaps more “realistic” solutions to the same quandary. Therefore, in what follows, I would like to better grasp the nature of this “scalar antinomy”, and the nature of architectural responses to it, by covering several other examples: (new-)Brutalism, Archigram, and Metabolism.

Before moving to that material, however, I will define the critical and conceptual framework I believe best explains the dynamics involved by drawing on the sociological concept of “boundary-work” and connecting it to Manfredo Tafuri’s critique of architectural ideology as an “ideology of the Plan”. With this framework it will become possible to grasp how the ambiguous relationship between part and whole, between fragment and totality, takes on a specific significance within the capitalist mode of production, representing the extreme polarity of commodity circulation: the commodities themselves—ever-changing and apparently infinite in number—and the total system of production and consumption through which they circulate. As argued by Manfredo Tafuri, this chaotic split offered a profound challenge to the architectural discipline, which, facing the chaos of industrialisation and rapid urban growth became increasingly aware that effective intervention at any point in the chain of production would require a thorough reform of the entire system. With that reform proving impossible—at least under terms set by the discipline—architecture remained in a position suspended uncomfortably between the two poles. Architectural practices, particularly polemical and theoretical practices, continued to produce ideological responses to this challenge by attempting to frame the discipline around ideal scalar boundaries. These scalar limits define the range of commodities architects seek to produce (or more accurately, participate in the production thereof), yet the underlying contradiction remained. Architects try to find a manageable scale at which they can sell the object of their practice: the housing block, the detached house, the capsule. However, in order to do that they also need to reorganise the urban system so that it will accept that work: the urban plan, the garden-city, or the “Plug-In City”. The era of “radical architecture” of the 1960s and 1970s brought this scalar impasse into stark relief, yet, I will argue, its contradictions remain essentially the same for the discipline today. So long as the capitalism system remains the dominant mode of production in the West, architecture will continue to occupy an ambiguous and essentially contradictory position between ideal yet elusive commodity forms and the reforms necessary but impossible to implement.

Disciplinary, Boundary-Work, and Ideology

If the development of the capitalist mode of production creates contradictions within the architectural discipline, how and in what manner does the discipline confront these contradictions? Can we even assume the coherence of a disciplinary subject capable of making a recognisable response, and, if so, to what extent is that subject determined by the very material relations producing the contradiction?

Taking advantage of a fortuitous play on words, I would like to introduce a concept from the sociology of science, which can help to frame our problem. “Boundary-work” defines a kind of disciplinary effort devoted to the maintenance, extension, and defence of a discipline’s borders and integrity—an active self-production of the discipline by its would-be practitioners. As we shall see, for architecture, an important form of boundary-work involves the literal “drawing” and redrawing” of the disciplinary boundaries around different scales of intervention.

The term was introduced by Thomas F. Gieryn as a critical tool for understanding the complex and often contradictory ways in which disciplines justify and defend themselves, particularly to an outside audience. Gieryn’s examples come from the history of science. The text “Boundary-work and the Demarcation of Science from Non-science: Strains and Interests in Professional Ideologies of Scientists”⁷, begins with a clear introduction to the term and its application:

The demarcation of science from other intellectual activities—long an analytic problem for philosophers and sociologists—is here examined as a *practical* problem for scientists. Construction of a boundary between science and varieties of non-science is useful for scientists’ pursuit of professional goals: acquisition of intellectual authority and career opportunities; denial of these resources to “pseudoscientists”; and protection of the autonomy of scientific research from political interference. “Boundary-work” describes an ideological style found in scientists’ attempts to create a public image for science by contrasting it favourably to non-scientific intellectual or technical activities.⁸

Gieryn immediately distinguishes the term’s application from debates around the true nature and boundaries of a discipline. Rather, what is in question are the stakes for practitioners, their real investment in the discipline, and therefore, in effect, the manner in which disciplines are socially constructed

7 Thomas F. Gieryn, “Boundary-work and the Demarcation of Science from Non-science: Strains and Interests in Professional Ideologies of Scientists,” *American Sociological Review* 48, no. 6. (Dec. 1983): 781–795.

8 Gieryn, “Boundary-work,” 781.

by their agents. Furthermore, these stakes are much more concrete than a matter of terminological clarity: they define the ability of practitioners to actually practice within a society governed by the scarcity of resources and competition of interests. The above passage refers to an “ideological style”, which Gieryn further characterises as a set of “rhetorical practices” that practitioners employ in order to position their discipline within the network of forces and power-relations that determine institutional support and security. Terms like “style” and “rhetoric” suggest a less than scientific rigour is at work in scientists’ own self-presentation and positioning. This contradiction, it turns out, is fundamental, since the shifting conditions for practice do not allow for a stable and consistent disciplinary strategy:

Alternative sets of characteristics available for ideological attribution to science reflect ambivalences or strains within the institution: science can be made to look empirical or theoretical, pure or applied. However, selection of one or another description depends on which characteristics best achieve the demarcation in a way that justifies scientists’ claims to authority or resources. Thus, “science” is no single thing: its boundaries are drawn and redrawn in flexible, historically changing and sometimes ambiguous ways.⁹

9 Gieryn, “Boundary-work,” 781.

Much has been written on the specific challenges of the architectural discipline: its dependence upon clients and construction trades, its subservience to developers and regulation. All these pressures and competing factors produce what the boundary-work literature calls “strains” upon the discipline. At the same time, following Gieryn’s argument, strains are not enough to explain the ideological nature of boundary-work, which is essentially motivated by the material “interests” of the disciplinary subject.¹⁰ Boundary-work is therefore a complex and negotiated process, but at bottom, its results are not a product of logical coherence, consistency, or even good faith,¹¹ but of power-plays by practitioners with specific stakes and interests in the social relations of production.

10 Gieryn, “Boundary-work,” 792.

11 Gieryn, 787. “Boundary-work,”

By simultaneously accepting the shifting and artificial nature of disciplines, while nevertheless constructing a critical perspective in which to locate and analyse disciplinary subjects, Gieryn provides a flexible and sophisticated framework for critical analysis. Deploying the concept of “ideology” and using *interest* as the driving force behind boundary-work, the fluid character of disciplines can be grasped as a product of their basis in material social relations—rather than of limitations in scientific rationality per se.

12 In choosing these specific years, I intentionally distinguish the work of this period from the later work in which Tafuri's choice of conceptual references moved further away from materialism and Marx. I also group *Teorie e storia* more closely with the work of the Marxist period than chronology alone should allow. This is because I believe there is a stronger continuity here than is generally accepted by later reflections based on the 1980 translation: *Theories and History*. For a full account of my argument, please see the chapter "Tafuri for Militants" in: William Hutchins Orr, "Counterrealisation: Architectural Ideology from Plan to Project" (PhD thesis, Architectural Association and The Open University, 2019), 43–83, <http://oro.open.ac.uk/61433/>.

14 This sort of relationship has been described by sociologist Howard Becker as a dynamic common among disciplines on the boundary between "art" and "craft": "Crafts ordinarily divide along the line between the ordinary craftsman trying to do decent work and make a living and the artist-craftsman with more ambitious goals and ideologies. Ordinary craftsmen usually respect artist-craftsmen and see them as the source of innovation and original ideas." Howard S. Becker, "Arts and Craft," *American Journal of Sociology* 83, no. 4 (Jan. 1978): 866.

16 Tafuri, "Toward a Critique of Architectural Ideology," 15.

13 Manfredo Tafuri, *Teorie e storia dell'architettura* (Bari: Laterza, 1968). The book went through several editions before being translated into English in 1980: Manfredo Tafuri, *Theories and History of Architecture*, trans. Giorgio Verrecchia (London: Granada, 1980).

15 Manfredo Tafuri, "Per una critica dell'ideologia architettonica," *Contropiano* 1 (1969): 31–79.

17 Antonio Negri, "La teorie capitalistica nel '29: John M. Keynes," *Contropiano* 1 (1968): 3–40; Antonio Negri, "Keynes and the Capitalist Theory of the State, Post-1929," in *Revolution Retrieved: Writings on Marx, Keynes, Capitalist Crisis, and New Social Subjects (1967–83)* (London: Red Notes, 1988), 5–42.

18 Tafuri, "Toward a Critique of Architectural Ideology," 15.

At this point we can make a connection to architectural discourse, for, I argue, boundary-work provides a useful extension to the critique of architectural ideology as developed by Manfredo Tafuri from the late 1960s to the mid-1970s.¹² First of all, the concept of "operativity", developed in 1968's *Teorie e storia dell'architettura* to describe the *interested* character of architectural criticism and historians' purportedly rigorous construction of disciplinary history, demonstrates the mutual dependence between design professionals and the writers who accompany and justify their work.¹³ Tafuri reveals modern architectural criticism and historiography to be boundary-work practices, defining what is and is not, "architecture", making claims on certain fields of production while excluding others.

However, boundary-work does not only manifest itself in disciplinary literature. Design practices themselves involve boundary-work, particularly via projects charged with avant-garde, visionary, or critical weight. Just like architectural discourse, such practices also contribute to the production and positioning of the discipline with results that effect more traditional practices as well.¹⁴ Considering primarily the work of the architectural avant-gardes, but locating it within a larger disciplinary shift, Tafuri's critique of architectural ideology as begun in "*Per una critica dell'ideologia architettonica*" provides the final clue to the disciplinary significance of *scale*.¹⁵

One Discipline to Rule Them All

Tafuri argued that the complex history of modern architecture, from the seventeenth century to the middle of the twentieth represents the development of an "ideology of the Plan", which finally takes clear shape at the height of the interwar Modern Movement.¹⁶ For Tafuri, who drew directly upon Antonio Negri's writing on British economist John Maynard Keynes¹⁷, "the Plan" takes on more than its usual disciplinary significance. It also implies the political-economic planning of society as a whole:

Starting from problems specific to itself, modern architecture, as a whole, was able to create, even before the mechanisms and theories of Political Economy had created the instruments for it, an ideological climate for fully integrating design, at all levels, into a comprehensive Project aimed at the reorganization of production, distribution and consumption.¹⁸

The trajectory of modern architecture therefore involves a reorientation of the discipline towards material relationships beyond its traditional

boundaries. This change in orientation also involves a literal enlargement of scalar boundaries to take in entire cities—even entire regions. The important point to emphasise here is that this move does not reflect mere megalomania, but rather recognition that architectural questions could only be addressed as part of a total system of production and consumption.

On this point we have to mark a departure from the relativism of Gieryn's critique of disciplinarity. A basic premise of examining disciplinary production under the terms of "boundary-work" holds that disciplinary content—to use Gieryn's example, scientific truth—is socially constructed. Gieryn does not pre-judge the legitimacy of rival claims to scientificity. As an example, this means treating a nineteenth-century debate between phrenologists and anatomists as a contest of rhetoric and political pressure, rather than truth and falsehood.¹⁹ Nevertheless, the analysis of boundary-work can escape *pure* relativism by moving to the level of the social forces and material interests motivating disciplinary subjects. Truth can be found at the level of political economy and ultimately, historical materialism.²⁰ Here lies the problem: in Negri's writing on Keynes and in Tafuri's writing on the Modern Movement, "the Plan" represents a scientific approach *to* political economy. This creates a paradox unless we are willing to grant a different kind of disciplinarity to political economy.

To put it another way, if boundary-work is really just a disciplinary sales pitch within the marketplace of ideas, "the Plan" is paradoxical because it attempts to sell the end of that marketplace, the end of sales pitches, as one more sales pitch. We can see this paradox at work, for instance, in Le Corbusier's attempts to sell the socialisation of property to banks, industrial capital, and bourgeois governments, as a solution to the political crisis of industrial urbanisation.²¹ But this is really the paradox of Keynesian planning according to Negri, which he described as "capital [turning] to Marx, or at least [learning] to read *Das Kapital*".²²

Without travelling further down the rabbit hole, what are we to make of this? Only that a kind of truth test did come into play with the Modern Movement's "ideology of the Plan". Planning had to *work*, it had to actually reorganise production and consumption as an effective antidote to a real crisis of capitalism. That crisis had become palpable through urban issues like the housing problem, but it would become unmistakable with the Soviet Revolution and the Great Depression. If the architectural discipline were able to pull off this one last sales pitch, it would effectively cement the transcendental character of architecture as universal discipline: "the key to everything."²³

In this way, the Modern Movement attempted a qualitative change, which of necessity forced a quantitative change. It tried to extend its

19 Gieryn, "Boundary-work," 787–789.

20 Gieryn cites Marx for the theory of ideology as motivated by interest: Gieryn, "Boundary-work," 782. I follow this opening to its logical conclusions.

21 Le Corbusier, "Architecture or Revolution," in *Towards a New Architecture*, trans. Fredrick Etchells (New York: Dover, 1986), 7–14, 249–269. The case is made more forcefully in points 72, 73, 91, 93, 94, and 95 of the Athens Charter: Le Corbusier, *The Athens Charter*, trans. Anthony Eardly (New York, NY: Grossman, 1973), 93–105.

22 Negri, "Keynes," 12–13.

23 Point 92 of: Le Corbusier, *The Athens Charter*, 104.

disciplinary boundary to include the economic organisation of society at all levels and all scales. Its centre would be everywhere and circumference nowhere. Tafuri described the integration:

From the standardized part and the cell to the single block, the Siedlung, and finally to the city: such is the assembly line that architectural culture devised between the wars with exceptional clarity and consistency. Each “piece” in the line is fully resolved and tends to disappear or, better yet, to dissolve formally in the assembly.²⁴

24 Tafuri, “Toward a Critique of Architectural Ideology,” 21.

However, such ideal proposals were only possible for a brief period before the discipline ran into larger forces and interests unmoved by the modernist sales pitch. Tafuri describes how the reality of the Plan, through governmental implementation of Keynesian economic policies, overtook and displaced the visionary and utopian suggestions of architects. Le Corbusier’s disciplinary-cum-political manifesto “Architecture or Revolution,” was sidelined by the Welfare State’s third way: the implementation of demand-side policies and a public planning and building sector in which architectural vision would be subordinated to practical utility. Tafuri bluntly described this reversal: “once the Plan came within the scope of the general reorganization of production, architecture and urban planning would become its objects, not its subjects.”²⁵

25 Tafuri, “Toward a Critique of Architectural Ideology,” 21.

In this way, Tafuri describes a failed boundary-work project, perhaps the most ambitious undertaken by any discipline in modern history. After its failure, Tafuri appeared to hold little hope for redemption since the only way out from architecture’s historical checkmate had proven futile. In the scalar terms of this essay, the way to guarantee a secure disciplinary boundary would have been to draw the line around the entirety of human production and consumption. Yet the examples we are interested in, the projects of the 1960s and 1970s with their contemporary resonance, appear, at least superficially, to extend beyond the failure of the Modern Movement into new disciplinary directions.

I believe “boundary-work” offers a versatile conceptual framework for maintaining the terms of Tafuri’s critique of ideology beyond the limits of the Modern Movement—particularly where scale remains a fundamental problem. This is particularly crucial when considering that Welfare State economic planning itself had its limits, collapsing in the latter decades of the twentieth century. In what is generally referred to as the neo-liberal era, scalar antinomies return with a vengeance. When released from anti-cyclical regulatory policies and without the support of a public building sector, the

chaos of capitalist production and consumption confronts architects with a stark new dichotomy between the ideal scales of intervention: the consumer commodity, and the unruly market system which refuses to offer architects a slice of the pie.

Radical Architecture and the Libertarian Paradox

Reyner Banham's "A Home is Not a House" stands neck-beard to neck-beard with other works of libertarian fantasy, such as Ayn Rand's *Atlas Shrugged* or Kenneth Neumeyer's *Sailing the Farm*.²⁶ Where the latter two launch their ideals of freedom upon the rails or the sea, Banham is interested in the less grandiose transport of roads and highways. Taking to American culture with the fanaticism of the convert, Banham extrapolates on the ideas of Buckminster Fuller, combining them with what he sees as the success of the mobile home enjoyed by "untold thousands of Americans". He projects a future of shelter completely liberated from infrastructure and human settlement:

If someone could devise a package that would effectively disconnect the mobile home from the dangling wires of the town electricity supply, the bottled gas containers insecurely perched on a packing case and the semi-unspicable sanitary arrangements that stem from not being connected to the main sewer—then we should really see some changes. It may not be so far away either; defense cutbacks may send aerospace spin-off spinning in some new directions ...²⁷

In reality, the following years would see that spending come "spinning" down on Vietnam and Laos in the form of the largest bombing campaign in history. No architectural-industrial complex was to take the place of the military-industrial complex. For its historical and geopolitical myopia as much as its architectural hyperopia, this passage might stand as the most clueless piece of architectural criticism ever published. However, as boundary-work, it is perfectly rational.

Following the explosion of consumer markets brought on by precisely the demand-side economic policies described above, a number of architects were quick to recognise a lucrative new disciplinary possibility: architecture as consumer product. The integration of architecture into a reorganised industrial building sector had of course been an essential proposal of the Modern Movement. What was different in the work of Buckminster Fuller and the many who followed decades later, was a focus on the autonomy of the architectural object as a consumer product that could be made independent of

²⁶ Reyner Banham, "A Home is Not a House," *Art in America* no. 2 (1965): 70–79. Kenneth Neumeyer is credited with developing the idea of "seasteading" in: *Sailing the Farm* (Berkeley, CA.: 10 Speed Press, 1981).

²⁷ Banham, "A Home is Not a House," 74–75.

the usual planning and infrastructure difficulties. Fuller's sales pitch required only a reorganisation of distribution and production within the factory. With no real planning required—not even at the level of plumbing—the Dymaxion House (1933) offered a completely atomised consumer solution.

Standing simultaneously as a disciplinary radical and an individual entrepreneur, what Fuller needed to do, in the tradition of the British mechanical inventors of the nineteenth century, was to patent his invention and demonstrate its practicability to an industry buyer. Unfortunately, as Banham mentioned, the practicalities of plumbing (among many other things) remained insurmountable obstacles. Still, with the Dymaxion deployment unit (1940), Fuller's creations did attract a limited portion of military spending.

Allison and Peter Smithson's House of the Future, produced in mock-up for the 1956 *Daily Mail* Ideal Home Exhibition, suggests a further development of the same boundary-work tactic. In the "H.O.F.", all interior functions and appliances are built-in. Beatriz Colomina described how the project translated earlier modernist experiments in industrialised and modular housing into a new form:

A plastic version of the 1920s dream of the industrialized house then. But the dream was no longer of a series of standard elements that could be combined in different ways to produce different houses. Rather, the dream was of a series of unique molded shapes that could fit together in only one form. Prefabrication in the H.O.F. doesn't represent infinite flexibility but a singular, self-supporting shape, which will, like any other consumer product, be abandoned as soon as a new model comes out.²⁸

²⁸ Beatriz Colomina, "Unbreathed Air 1956," *Grey Room*, no. 15 (Spring 2004): 31.

Here we can see the commodity logic of the Dymaxion house clarified in order to match the advanced commodity logic of the post-war period. A totally integrated architectural system, modelled after the automobile, would eliminate further commodity supplementation. Without need for furniture and appliances, the consumer dwelling unit would become a universal commodity, absorbing into itself an enormous consumer product sector. At the same time, its perfection and inflexibility would necessitate replacement when needs, material or otherwise, changed. In this case the disciplinary boundary is drawn at the small physical scale of the home, but nevertheless represents an extreme expansion of the boundary in real material terms.

The weakness of the project, however, was easy to find, for it lay at precisely the same scalar boundary bedeviling earlier attempts: how are

individual units to be aggregated and organised? The Smithsons' proposal, a "matt-cluster" with circulation of the most rudimentary and inflexible kind, reveals the inability of such ideal commodity scale solutions to simultaneously address planning and infrastructural questions.

Enter the megastructure. As Tafuri argued, Le Corbusier's Obus Plan for Algiers already achieved "the most advanced theoretical hypothesis of modern urbanism" in 1931. Corb "broke the unbroken associative chain of architecture-neighborhood-city" by architecturalising the entire system.²⁹ But this solution would be explored in greater detail in the work of Yona Friedman, the Metabolists, and Archigram decades later. The latter's Plug-In City (1963 to 1966) demonstrates most clearly the scalar contradiction that inevitably results. Focussing on the pod-form of the individual dwelling unit, Archigram sought to project an ideal lifestyle product: flexible to whim and fashion, expressive and mobile. However, such pods could not be inserted directly into the city as it existed. A new system of ports and interfaces would be required. Therefore, the full integration of architecture into modern consumer culture—a far from revolutionary proposition—required an infrastructural transformation hardly imagined by even the most ardent socialist planners. Plug-In City expresses perfectly the paradox of free-market libertarianism: absolute freedom of the individual requires the most extreme totalitarian system to support and guarantee the property rights on which such individuals depend. Translated into architectural terms, Plug-In City provides a diagram of this extreme contradiction. Its colourful illustrations sell this cognitive dissonance as an aesthetic value.

Not all megastructural projects proudly exhibit this level of ideological bafflement. A more serious programme can be read in projects of the Metabolist group. In *Kenzo Tange and the Modern Movement*, Zhongjie Lin describes how the economic, political, and disciplinary constraints the Metabolists faced in post-war Japan were manifest in Tokyo's accelerated and unplanned expansion on a feudal pattern unchanged by incomplete and undemocratic processes of land reform.³⁰ Lin places Arata Isozaki's City in the Air in this context, quoting the architect: "an empty lot of about 10 square meters is all I need on the ground. I will erect a column there, and that column will be both a structural column and a channel for vertical circulation." Above that minimal plot, the project branches out into a highly ordered urban network, completely free of the complex constraints that hold the ground.

Metabolist megastructure projects like the City in the Air, are not ideal cities unto themselves, but an ideal supplement to an existing, less-than-ideal city. As Japanese society transitioned (under American direction) almost straight from late feudalism into neoliberalism, the era of "the Plan"

29 Tafuri, "Toward a Critique of Architectural Ideology," 26.

30 Zhongjie Lin, *Kenzo Tange and the Modern Movement* (London: Routledge, 2010), 69–74.

was largely foreclosed. With no prospect for a planned reorganisation of the city of the kind sought by the European Modern Movement, the Metabolists internalised planning within the paradoxical scale of their architecture. Simultaneously occupying a small plot of land—theoretically requiring little reform to property relations within the city—the project is nonetheless capable of expanding into an articulated urban infrastructure. In effect, the Metabolists created an “ideology of the Plan” theoretically independent from real planning. Metabolist architects could assign their projects different political logics, from socialism to neo-feudalism,³¹ because the project exists as an imaginary appendage to the political-economic reality of the city.

Familiar contradictions do, however, reappear at the level of the “metabolic” unit, the pod, or “capsule”. Despite appeals to Japanese tradition or to the trans-disciplinary authority of scientific biology, the obvious “metabolism” at stake in the Metabolist project is the metabolism of the business cycle. Turn-over of capsules, like discarding one House of the Future in order to buy the next, fulfil the systemic need to continuously extend and renew consumer markets. In the end, the planning at stake is “planned obsolescence,” and yet even this kind planning would prove utopian! Despite the unique compromise of their boundary-work, the Metabolists could no more achieve the necessary boundary redrawing required to integrate their recommendations favourably into a new production and consumption cycle. Individual capsules of the Nakagin Capsule Tower never had the chance to fulfil this aspect of their function. Instead, the entire structure rapidly obsolesced.

The Truly Radical Scale

Thus we return to Archizoom’s No-Stop City as ultimate expression of the dissolution of architecture into the twin infinities of commodity and market. However, as should be obvious, as an architect willing to accept this consequence Branzi proved to be in the minority. Sharing the Italian architectural scene, a different movement pursued what appeared to be the opposite solution: disciplinary retrenchment around traditional, even archaic boundaries. In starkest possible contrast, Aldo Rossi’s theory of architecture and the city deliberately centres on the medium-scale of the “urban artefact”.³² In “An Italian Querelle: Radical vs. Tendenza”,³³ Pablo Martínez Capdevila describes this debate over the nature of the architectural discipline. On the side of the Tendenza, Rossi’s lieutenant Massimo Scolari attacked Branzi and the Radical group for their disciplinary ambiguity, a charge that really came down to the lack of any medium scale within their projects.³⁴ For Branzi, it was a matter of reading the direction of advanced capitalist development and accepting the consequences.

31 Kiyonori Kikutake made the case for feudalism in a remarkable interview: Rem Koolhaas and Hans Ulrich Obrist, “Kiyonori Kikutake,” in *Project Japan: Metabolism Talks* (Taschen, 2011), 143.

32 Aldo Rossi, *The Architecture of the City*, trans. Diane Ghirardo and Joan Ockman (Cambridge Mass.: MIT Press, 1982).

33 Pablo Martínez Capdevila, “An Italian Querelle: Radical vs. Tendenza,” *Log*, no. 40 (Spring/Summer 2017): 67-81.

34 Capdevila, “An Italian Querelle,” 71-72.

Tellingly, both Branzi and Scolari make claims for their differing disciplinary positions on the grounds of reason, even, in the case of Scolari, scientific rigour. Writing in *Casabella*, Branzi “expresses surprise that Archizoom’s own No-Stop City, ‘which stands at this date as the most radical application of the very concept of rational architecture,’ could be criticized in a publication that advocates rational architecture.”³⁵ For Branzi, reason dictated that architecture no longer mattered as an autonomous discipline, while for the Tendenza, the facticity of “architecture” as a “universal and necessary” part of human civilisation³⁶ provided the opposite conclusion. Interestingly, and certainly in keeping with Gieryn’s description of the ambiguity of scientific boundary-work, the latter argument, in spite of its obvious logical inconsistencies, proved victorious. From the seventies to the eighties, the Tendenza grew in prominence, gaining disciplinary recognition, an international following, and, in some cases at least, architectural commissions. On the other side, the radicals made their own logical disciplinary move, accepting the scalar consequences of their analysis and abandoning architecture for “design”. The lines were clearly drawn in 1973 at the 15th Milan Triennale:

the Tendenza established itself as the hegemonic movement of Italian architecture. While Rossi curated the international architecture section of the Triennale, Radicals Andrea Branzi and Ettore Sottsass curated the design section, foretelling the fate that awaited the many Radicals who would thereafter focus primarily on furniture and product design.³⁷

Yet, at first, and despite their different disciplinary goals, both the Radicals and the Tendenza pursued the same initial disciplinary tactic. They drew their boundaries through the medium of *drawing*—not in the traditional manner of the architectural drawing submitted to the client as part of a building project, but as a boundary-work project tout court. As a work of art, “paper architecture”, the drawing can function as a meta-product. As such it stands as a commodity independent of the building sector altogether, while continuing to represent, and, in a sense, sell “architecture.” It is important to recall here that this same tactic had been Piranesi’s, whose fanciful depictions of Rome quickly sold to eighteenth century tourists, for “in Piranesi the attention to the market was never separated from a programmatic intent”.³⁸

Despite individual successes like Piranesi’s, the architectural drawing as art commodity represents the last redoubt of disciplinary boundary-work—the smallest of all scales and the thinnest in terms of institutional support and resources. Not intending to remain at this level, both the Radicals and the Tendenza translated their boundary-work into different forms

35 Capdevila, “An Italian Querelle,” 72.

36 Rossi, *The Architecture of the City*, 12.

37 Capdevilla, “An Italian Querelle,” 68.

38 Tafuri, *The Sphere and the Labyrinth*, 52.

of production. Yet in both cases, especially the latter, drawing remained fundamental. The Tendenza, most prominently Aldo Rossi, was able to use drawing as a means to reinvest in the architect's power to generate added value. Proceeding simultaneously through drawings, paintings, and design work, the former acted as supplement to the latter. The scalar relationship between "architecture and the city" was reconstructed through the drawing by leveraging the architect's artistic and individual interpretation of the common—see for example Rossi's continuous drawing and redrawing of "urban artefacts" from his youth. The unique authority of the architect as artist is what actually gave the supposedly rational and communal "urban-artefact" its value.

Seen in this light the traditional medium scale of "architecture" was only recuperated through the supplementary scale of the drawing itself as art-commodity—a kind of important but often overlooked boundary-work. But we can find a deeper explanation for why this was possible. At the buyer's end of the economic exchange, the enormous explosion of real-estate and financial investment which occurred after the neo-liberal switch from demand to supply-side economics provided the fertile soil for a wave of new architectural projects. This market explosion elevated an elite group of disciplinary practitioners to new heights of fame and fortune: the "starchitects". Thus after both visionary and real welfare state planning ended, even after the total market rationalisation envisaged by No-Stop City proved utopian, the new real-estate investment dynamics of gentrification provided the answer to the scalar antinomy: from the humbleness of the Airbnb conversion to the "Bigness" of the "starchitects", new political-economic realities offered the discipline new scales and new opportunities for boundary-work. But only for a time.

Material Impasse

As revealed by the financial crash of 2008, and the more recent and precipitous "Covid crash", crises are endemic to capitalism. Architects again find themselves on the brink of disaster. Trapped inside their live-work apartments, they again draw the boundary around the tight confines of their home, or extend it to cover the entire globe. Visions of capsules and mega-structures inevitably return. As Tom Daniell remarked in 2012: "Whether due to pure admiration or latent envy, the eternal return of projects by Archigram, Archizoom, Superstudio, Team X, Yona Friedman, Constant Nieuwenhuys, Cedric Price, early OMA, and so on, suggests that there is a blockage in the metabolism of architectural discourse itself."³⁹

39 Tom Daniell, "The Return of the Repressed," *Log*, no. 24 (2012): 27.

The blockage is material. The disjunction between the macro-scale and the micro-scale exemplified in works of “radical architecture”, is at bottom an expression of the fundamental contradiction of capitalism: between the socialisation of production and the private appropriation of its surplus, or between the planning within individual capital firms and the chaos of the capitalist system as a whole. There can be no organised totality under capitalism, nor can there be a systematic integration across its scales: global, national, regional, urban, or domestic. Until there is a fundamental change to the material structure of society, architects will remain trapped in the scalar antinomy, forced to draw and redraw their boundaries for a shifting and alien market. The split between commodity and market represents the unconscious ideological significance of architectural “scale” in general, and a material cause of the disciplines ongoing precarity.

Bibliography

Banham, Reyner. "A Home is Not a House." *Art in America*, no. 2 (1965): 70–79.

Capdevila, Pablo Martínez. "An Italian Querelle: Radical vs. Tendenza." *Log*, no. 40 (Spring/Summer 2017): 67–81.

Colomina, Beatriz. "Unbreathed Air 1956." *Grey Room*, no. 15 (Spring 2004): 28–59.

Le Corbusier. *Towards a New Architecture*. Translated by Fredrick Etchells. New York: Dover, 1986.

Le Corbusier. *The Athens Charter*. Translated by Anthony Eardly. New York, NY: Grossman, 1973.

Daniell, Thom. "The Return of the Repressed." *Log*, no. 24 (2012): 23–27.

Ghirardo, Diane Y. "Manfredo Tafuri and Architecture Theory in the U.S., 1970–2000." *Perspecta* 33 (2002): 38–47.

Gieryn, Thomas F. "Boundary-work and the Demarcation of Science from Non-science: Strains and Interests in Professional Ideologies of Scientists." *American Sociological Review* 48, no. 6 (Dec. 1983): 781–795.

Koolhaas, Rem, and Hans Ulrich Obrist. "Kiyonori Kikutake." In *Project Japan: Metabolism Talks*, 128–174. Cologne: Taschen, 2011.

Lin, Zhongjie. *Kenzo Tange and the Modern Movement*. London: Routledge, 2010.

Negri, Antonio. "Keynes and the Capitalist Theory of the State, Post-1929." In *Revolution Retrieved: Writings on Marx, Keynes, Capitalist Crisis, and New Social Subjects (1967–83)*, 5–42. London: Red Notes, 1988.

Orr, William Hutchins. "Counterrealisation: Architectural Ideology from Plan to Project." PhD thesis, Architectural Association and The Open University, 2019. <http://oro.open.ac.uk/61433/>.

Pascal, Blaise. *Thoughts*. Translated by W.F. Trotter. New York: P.F. Collier, 1910.

Rossi, Aldo. *The Architecture of the City*. Translated by Diane Ghirardo and Joan Ockman. Cambridge, Mass.: MIT Press, 1982.

Tafuri, Manfredo. *The Sphere and the Labyrinth*. Translated by Pellegrino d'Aciero and Robert Connolly. Cambridge, Mass.: MIT Press, 1990.

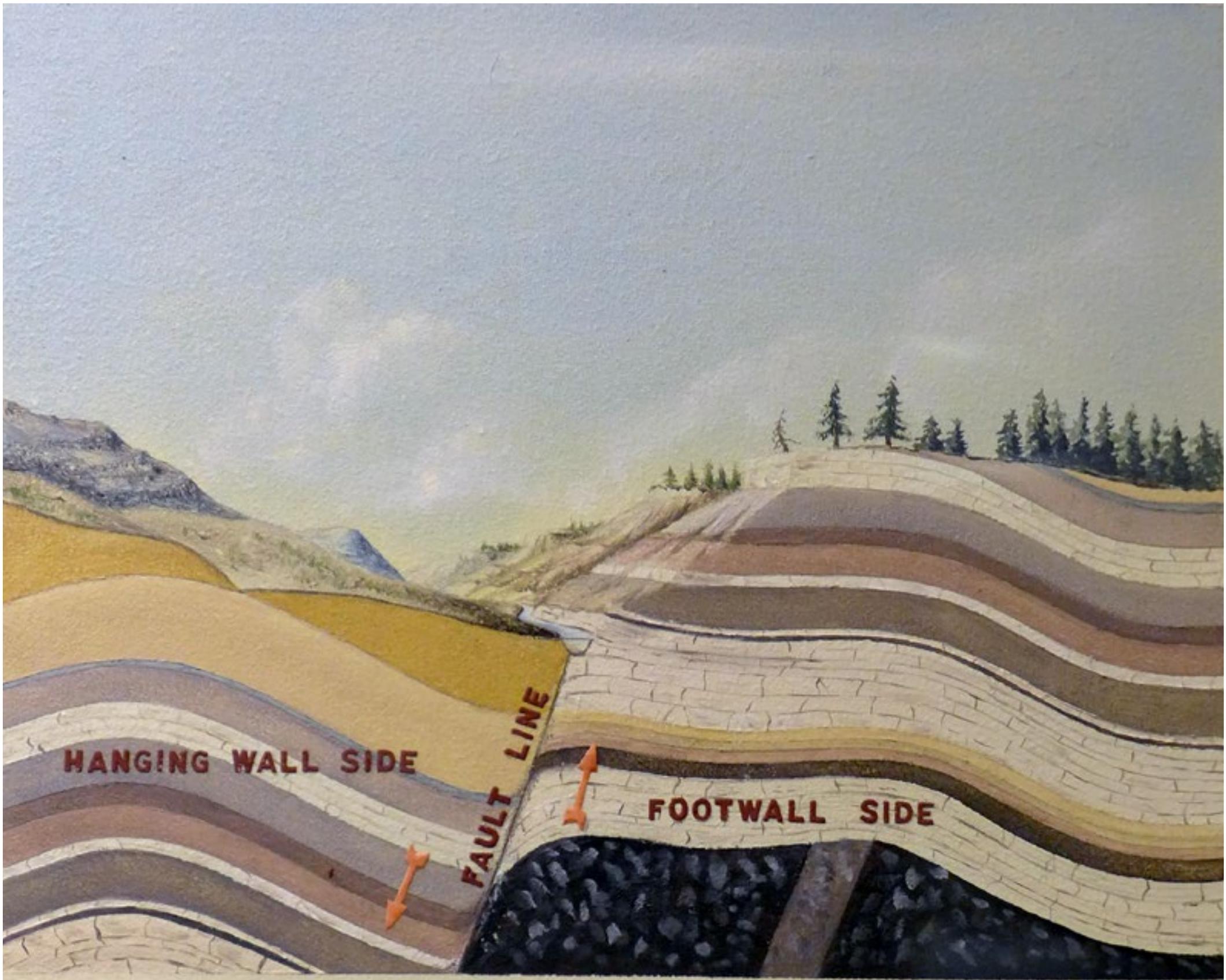
Tafuri, Manfredo. "Toward a Critique of Architectural Ideology." Translated by Stephen Sartarelli. In *Architecture Theory since 1968*, edited by K Michael Hays, 6–35. Cambridge Mass.: MIT Press, 1998.

Tafuri, Manfredo. *Theories and History of Architecture*. Translated by Giorgio Verrecchia. London: Granada, 1980.

**Selected Works
IX-XVI**

Deborah Stratman

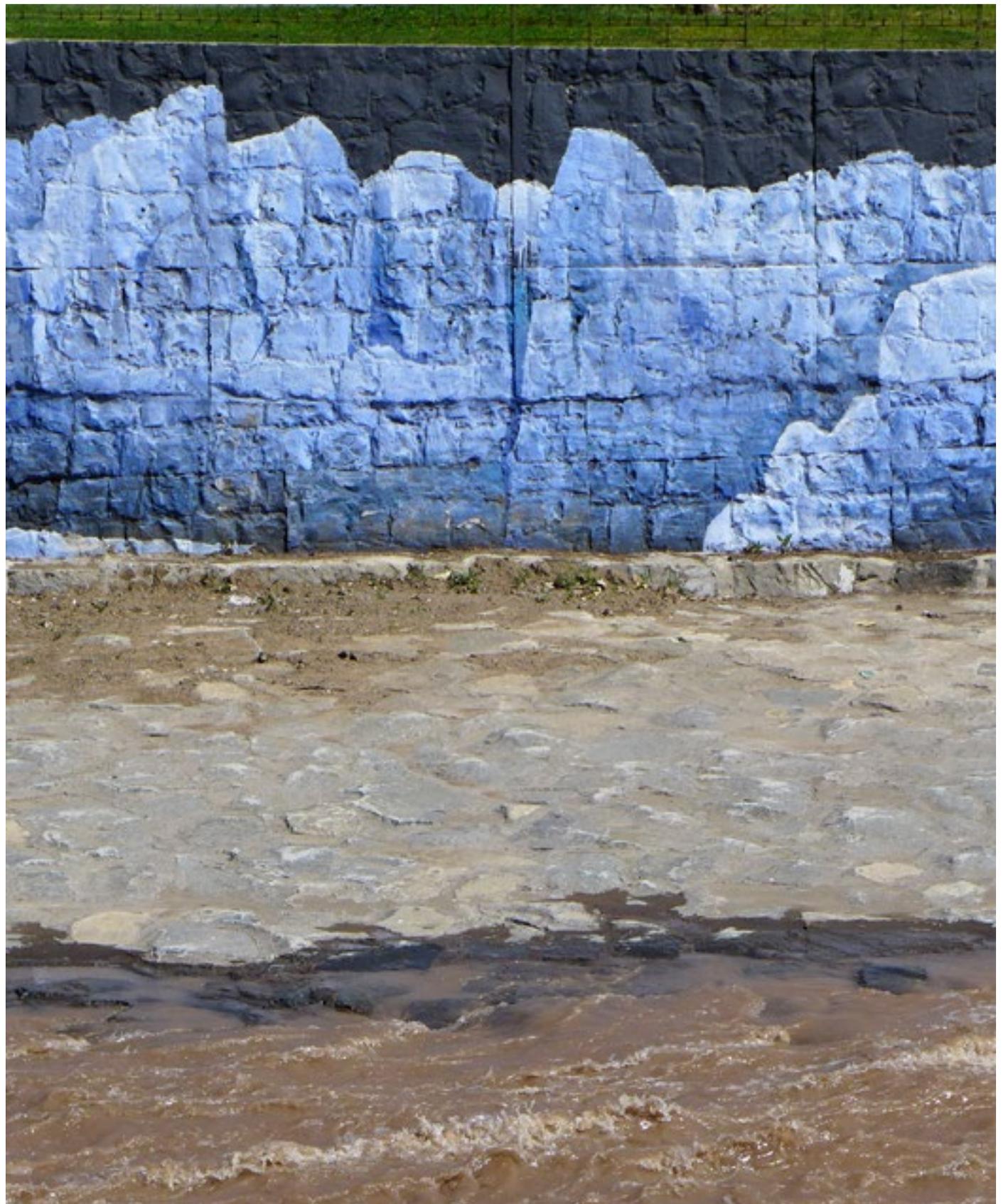




HANGING WALL SIDE

FAULT LINE

FOOTWALL SIDE













- IX Fremont culture petroglyph, (200-1300AD), Dinosaur National Monument, Utah
- X Geology gallery, The Field Museum, Chicago, Illinois
- XI Mural detail, Río Mapocho, Santiago, Chile
- XII Sandbags, Río Mapocho, Santiago, Chile
- XIII Wabash River debris, New Harmony, Indiana
- XIV Drainage display, US Army Core of Engineers Bay Model, Sausalito, California
- XV Sink hole remediation buoys, Texas Brine Company, Bayou Corne, Louisiana
- XVI Detail of The Face of Christ by Claude Mellan, 1649

Biographies

Marina Lathouri is the director of the Graduate Programme in History and Critical Thinking at the Architectural Association in London and visiting lecturer at the University of Cambridge. She has previously taught at the University of Pennsylvania and has been Guest Professor at the Universidad de Navarra, Spain, the Universidad Catolica in Santiago, Chile, the School of Fine Arts in Athens, Greece, and the Bartlett School of Architecture. She studied architecture, philosophy of art and aesthetics. Her research interests lie in the conjunction of history and politics of historiography, architecture and writing practices, the city and political philosophy. She co-authored *Intimate Metropolis: Urban Subjects in the Modern City* (Routledge 2008), directed the AA research project *City Cultures: Contemporary Positions on the City* (AA Publications 2010) and has contributed to numerous publications. Her teachings and writings align histories of architecture and the city with contemporary theoretical arguments and questions of the social as well as textual, visual and design practices.

Deborah Stratman, artist and filmmaker, makes work that investigates issues of power, control and belief, exploring how places, ideas, and society are intertwined. Recent projects have addressed freedom, surveillance, orthoptera, raptors, comets, evolution, exodus and faith. She's exhibited internationally at venues including MoMA NY, Centre Pompidou, Hammer Museum, Witte de With, Tabakalera, Austrian Film Museum and the Whitney Biennial. She has made 40 films which have screened at festivals including Sundance, Berlinale, CPH/DOX, Viennale, Oberhausen, True/False, Locarno and Rotterdam. Stratman lives in Chicago where she teaches at the University of Illinois.

Hélène Frichot, Architectural theorist and philosopher, writer and critic, is Professor of Architecture and Philosophy, and Director of

the Bachelor of Design, Faculty of Architecture, Building and Planning University of Melbourne, Australia. She is Guest Professor, and the former Director of Critical Studies in Architecture, School of Architecture, KTH Stockholm, Sweden. Her recent publications include *Dirty Theory: Troubling Architecture* (AADR 2019), *Creative Ecologies: Theorizing the Practice of Architecture* (Bloomsbury 2018), *How to Make Yourself a Feminist Design Power Tool* (2016). She is editor on a number of publications, including with Catharina Gabriellsson and Helen Runting, *Architecture and Feminisms: Ecologies, Economies, Technologies* (Routledge 2017) and more recently with Naomi Stead, *Writing Architectures: Ficto-Critical Approaches* (Bloomsbury 2020).

Chris Taylor: born in West Germany, raised in waters of Southwest Florida, lives in arid American Southwest. An architect, educator, and director of Land Arts of the American West at Texas Tech University, Taylor is deeply committed to the intersection of human construction and the evolving nature of the planet. The Terminal Lake Exploration Platform, created with support from the Graham Foundation for Advanced Studies in the Fine Arts, continues to facilitate visual and performative research within under-examined basins and internal aquatic fringes. Taylor studied architecture at the University of Florida and the Graduate School of Design at Harvard.

Alvaro Velasco Perez is lecturer at the School of Architecture of the University of Navarra. He is tutor at the Writing Centre and studio tutor at the Architectural Association, London. He is PhD by the same institution where he previously studied a masters on History and Critical Thinking in Architecture. In 2012, he obtained his degree on Architecture by the University of Navarra, Spain. He has collaborated in teaching positions at the AA, UHerts, AA Summer School and University of Navarra,

as well as participated in crits throughout the schools. Alvaro has practiced in offices in London, Nigeria, Spain and New York.

Léopold Lambert is the editor-in-chief of The Funambulist. He is a trained architect, as well as the author of three books that examine the inherent violence of architecture on bodies, and its political instrumentalization at various scales and in various geographical contexts. He is the author of *Weaponized Architecture: The Impossibility of Innocence* (dpr-barcelona, 2012), *Topie Impitoyable: The Corporeal Politics of the Cloth, the Wall, and the Street* (punctum, 2016) and *La politique du Bulldozer: La ruine palestinienne comme projet israélien* (B2, 2016). His forthcoming book (2021) is tentatively called *States of Emergency: A Spatial History of the French Colonial Continuum*.

Ethel Baraona Pohl. Critic, writer and curator. Co-founder of the independent research studio and publishing house **dpr-barcelona**, which operates in the fields of architecture, political theory and the social milieu. Editor of *Quaderns d'arquitectura i urbanisme* from 2011-2016, her writing appears in *Open Source Architecture* (Thames and Hudson, 2015), *The Form of Form* (Lars Muller, 2016), *Together! The New Architecture of the Collective* (Ruby Press, 2017), *Architecture is All Over* (Columbia Books of Architecture, 2017), *Harvard Design Magazine*, *ARQ*, *e-flux*, and *Volume*, among others. Her curatorial practice includes "Adhocracy ATHENS" (together with César Reyes and Pelin Tan for the Onassis Cultural Centre, 2015), winner of the ADI Culture Award 2016; and "Twelve Cautionary Urban Tales" (Matadero Madrid, 2020-21).

Thanos Zartaloudis teaches and researches at Kent Law School, University of Kent, UK and is an associate and PhD supervisor at the Architectural Association, School of Architecture, London, UK where he taught the course *Commanding Architecture?* for a number of years. At Kent he co-directs the *Kent Interdisciplinary Centre for Spatial Studies* and teaches the course *Law, Space and Power*. His most recent monograph is *The Birth of Nomos* (EUP, 2019). With Aristide Antonas he has coauthored the Athens Protocols in Antonas, A. and Zartaloudis, T.. *The Protocols of Athens*, in Antonas, A. *The Archipelago of Protocols*, Barcelona: DPR Barcelona, 2016, pp. 11–207.

Mariabruna Fabrizi and **Fosco Lucarelli** are architects, educators and curators. They are

currently based in Paris where they have founded the practice Microcities and the website and visual atlas Socks-studio. They teach design studios, ateliers and theory courses at the Éav&t, Paris Est. They also taught at the MIARD in Rotterdam and are collaborators at the EPFL in Lausanne. F.Lucarelli was 2017-18 Garofalo fellow at the UIC School of Architecture in Chicago; he was the recipient of a grant from the Graham Foundation and was a 2018 fellow at the American Academy in Rome. M.Fabrizi is currently head of the Architectural Visualisation Department at the Éav&t, Paris Est. Fabrizi and Lucarelli have been invited curators at the 2016 Lisbon Architecture Triennale. They curated the exhibition "Inner Space" at the Lisbon Triennale 2019 and are currently preparing "Database, Network, Interface, the architecture of information" for the gallery Archizoom at the EPFL in Lausanne. They published the book "Inner Space" in 2019 for the publisher Poligrafa. Their works have been awarded and exhibited widely.

Chiara Toscani graduated in Architecture at Politecnico di Milano, School of Architecture and Society, Campus Leonardo, in 2002. In 2008, she obtained a Ph.D. in Architectural and Urban Design, cum laude at Politecnico di Milano. Between 2010 and 2012, she was a research fellow at Politecnico di Milano within the research program "Urban and architectural strategies in the contemporary contexts. Theories, methods, and tools". From 2009 to 2018, she was an adjunct professor at Politecnico di Milano, teaching morphology and building typologies, and Architectural design studio 1 and 3. She is the author of many essays and books alongside curating several exhibitions and workshops. From 2006 to 2018, she has been working for Cino Zucchi Architetti as a senior architect.

Elena Palacios Carral (AAHCT 2015, AADipl 2012) is a PhD Candidate at the Architectural Association and a founding director of Forms of Living, a design and research platform. Palacios Carral has worked as an architectural designer in Mexico City and the UK, and as a researcher at Forensic Architecture. She teaches design studios at Oxford Brookes and Kingston University, and is a lecturer in history and theory at the Royal College of Arts

Alessandra Ponte is Full professor at the École d'architecture, Université de Montréal. Since 2008, she has been responsible for the Phyllis Lambert International Seminar, a series of colloquia held at the Université de Montréal.

Curator of the exhibition *Total Environment: Montreal 1965-1975* (Canadian Center for Architecture, Montreal, 2009), she also collaborated to the exhibition and catalogue *God & Co: François Dallegret Beyond the Bubble* (with Laurent Stalder and Thomas Weaver, London: Architectural Association Publications, 2011), and contributed to the Canadian Pavilion at the Venice Biennale Architecture in 2014 (*Arctic Adaptations*) and 2016 (*Extraction*). Among her recent publications: *The House of Light and Entropy* (London: AA Publications, 2014), *Architecture et Information 2.0//2017*, *Architecture et Information 2.0//2018* and *Architecture et Information 2.0// 2020* (École d'architecture, Université de Montréal, 2017, 2018, 2020).

Markus Lähteenmäki is a historian and curator of art and architecture, currently a doctoral fellow at the Institute for the History and Theory of Architecture (gta) at ETH Zurich. He has curated several critically acclaimed exhibitions, most recently *Planetarium: Oleg Kudryashov and Peter Märkli Presented by Alexander Brodsky* at gta Exhibitions (2019) and taught regularly at the London Metropolitan University (2014-2016) and lectured and lead seminars at various universities, including the Royal College of Arts, London, Central Saint Martins, London and ETH Zurich. His writing has been published in *The Burlington Magazine*, *The Architectural Review* and *Harvard Design Magazine* and his curatorial work has been featured in *The Financial Times*, *Art Forum* and *London Review of Books*. He lives and works in Helsinki, where he is a co-organizer of the New Academy (www.newacademy.fi).

David Hutama Setiadi is currently at his final year in the PhD program PhD at the Architectural Association (AA) School of Architecture, London, United Kingdom. His research aims to comprehend the nature of architectural practice and education in the Dutch East-Indies which historically influence the current architectural practice and education in Indonesia. He is framing his research on the role of Dutch Engineers and architects, regarding their practices and training in the early part of the 20th century in the Dutch East Indies. He was also co-curator of Pavilion Indonesia at the 14th and the 16th International Architecture Exhibition la Biennale di Venezia, Venice - Italy (2014 & 2018). From 2018-2020 he also registered as an Affiliated Research Fellow at the KITLV (Royal Netherlands Institute of Southeast Asian and Caribbean Studies) in Leiden, The Netherlands.

Alejandra Celedon was born in Edmonton, Canada. She is an architect from Universidad de Chile, holds a Master from The Bartlett, and a PhD from the Architectural Association. Director of the Master of Architecture (MARQ) Pontificia Universidad Católica de Chile. Curator of the Chilean Pavilion at the 16th Venice Architecture Biennial, and co-curator (along with Nicolas Stutzin and Javier Correa) of "The Plot: Miracle and Mirage" at the Chicago Architecture Biennale 2019. Her latest publications include the books "Stadium: A Building to Render the Image of a City" (Park Books: 2018), co-edited with Stephannie Fell and "Stereography: Tattara & Zenghelis" co-edited with Felipe de Ferrari and Francisco Díaz (Ediciones ARQ, Santiago, 2020). She currently conducts research on educational infrastructure from the scale of the furniture, the classroom, the building to the institutional and political programme.

Francisca Gomez was born in Santiago, Chile. She is an architect from Universidad Católica de Chile, and holds a Master in Architecture from the same University. Her master thesis was developed in the Studio "Las Escuelas" focusing on la Nueva Habana as case study for her project.

Will Orr is a British-Canadian theorist and historian based in London. In 2019, he completed a PhD at the AA, where he teaches in the history and theory programme. Using an historical materialist framework, his research examines the interplay between political and architectural theory from the 1960s to the present.

A Book Interrupts

Books are formed by lines – *paper-lines* frame surfaces, *gutter-lines* folding a spread and forming dualities, *thread-lines* stitching paper into signatures, a *glue-line* binding signatures into a text-block gives form to *edge-lines*: a/head-edge, b/foot-edge, c/foreedge; the *cover-line* wrapping around content bearing countenance, a nape—back-cover—and forming the *spine-line* (this one we see the most actually—anthropomorphically!). These visible lines proffer the haptic space of a book – how it is held and turned while approaching the *content-line*, the invisible *hyper-line*, interrupted but usually numbered, continuously moving from the first page to the last in narrative stride.

A book exists because *content-lines* are too long to be practical on their own, imagine this book as an uninterrupted line spanning from Ljubljana to Paris, set in 10 pt. Minion. Words, paragraphs, chapters and essentially anything that is part of the *content-line* is interrupted by the confinement of the book's *body-lines*. These interruptions create thresholds that from any page we can enter, and if the premise of the *content-line* opens to us—books like this one—then its *content-line* of inner gestalts greets us openly signified.

Marko Damiš

Izdala

Publisher

Univerza v Ljubljani, Fakulteta za arhitekturo
/ University of Ljubljana, Faculty of Architecture

Zoisova cesta 12, SI-1000 Ljubljana

Urednik

Editor

Paul O Robinson, University of Ljubljana, FA

Gostujoča urednica

Guest Editor

prof. dr. Marina Lathouri, the Architectural Association, London

Uredniški odbor

Editorial Board

izr. prof. dr. Uršula Berlot Pompe, University of Ljubljana, ALUO
izr. prof. dr. Jaka Bonča, University of Ljubljana, FA
Judith Birdsong, Writer and Lecturer, School of architecture, UT Austin
izr. prof. dr. Matej Blenkuš, University of Ljubljana, FA
doc. dr. Mariana Correia, Escola Superior Gallaecia, PT
prof. dr. Peter Fister
prof. PhD Imma Forino, Politecnico di Milano
prof. mag. Peter Gabrijelčič
prof. dr. Vojko Kilar, University of Ljubljana, FA
prof. Robert MacLeod, USF School of Architecture and Community Design
prof. Agostino De Rosa, Università Iuav di Venezia
doc. dr. Matevž Juvančič, University of Ljubljana, FA
doc. dr. Beatriz Tomšič Čerkez, University of Ljubljana, PeF
doc. dr. Domen Zupančič, University of Ljubljana, FA
prof. dr. Tadeja Zupančič, University of Ljubljana, FA

Oblikovanje

Graphic Design

Marko Damiš & Martin Košir

Prelom

Layout

Marko Damiš

Tisk

Printed by

Formatisk d.o.o.

Črkovna vrsta

Fonts

Minion Pro, Acumin pro

Prevodi v slovenščino

Slovene Translations

Boris Troha

Podoba na naslovnici

Cover Art

Deborah Stratman

Tehnični urednik

Technical Editor

dr. Špela Verovšek

Naklada

Copies

500

Cena

Price

20,00 EUR



Arhitektura, raziskave

/ Architecture Research

2020

Univerza v Ljubljani
Fakulteta za arhitekturo



© 2020

ISSN 1580-5573
ISSN 1581-6974

print
www