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# Waking Leviathan

## Frank Lloyd Wright's rural urban ideal

From *Art and Craft Of The Machine* (1901) to *The Living City* (1958)

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'Destruction of Leviathan' 1865 Engraving by Gustave Doré

*“I readily admit that the Americans have as yet no poets; I cannot allow that they have no poetic ideas. In Europe people talk a great deal of the wilds of America, but the Americans themselves never think about them: they are insensible to the wonders of inanimate nature, and they may be said not to perceive the mighty forests which surround them until they fall beneath the hatchet. Their eyes are fixed upon another sight: the American people views its own march across these wilds – drying swamps, turning the course of rivers, peopling solitudes, and subduing nature. This magnificent image of themselves does not meet the gaze of the Americans at intervals only; it may be said to haunt every one of them in his least as well as in his most important actions, and to be always flitting before his mind. Nothing conceivable is so petty, so insipid, so crowded with paltry interests, in one word so anti-poetic, as the life of a man in the United States. But amongst the thoughts which it suggests there is always one which is full of poetry, and that is the hidden nerve which gives vigour to the frame.”*

Alexis de Tocqueville, *Democracy in America*, Book 1, Chapter XVII: Of Some Of The Sources Of Poetry Amongst Democratic Nations (1831–33)

# Abstract

There still exists in the collective global imagination a ghostly 'image of progress' framed by a nature-dominating narrative that distorts reality. As living standards rise worldwide, the demand for natural resources is accelerating in a familiar pattern: cities eat the rural, and the rural eats the wilderness. Ecology, society and economy are not the either/or variables they are often portrayed as being: there is no society without ecology, and no economy without society, each is embedded in context. As globalised societies become increasingly urban, the notion that cities ought to become self-sufficient has been widely popularised in both the architectural profession and in academia, legitimated through the use of the term autopoiesis (Greek αὐ'to 'self' and ποίησις 'creation'), borrowed from the field of chronobiology. The opposite of autopoiesis, a closed process in which context might be an afterthought, is allopoiesis, the process whereby an organisationally open system produces something other than itself. Reality is many-layered and emphatically simultaneous, and while designers are busy fine-tuning daydreams of 'self-sufficient cities', regions and ecological systems now supporting real cities are being fragmented and erased in vast swaths, often taking once thriving cities along with them, further accelerating centralised urbanisation. Frank Lloyd Wright's *The Living City* is a conceptual rural urban model for decentralised development that attempts, through its evolution in several iterations (from 1901 till 1958) to provide a humane alternative to centralised commercial urbanism. Wright's life (1867-1959) and work spanned from the Victorian age to the space age, and *The Living City* is arguably his most ambitious attempt to 'bridge the gap'. In arguing for contextual, open-ended planning methods it provides a suitable polar counterpoint to contemporary notions of cities as self-sufficient. As a precedent stimulating awareness of the fundamental need for the 'humane proportion' of industry and agronomy, it is of urgent relevance today.

## KEYWORDS

regional design; infrastructure; networks; regionalism; contextualism; regional design; contextual infrastructure; dual networks; climatic periodicity; radical contextualism; critical regionalism; second nature; rural urban dynamics; contrapuntal thinking

## 1. INTERGENERATIONAL LEGACY

There still exists in the collective global imagination a ghostly ‘image of progress’ framed by a nature-dominating narrative that distorts reality – as worldwide living standards rise, the demand for natural resources is accelerating in a familiar pattern: cities eat rural regions, and rural eats wilderness. Ecology, society and economy are not the either/or variables they are often portrayed as being: there is no society without ecology, and no economy without society – each is embedded in context. As globalised societies become increasingly urban, the notion that cities ought to become self-sufficient has been widely popularised in both the architectural profession and academia. But reality is many-layered and emphatically simultaneous, and while designers are busy fine-tuning daydreams of ‘self-sufficient cities’, however poetic<sup>1</sup>, the rural regions and ecological systems now supporting real cities are being fragmented and erased in vast swaths – often taking once thriving cities along with them, further accelerating centralised urbanisation.

In 45 BC Cicero conceived of rural and urban regions as engaged in a interaction balance involving existing landscapes. Rural and urban are seen as the mutually interrelated counterparts of the same civilising force, polarities of an on-going initiative Cicero termed *second nature* (Cicero, 2008). Contemporary recognition of the importance of context is again broadening the conceptual scope of design. As an alternative to the image of progress, whose nature-negating narrative was that of ‘manifest destiny’ – recalling de Toqueville’s text – and contemporary architects advocacy of taking ‘insane risks’, it is interesting to consider other precedents. Low-risk strategies that harness urban acceleration and mitigate ecological degradation have an established legacy, an alternative *image-of-progress*. Cicero wrote of a rural/urban second nature, and Vitruvius’ reflections on the work done in Cicero’s time has had an enduring influence: from Roman villas, to English public gardens, to Olmsted’s urban parks, to Wright’s *Living City*, to Cedric Price’s *Fun Palace*, Archizoom’s *No-Stop City* and Banham’s *Architecture of the Well-Tempered Environment*, leading straight to the use of contemporary GIS and parametric methods in landscape infrastructure-related initiatives. Yet the tendency to reject altogether that which has come before still prevails, causing wild oscillations in the name of progress – a disruptive intergenerational dissonance. Beaux-Arts was rejected by Wright, while Wright’s expressive machine-ornamentation was called a ‘crime’ by Adolf Loos. History itself was rejected by the Modernists, and Modernism was considered a failure by the next generation. Subsequent movements, whether New Urbanism, Parametricism, or Landscape Urbanism, are taken up and rejected in turn, often with little evaluation of internal counter-currents that could fruitfully align these trajectories. Team 10 is credited with bringing about the end of CIAM, and, indeed, they seemed to relish doing so – but wasn’t a course correction their

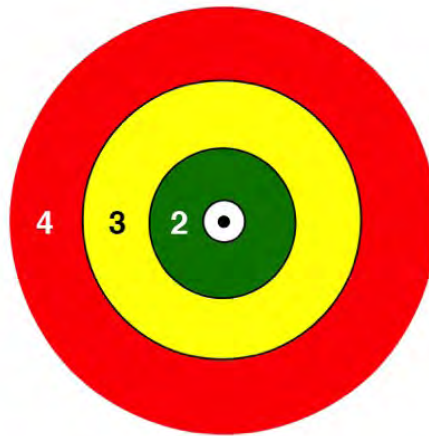


stated aim? This essay focuses on one project in the timeline, on the eve of the Frank Lloyd Wright Archives relocating from Taliesin West to Columbia University's Avery Library and what can only be considered a new era of Wright scholarship. There are many treasures in the archive, certainly – I recall finding *Wendingen* journal editor T.H. Wijdeveld's letters to Wright, beautifully crafted, with translucent paper and gold ink; or Wright's illustrations for Jens Jensen's non-profit *Friends of Our Native Landscape* – but I believe among all the archive's contents it is inevitable that Wright's rural urban strategy, *The Living City*, will be given renewed, even urgent scholarly attention.

## 2. AN ALTERNATIVE TO URBANISM

Frank Lloyd Wright's *The Living City* (Wright, 1958) is a conceptual rural urban model for decentralised development that attempts, through its evolution in several texts, and the models and drawings accompanying them, to provide a humane alternative to centralised commercial urbanism. In that regard it is as interesting for what is omitted as for what is shown in the models and drawings – that is, the context from which the work emerged, beyond the models and outside of the drawings. This consideration is an exercise that requires 'zooming out', and taking into account the context in which the work itself was done. References to this may be found in Wright's numerous texts, in which he develops what might be called his *radical humanism*, and in the legacy of ideas, opportunities and personalities the project engages in its socio-political context over time – relating the social logic, physical proportion and spatial anatomy of the strategy itself to its underlying environmental framework. In Wright's time, as in our own, the rapid urban transformation of formerly rural sites of strategic interest contributed to a myopic enthusiasm for urbanisation. This was evidenced then in the widespread adoption of centralised socio-economic models such as Von Thunen's *The Isolated State* (1826) (figure 1), as it is now in popular academic and professional ideals of the self-sufficient city. Yet the city has never existed in isolation, and neglecting to acknowledge the city 'in context' has contributed to both ecological and social degradation from generation to generation. We have seen that this degradation actually leads to fewer lifestyle options – and to cities of utter sameness.

Can the technologically advanced city be reconciled with existing environmental and social contexts, or must it impose another order? The following pages provide an overview of how Wright framed this question verbally, socially and spatially – and how he responded to it with *The Living City*. The text concludes with a critical consideration of this response given the cultural context in which it was produced, and an evaluation of the contribution that response might still make to contemporary research.



**Figure 1** The Isolated State' (1826) Johann Heinrich von Thünen developed a model that is considered to be the first serious treatment of spatial economics and economic geography – connecting it with the theory of rent. The black dot represents a city; 1 (white) dairy and market gardening; 2 (green) forest for fuel; 3 (yellow) grains and field crops; 4 (red) ranching; the area beyond this represents wilderness where agriculture is not profitable

### Origins and elaboration

The main themes developed in *The Living City* can all be found in Wright's early writings of the 1890's, and are directly related to his personal experience. Raised in a socially progressive Wisconsin agricultural community of Welsh immigrants, his immediate family members were leaders in the Unitarian church, and the important philosopher and educator John Dewey was an associate of his teacher-aunts, for whom Wright designed the renowned Hillside Home School in 1896, and additional buildings subsequently. These ultimately became the home of the Taliesin Fellowship in 1932, initially conceived of as the *Hillside School for the Allied Arts* in 1928. Of rural origins, as a youth coming of age he experienced the very modern phenomenon of leaving the country for the city, living and working in industrial-era Chicago, where both the vitality and the ills of industrial-era cities were abundantly manifest: from the coexistence of extreme wealth and poverty, to progressive social initiatives and the exploitation of ever-abundant immigrant labour, to the creation of remarkable urban parks and the destruction of entire ecological systems such as those lost by reversing the flow of the Chicago River from 1892 to 1900 by engineers (Chicago River, 2013). The key themes in his early texts were also the subject of his personal and professional efforts – namely the intergenerational continuity of knowledge in a site-specific context, the creative use of technology for humane purposes, and a notion of rural and urban settlements together as the living 'body of civilization'.



These themes coalesced in his essay *The Art and Craft of the Machine* (Wright, 1901), which was prepared and delivered for a meeting of the Chicago Society of Arts and Crafts at Jane Addam's Hull House, an institution with a broad reputation for its advocacy of social reform (cf. Johnson, 2004). From its founding in 1889 until its sudden, politically-motivated closure in 2012, Hull House was considered a standard-bearer for innovative social, educational and artistic programs for immigrant and working-class families. The Chicago Society of Arts and Crafts itself was founded in response to the rapid industrialisation of production methods, and sought collective means by which to stem the proliferation of cheap goods and to retain the arts and crafts as viable livelihoods. As distinct from the tendency to regard industrialisation of production as exclusively negative in social terms, Wright asserted that the machine was but another tool, arguing that in the hands of the artist and craftsman it could also serve to bring about a more humane society. Indeed, the architect accepted the machine as an inevitable means of production, but sought to control its consequences at the scale of architecture and the city:

*"As we work along our various ways, there takes shape within us, in some sort, an ideal – something we are to become, some work to be done. This, I think, is denied to very few, and we begin really to live only when the thrill of this ideality moves us in what we will to accomplish. In the years which have been devoted in my own life to working out in stubborn materials a feeling for the beautiful, in the vortex of distorted complex conditions, a hope has grown stronger with the experience of each year, amounting now to a gradually deepening conviction that in the Machine lies the only future of art and craft – as I believe, a glorious future; that the Machine is, in fact, the metamorphosis of ancient art and craft; that we are at last face to face with the machine – the modern Sphinx – whose riddle the artist must solve if he would that art live, for his nature holds the key."* (Wright, 1901)

As an extension of human will, he describes the city in terms of an explicitly biological analogy – the modern city as the offspring of the 'machine-Sphinx', consistent with the image of the mechanised city as *Leviathan* he portrays in the essay's dramatic conclusion:

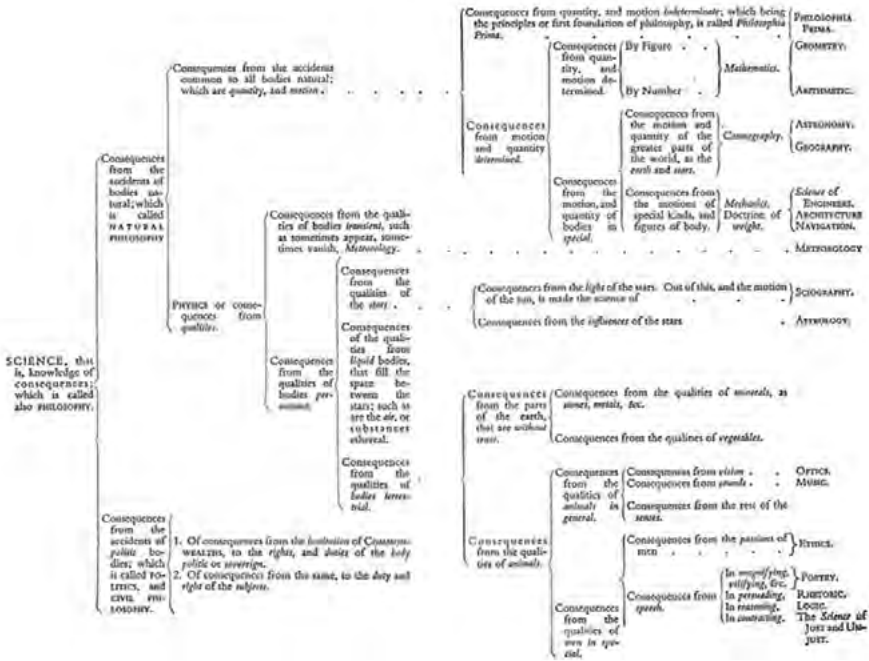
*"[...] be gently lifted at nightfall to the top of a great downtown office building, and you may see how in the image of material man, at once his glory and menace, is this thing we call a city. There beneath, grown up in a night, is the monster leviathan, stretching acre upon acre into the far distance. High overhead hangs the stagnant pall of its fetid breath, reddened with the light from its myriad eyes endlessly everywhere blinking. Ten thousand acres of cellular tissue, layer upon layer, the city's flesh, outspreads enmeshed by intricate network of veins and arteries, radiating into*

the gloom, and there with muffled, persistent roar, pulses and circulates as the blood in your veins, the ceaseless beat of the activity to whose necessities it all conforms [...]. If the pulse of activity in this great city, to which the tremor of the mammoth skeleton beneath our feet is but an awe-inspiring response, is thrilling, what of this prolific, silent obedience? And the texture of the tissue of this great thing, this Forerunner of Democracy, the Machine, has been deposited particle by particle, in blind obedience to organic law, the law to which the great solar universe is but an obedient machine.

Thus is the thing into which the forces of Art are to breathe the thrill of ideality! A SOUL!” (Wright, 1901)

This analogy of the body of civilisation as an obedient, pulsing machine frames the answer he gives as to the nature of the architect’s ultimate objective – to bring, through art, ‘a soul’ to the city-machine, the *Leviathan*, rendering it empathetic and beneficial to humanity as a habitable artefact. I believe that it was Thomas Hobbes’ classic 1651 text, *LEVIATHAN or The Matter, Form, and Power of a Commonwealth Ecclesiastical and Civil* (Hobbes, 1977), which influenced Wright’s choice of that particular term in characterising the city. Indeed, in *LEVIATHAN* Hobbes lays the foundation for ‘the science of natural justice’, which he regarded as the culmination of ‘the science of consequences’ – he illustrates this with a diagram of the fields of knowledge as then interpreted (figure 2). The holistic, inclusive ambition of Hobbes to grapple with the issues of society *en masse* and *in situ* anticipates the scope Wright attempts to bring forward in his essay.

When *The Art and Craft of the Machine* was delivered in Chicago the industrial age was in full force. Although benefitting some, capitalised industry throughout the world was creating a massive and often genuinely oppressed labour class, while technologies to increase automated productivity were displacing artists and workers, and ever more powerfully impacting both agricultural and urban regions. In his text, Wright acknowledges the difficulties arising from the machine’s implementation, asserting that they are not inherent in the machine, but are the result of greed and the misuse of a powerful tool: the machine is ‘the creature and not the creator’ of political iniquity. His open attitude toward the machine was not then common among artists and intellectuals involved in the Arts and Crafts movement, many of whom actively protested any collaboration with industry. By his own account, this optimism was motivated by having read Victor Hugo’s *Notre-Dame de Paris* as a child.



**Figure 2** Disciplinary Anatomy (1651) Hobbes' indexical attitude resulted in this 'family tree' of the disciplines, which he describes thusly: "the registers of science are such books as contain the demonstrations of consequences of one affirmation to another, and are commonly called books of philosophy; whereof the sorts are many, according to the diversity of the matter, and may be divided in such a manner as I have divided them in the following table"

One chapter of the book, usually excized when published in English, is an essay titled *Ceci tuera cela*, or 'This Will Kill That' (Hugo, 1831). The essay describes, through a concise history of architecture, how in the Gothic cathedral one could see the culmination of architecture as the integration of all the arts: music, ritual, liturgy, textiles, carpentry, masonry, sculpture and painting. Hugo goes on to describe how, with the invention of the printing press "the book will kill the edifice"; because of the press, continuity of human thought no longer required strategies of material permanence, of stone and wood, but instead the proliferation of inexpensive multiplicities sufficed (figure 3). Hugo poetically describes the emancipated pages of the printing press blowing in the wind, "like birds leaving the cathedral at dawn." Wright refers to this chapter in his early essay as describing for him 'the grandest sad thing in the world':

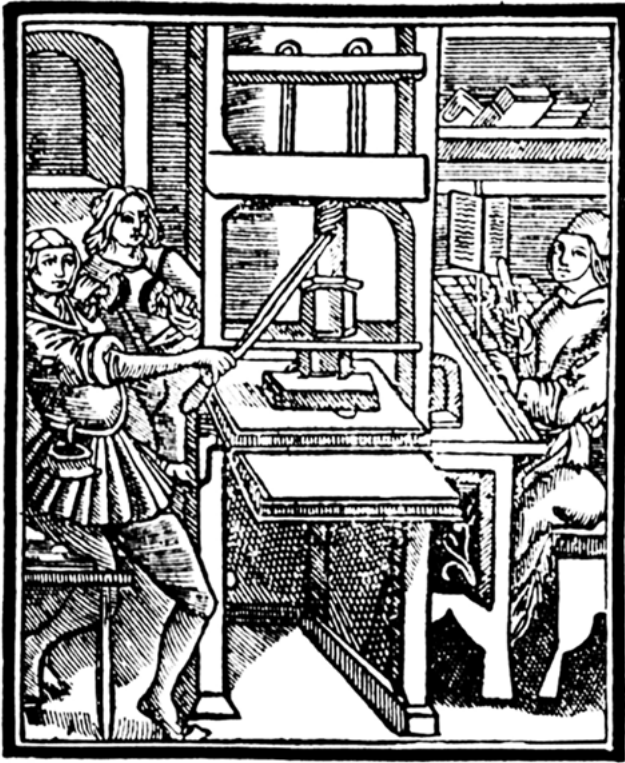


Figure 3 Gutenberg's press, ca. 1439

*“Architecture is dethroned.*

*Gutenberg’s letters of lead are about to supersede Orpheus’ letters of stone.*

*The book is about to kill the edifice. The invention of printing was the greatest event in history. It was the first great machine, after the great city. It is human thought stripping off one form and donning another. Printed, thought is more imperishable than ever – it is volatile, indestructible.*

*As architecture it was solid; it is now alive; it passes from duration in point of time to immortality.”*

(Wright, 1901)

One can see the further development of this interpretation of the historic trajectory of technology in *The Disappearing City*, the next major effort he made to address these themes. He began writing the book in 1928, and it was published in 1932 (Wright, 1932). The book’s independent publisher was William Farquhar Payson, formerly a journalist for the *New York Times* and managing editor at *Vogue Magazine* in the late 1890s, who in 1928 had supervised the

publication of Le Corbusier's *Toward a New Architecture*, and in 1929 had published a second book by Le Corbusier, *The City of To-morrow and its Planning*, and Henry Russell Hitchcock's *Modern Architecture*.

Certainly *The Disappearing City* can be seen as in dialogue with the architectural community at large. Prior to its publication, Wright had further developed his ideas for the book through a series of public lectures with the theme 'The City' at Princeton University in 1930. In this lecture series he questioned the nature of the centralised city and speculated about its gradual dissolution: 'human thought stripping off one form and donning another', and identified numerous factors of polycentralisation that have since been widely recognised, such as various forms of mobility and communication technologies. *The Disappearing City* issues an unrelenting indictment of the commercialised industrial city, describing it as "some tumor grown malignant [...] a menace to the future of humanity." The opening illustration in the book is an aerial view of New York City eerily shrouded in smog – an illustration retained in subsequent publications, including his final book *The Living City*, bearing the caption, 'Find the citizen' (figure 4).



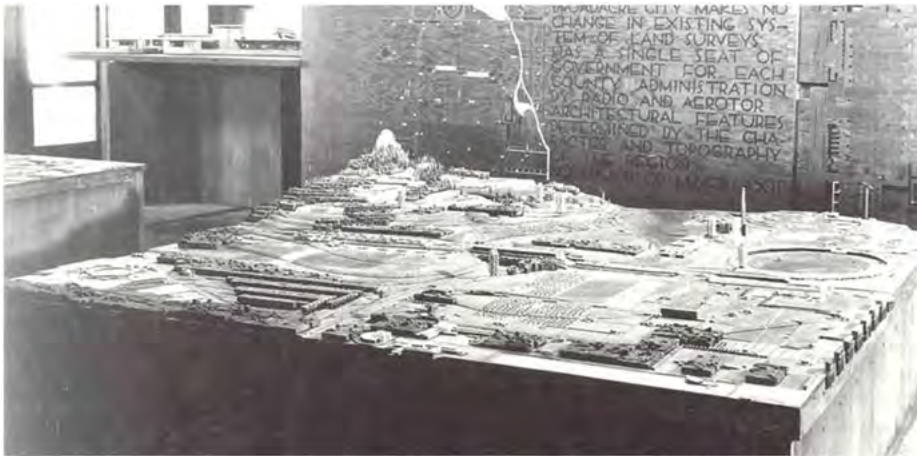
**Figure 4** *The Disappearing City* (1932) features an aerial view of New York City from the early 1900s that bears a striking similarity to a view of Dubai used on the cover of *AD magazine* from over a century later – illustrating what little progress has been made in terms of conceptualising the city.



In place of illustrations are vivid descriptions of what the decentralised city, in the hands of the artist-architect enabled by the machine, might become:

“Imagine spacious landscaped highways [...] giant roads, themselves great architecture. Pass public service stations, no longer eyesores, expanded to include all kinds of service and comfort. They unite and separate – separate and unite the series of diversified units, the farm units, the factory units, the roadside markets, the garden schools, the dwelling places (each on its acre of individually adorned and cultivated ground), the places for pleasure and leisure [...] This integral whole composes the great city that I see embracing all of this country – the Broadacre City of tomorrow.” (Wright, 1932)

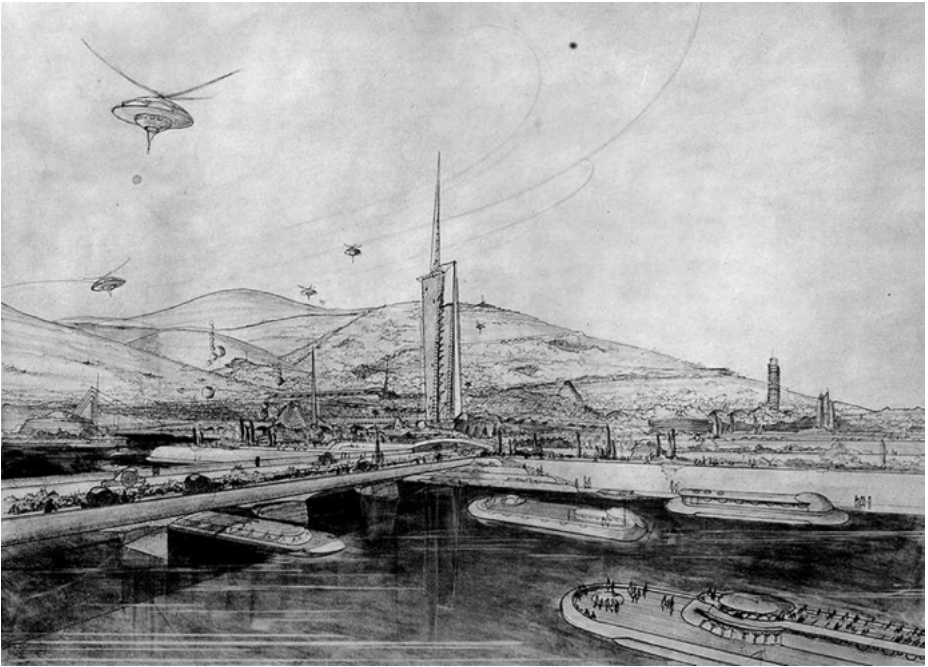
This description of the future city, first coining here the term *Broadacre City*, was to take form in 1934–35 in a series of drawings, models and publications related to an exhibition of that name which toured from Rockefeller Center in New York, to Washington DC, to Pittsburgh, and to several cities in rural Michigan and Wisconsin before embarking on an extensive international tour (figure 5).



**Figure 5** *Broadacre City* (1934) model quarter section, scale 1 inch = 75 feet (source: The Frank Lloyd Wright Foundation Archives at The Museum of Modern Art | Avery Architectural & Fine Arts Library, Columbia University, New York)

In 1945 *The Disappearing City* was fully revised, expanded, and illustrated with this new material, and it was published with the title *When Democracy Builds* (Wright, 1945).





**Figure 6** *The Living City* (1958) aerial view (source: The Frank Lloyd Wright Foundation Archives at The Museum of Modern Art | Avery Architectural & Fine Arts Library, Columbia University, New York)

The architect's final and most comprehensive treatise on the subject, *The Living City* (Wright, 1958) (figure 6), supplements the earlier texts with richly detailed perspective drawings and reflections about the impact of technology on an overarching social narrative.<sup>2</sup> Under the heading 'Illusion', he again correlates his key themes:

*“Centralization now proves to be something that, used to wind space up tighter and tighter, smaller and higher, is like some centripetal device revolving at increasing speed until – terrible, beyond control – it turns centrifugal, ending all by dispersal or explosion. Meantime, what possible control? Government? No – or only to a very limited extent. In democracy, more and more limited to expedients: politics. The only possible control, then, is profoundly educational. In democracy, is education – when on speaking terms with culture – not the true answer to such exaggerations of artificiality as machine power in production, or as crowding? On behalf of humane freedom it is the growth of this human intelligence ultimately applied to the city that we must interfere by such pressures as it can exert there where pressure does most good. Salvation from the false economies of centralization lies in a wider grasp of the limitations and danger of these powers – machine powers all – multiplied to excess. What hope is there for our future in this machine age, if indeed the machine age is*

to have any future, unless decentralization and appropriate reintegration are soon encouraged – given right-of-way in actual practice?” (Wright, 1958: 33–34)

He goes on to criticise the “three major artificialities [...] grafted by law upon all modern production”: rent for land (leading to speculative development), rent for money (leading to unscrupulous banking practices), and rent for inventions (leading to patents and proprietary knowledge):

“A new speculative commodity has therefore appeared – money, unnatural as commodity, now becoming monstrosity. The modern city is its stronghold and chief defender; and insurance is one of its commodities.” (Wright, 1958: 34–35) “And when urban men of commerce themselves succeed, they become more than ever vicarious. Soon these very successful men sink into the sham luxury their city life so continually produces. But they create nothing! Spiritually impotent, a fixation has them where impotence wants them: fixation in a cliché.” (Wright, 1958: 20)

Thus it is the cliché image of the city-as-progress, and its marketing propagandists, at which his treatise takes aim:

“So this modern monster, degeneration of the Renaissance city, becomes the form universal of anxiety, all stated in various forms of rent. The citizen’s very life is tenant, himself rented, in a rented world. Production is now trying to control consumption...this it is that turns the nation into a vast factory, greedy for foreign markets, with the spectre of war as inevitable clearing house.” (Wright, 1958: 21)

In contrast to this, he asserts:

“Our natural resource now is in new possibilities of access to good uses for good ground: an agronomy intelligently administered...The living, consuming man-unit of our society will ultimately decide this momentous issue. Consumption must control production. This matter will only be decided by consumption in proper control of an organic basis for distribution, man to man, nation to nation...The road to a good life is still open. But today this road must lead on through public obstruction...hindrances legally erected, legalities exploiting his good faith – a general depravity in a drift toward quantity at expense to quality, until we find all heading in toward war or revolution: this time the revolution industrial – yes. Agrarian, no. About time now our agronomy asserted itself in his behalf.” (Wright, 1958: 38–41)

In his closing notes, he reflects on the various iterations the work has taken:

*“Does The Art and Craft of the Machine, first read at Hull House [...] seems to suffer contradiction here? No. I then dreaded the machine unless well in the hand of the creative artist. Saying so then, I say so now. I knew then that this power we call the Machine was, otherwise, socially malevolent [...] but today the Machine is running away [...] it has been far too exploited by industrialism and science at expense to art and true religion.”* (Wright, 1958: 246)

He goes on:

*“Machine facilities have increased inordinate quantity production beyond consumption until total mechanization is trying to control distribution and the market. By total industrialism war, more war is always in sight, paid for in advance – all but the bloodshed. The machine is now become more the engine of destruction, and propaganda for increasing our national insecurity by wage-slavery is everywhere in the social fabric of the news. Higher human faculties, which the machine should serve to release in our Democracy, are officially and academically emasculated, the humane interest fast disappearing. That is why the belated writing of this – seeming to me now – more timely, more important than ever book, original advocate of organic architecture; again to take the stand for the ‘consumer’ (the people) as against the ubiquitous, thoughtless producer for profit. The ‘consumer’ now must take what ‘production’ decides to make [...]. This antithesis of the democratic process is a menace, a drift toward deadly conformity.”* (Wright, 1958: 246)

He concludes:

*“Finally, then, this long discourse, hard to write or read, is a sincere attempt to take apart and show, from inside, the radical simplicities of fate to which our own machine skills have now laid us wide open and try to show how radical eliminations are now essential to our spiritual health, and to the culture, if not the countenance, of democratic civilization itself [...]. ‘The Living City’ then is nothing less than inspiration, or better, than restraint upon the effects of ill planning by the trustees whose responsibility it is – our young architects. I hope this book is at least an exhortation for them, a warning for the farmer, a caution and encouragement for the small manufacturer and for national colleges of architecture and agriculture, or such cultural nurseries as this nation has raised or razed or carelessly left standing. We cannot achieve our democratic destiny by mere industrialism, however great. We are by nature gifted as a vast agronomy. In the humane proportion of those two – industrialism and agronomy – we will produce the culture that belongs to Democracy organic [...]. The present is the ever moving shadow that divides yesterday from tomorrow. In that lies hope.”* (Wright, 1958: 248)

### 3. CRITICAL RECEPTION AND CONTEMPORARY INTERPRETATION

Historically, academics and architectural professionals have seriously considered little of Wright's work in the extra-large scale – and when it has been considered it has generally been done rather cursorily. Architecture critic Witold Rybczynski summarized a view often held by the establishment when he described the *Broadacre City* project as the “*embarrassing foible of an aging master*” (Rybczynski, 1996). Herbert Muschamp, before he was the architecture critic of *The New York Times*, concluded that the plan was “*too real to be Utopian and too dreamlike to be of practical importance.*” While author, historian and critic Lewis Mumford had early praise for it: “*On the whole, Wright's philosophy of life and his mode of planning have never shown to better advantage*”, 30 years later he criticized the plan's “*sprawling, open, individualistic structure*” as being “*almost antisocial in its dispersal and its random pattern.*” This is a particularly interesting observation, given Mumford's close friendship with Wright, and his instrumental role in establishing the Regional Planning Association (Regional Plan Association), an organization closely associated with the Chicago School of Sociology, that nevertheless has been an influential advocate of many *Living City* concepts and remains active today. Of course, among several notable exceptions to this historic disregard are Robert Fishman's classic *Urban Utopias in the Twentieth Century* (Fishman, 1982) and Charles Waldheim's essay *Towards a History of Agrarian Urbanism* (Waldheim, 2010) – which aside from Chris Reed's passing reference to *The Living City* and inclusion of an image of one of the 1958 aerial perspectives (mistakenly dated 1935) in his essay *Public Works Practice* in 2006's *Landscape Urbanism Reader* (Reed, 2006) also edited by Waldheim, is the only reference to the project I have come across in the landscape urbanism discourse.

Wright maintained close friendships and professional collaborations with many of the individuals who figure prominently in the evolving contemporary discourse around landscape urbanism, ecological urbanism, and landscape infrastructure. Landscape architect Jens Jensen was a long-time collaborator, and Wright volunteered his services for Jensen's not-for-profit organization Friends of Our Native Landscape; Wright corresponded with Olmsted, designed houses for his Riverside masterplan, and his son, Frank Lloyd Wright Jr., worked with the Olmsted Brothers practice directly after working with his father; landscape architect Lawrence Halprin attests that he entered the field after visiting Wright's Taliesin, etcetera. Clearly these exchanges exerted a reciprocal influence, and one can only imagine what deeper scholarship in this area will reveal. As UCLA prof. emeritus Lionel March has written,

“[...] contrary to the impression given by Wright's critics, these views [represented by Wright in *The Living City*] were in fact shared by some of the most no-

table intellectuals and practicing politicians of his day. In particular I have in mind those social reformers, progressives and liberals [...] whom he ‘read and respected,’ or whom he knew as friends [...] such as William James and John Dewey, the American pragmatists; Henry George the popular economist; two of John Maynard Keynes’ ‘heretics’ – C.H. Douglas and Silvio Gesell – as well as the American institutional economists Thorstein Veblen and John Commons and the economic historian Charles Beard; in industry Henry Ford and Owen D. Young (of General Electric); in politics the ‘Wisconsin Idea’ progressives, the La Follettes; and in social matters, Jane Addams, Edward Ross, and Richard Ely. All of them are at once idealistic and people of action [...] at least in the context of this particular liberal milieu [...]. Wright’s views of society were unexceptionable and [...] in Broadacres, Wright was attempting as the best architect of his day to give potential architectural and urban form to what he believed to be the best thoughts and the best social actions of his American contemporaries [...] [they] did not consider democracy to be a form of government, so much as a way of living. This distinction between form on one hand and way or process on the other was a preoccupation of American pragmatic philosophy at the turn of the century [...] in contrast to the systematic philosophies of the established old world, the pragmatists conceived of an open-ended approach to cope with an entirely new emergent situation [...] the dissemination of the pluralistic values of a polyglot people.” (March, 1983)

March goes on to establish many connections between *The Living City* and contemporary progressive initiatives in governance, economic and educational policy, substantiating his assertion that the design is indeed more procedurally – that is to say *dynamically* – conceived than it is formally, or *statically*, contrived. This brings up what is certainly a valid critique of *The Living City*: although ostensibly built on the basis of a real quarter-section of land in the American Midwest, and Wright’s initial, evocative hand sketches of curvilinear, landscape-responsive Broadacre variants exist in the archives (figure 7).



**Figure 7** Frank Lloyd Wright, Broadacre City plan sketch, 1934. Ink, colour pencil on paper. 9 3/8 x 8 1/2 in (source: The Frank Lloyd Wright Foundation Archives at The Museum of Modern Art | Avery Architectural & Fine Arts Library, Columbia University, New York)

Wright never illustrated the scheme in the broader regional context. How was one district to relate to another? Was it to be deployed like a carpet, as a linear city, or as a polycentric network in which areas like this serve as nodes?<sup>3</sup> Nevertheless, it is interesting to note that March's extrapolated assessments of *The Living City's* performative capabilities – made on the basis of what is represented in the project – provide evidence that rather than being a short-sighted model of automobile-induced sprawl, as had commonly been asserted, *The Living City* emerges as a meticulously scaled diagram of a compact transportation corridor network, whose rural urban dynamic could sustain the entire US population within a total footprint of 4% of the nation's area, leaving 96% to go back to wilderness. These figures include the agricultural and industrial land necessary to sustain the urban districts as well, creating what is effectively an integrated rural urban regional metabolism, as distinct from an isolated, self-sufficient city (Sargent, 1992). At a one-to-one scale this is, conveniently, about equivalent to the length of the US Interstate highway system when two miles on either side of the roadway (figure 8). Of course, in practice *The Living City* strategy is unlikely to be either uniform or symmetrical, as environmental and socio-political settings will vary, and it was clearly conceived of as responsive to these contextual factors (figure 9).





**Figure 8** US interstate highway system, 4% of land mass, equivalent to Broadacre City's footprint when housing entire US population (2000 census), after L. March



**Figure 9** Broadacre City Model (1934) and the Vitra Museum's *The Living City* (1997): this later exhibition reinterpreted the models in an aesthetically beautiful way, while neglecting the axial role of the transportation corridor 'spine' in relation to which the entire scheme is a gradation of density toward the edge – an interpretation unfortunately obscuring the essential formal logic of the scheme (source: The Frank Lloyd Wright Foundation Archives at The Museum of Modern Art | Avery Architectural & Fine Arts Library, Columbia University, New York (left); Vitra Museum, Basel (right))

Although such a digression hardly matches the scope of this essay, it would be interesting to write the genealogy of ideas leading from Wright to Team 10 and the Texas Rangers: both these counter-cultural groups gained ascendancy in the mid-late 1950s as Wright was fading – both emphasised, as did Wright, the social and spatial as drivers of architecture and urbanisation – and it seems clear to me that they are the closest thing yet to a ‘Wrightian’ legacy in architecture, polemic though that legacy may be.<sup>4</sup>

Certainly reactions against this legacy are still present. For instance when Peter Eisenman (a student of Colin Rowe – a Texas Ranger – and of Wittkower) was asked about the contemporary relevance of his PhD thesis, in which he analysed what he described as Wright’s ‘multi-axial’, ‘linear spatial’ compositions, he responded:

*“I hate Wright. I’ve always hated Wright. I only studied him to figure out why I hated him so much [...]. I hate nature. If you love nature so much you should be a damned landscape architect.”<sup>5</sup>*

In the same discussion Eisenman stated that Rem Koolhaas had been one of his ‘great discoveries’, and of course it was Koolhaas who has famously asserted that the subtext of contemporary super-urbanism is ‘f\*\*k context’ (Koolhaas, 1998). Certainly there is ample precedent for this apparent compulsion to obscure context. In behavioural sciences it is generally associated with the repression of memory itself within the subconscious. Repressed memory is a psychological condition in which a memory has been blocked due to a high level of stress or trauma – although the individual often cannot recall the memory, it may still be affecting him. It is still a controversial topic in the discipline of psychology, and according to some psychologists repressed memories can be recovered through therapy, while others believe that repressed memories are in fact a cultural symptom because there is no documentation of their existence before the 1800s. This is a fascinating question – but whether repressed memory is an individual or cultural phenomenon, it may well be that contemporary cities’ persistent and general disassociation from context is attributable to traumatic events, both local and global.

Just so, in counterpoint to ascendant memory-negating theories of super-urbanism, the contemporary historian Sébastien Marot develops a direction of thought he describes as *sub-urbanism*, ‘a theoretical hypothesis, not necessarily exclusive of its opposite’ in which the conventional urban paradigm is inverted (figure 10).



**Figure 10** 'Sub-Urbanism and the Art of Memory' (2003) Sébastien Marot's treatise is explicitly written in counterpoint to Koolhaas' 'Delirious New York' (source: Architectural Association, London)

Rather than program being the defining parameter of the project, as is the architectural tendency when amplified to the scale of the city, the existing site – that is, both the landscape and social context – are taken as definitive of suitable programs. He elegantly characterises such an approach with four attitudes: an 'active regard' for the memory of the site, an 'in depth' rather than 'planar' view of open and public space, seeing site and design as 'fields of relations' rather than as objects, and seeing these as 'processes' rather than as products. Marot explains, *"I regard these four principles not as inflexible rules of ethics but rather as the precepts (themselves essentially relative) of a preliminary and therefore imperfect code of conduct that, to borrow from Descartes, 'can be followed by way of provision, so long as one doesn't know any better'"* (Marot, 1993). Such an approach would indeed be consistent with the principles outlined in *The Living City*, and might still provide effective therapy for traumatised, dis-associated regions and their inhabitants.

#### 4. TO WAKE LEVIATHAN

The relationship between individual memory, imagination and cultural memory played an important role in Hobbes' *Leviathan*. The source of Hobbes'

use of the term was evidently Biblical scripture, in which perhaps the most famous reference to it is in the book of Job, where Leviathan is mentioned in the context of its obscuring not only memory, and light, but even time itself. To set the stage: Job has been a blameless and successful man, living well with his family and his deserved wealth, until one day he loses everything, even his health. His friends come to visit him, “[...] and they sat with him seven days and seven nights, and no one spoke a word to him, for they saw that his suffering was very great”:

“After this Job opened his mouth and cursed the day of his birth. And Job said: ‘Let the day perish wherein I was born, and the night which said, A man-child is conceived. Let that day be darkness! May God above not seek it, nor light shine upon it. Let gloom and deep darkness claim it. Let clouds dwell upon it; let the blackness of the day terrify it. That night – let thick darkness seize it! Let it not rejoice among the days of the year, let it not come into the number of months. Yea, let that night be barren; let no joyful cry be heard in it. Let those curse it who curse the day, who are skilled to wake Leviathan.’”<sup>6</sup>

While Job itself is likely not a mythological book, this reference to Leviathan is no doubt an allusion to mythology. Many scholars identify the Leviathan of this verse with a mythological creature described in Ugaritic myths, according to which a marine monster named Lotan was capable of altering the entire world order by eclipsing the sun or moon with its body.<sup>7</sup> So Job, angry and frustrated, employs the most forceful, vividly poetic language available to him in order to call for the obliteration of that day. Clearly the evocative use made of the term *Leviathan* by Hobbes and Wright is consistent with this earlier use. When asked by his apprentices in later years what they should read of the architectural classics, Wright consistently referred to Victor Hugo’s aforementioned essay, which he cited so extensively in *The Art and Craft of the Machine*, and to the work of Eugène-Emmanuel Viollet-le-Duc, who in 1868 (incidentally the year following Wright’s birth) identified the machine as promising to fulfil the Gothic ideal in its ability to “*express the qualities of materials and to transform static relationships into dynamic ones based on balances between opposing forces*” (Viollet le Duc, 1868).

Throughout *The Living City* Wright uses the term *static* to connote outdated notions, and *dynamic* to connote progress. He describes his interest in “*looking into instead of at*”, championing the analysis of dynamics over the comparison of appearances, with practical implications both for structurally optimising oscillations between tension and compression in the form of a building, as for situating the city within the material and spatial dynamics of environmental, social, and economic forces. These forces are now common-

ly regarded, in the parlance of contemporary macro-economic analysis, as PESTEL: Politics, Economics, Sociology, Technology, Environment and Law. When correlated with current computational technology at the scale of the city, these dynamics are seen as even subtler geometric interactions, meta-data describing energetic affinities, attracting, repelling, and generating form. The ever-growing sophistication of technology eventually facilitates the subtler optimisation of the form of the city and its architecture, enabling the creation of buildings, environments and social infrastructures that are profoundly humane. Clearly the scope of Wright's ambition encompassed not only the city, nor merely the reunification of the arts and crafts that were ensemble in the Gothic era, but the radical humanisation of the entire ecology of the forces of our modern era and whose interactions transform the shape of society – materially and energetically. At the same time, his regard for cultures of the past prompted him to reject as reactionary the dismissal either of tradition or of the machine. This progressive interest came with a sense of responsibility to the past – “*that the new art to come might not have dropped too many stitches nor have unravelled what would still be useful to her*” (Wright 1901d). After all, we still have the building and the book, rural and urban – and the ideal city, however imperfect, ought to be inclusive of the humanity epitomised by each.

Wright's life and work spanned from the Victorian age to the space age, and *The Living City* is arguably his most ambitious attempt to ‘bridge the gap’. In arguing for contextual, open-ended planning methods it provides a suitable polar counterpoint to contemporary notions of cities as self-sufficient. As a precedent stimulating an awareness of the fundamental need of a ‘humane proportion’ of industry and agronomy, it is of urgent relevance today. Certainly in many ways we are still in that era: although the ever-increasing precision of modern technology enables incredibly powerful machines, new scientific insights regularly expand our horizons and every day proud new cities sprawl Leviathan-like across the face of the earth, it is up to us to require that they be humane. Perhaps humanity is ever to go on learning the lesson of the printing press: iterative and exploratory are often still preferable to permanent and perfect, as they are better suited to our inter-generational human condition. *The Living City* – a project resulting from the architect's own initiative, not a client's – gives form to decentralised power in direct affinity with woman's suffrage, civil rights movements, anti-trust legislation and open source networks. If the mythological deep-sea Leviathan can be equated with submerged, repressed memories, and fear of it equated with individual or cultural anxieties related to these, then ‘waking Leviathan’ could be just the therapy needed for us to realise that the shadow threatening to blot out memory, light, and time, is our own.

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## ENDNOTES

- 1 A correlation in emerging academic discourse exists here that is worth mentioning, insofar as reference to the 'poetic' - here in the sense that term is used in the de Tocqueville citation - is currently undergoing a dramatic resurgence, thanks in part to the work of Lynn Margulis in the still emerging field of chronobiology, which examines periodicity - or cyclic phenomena - in living organisms, and their adaptation to solar and lunar rhythms. As referred to in the text, current enthusiasm for autonomy, for urban self-sufficiency, tends to construe the implications of biological analogy along the lines of ideas like *autopoiesis*, which refers to a system capable of reproducing and maintaining itself. However, its opposite seems a more likely biological analogy: *allopoiesis* is the process whereby a system produces something other than the system itself, like a crystal, or an assembly line, where the final product is distinct from the means of production. Thinking that cities come from cities, or that architecture comes from architecture, is somehow not quite right. To quote pianist Keith Jarrett as regards music: "It is like saying babies come from babies. It just isn't true! Music doesn't come from music - it comes from everything but music." [Keith Jarrett: *The Art of Improvisation* (DVD 2005)]
- 2 As for instance from *The Living City*, p. 42: "That government is best which governs least" said a Thomas Jefferson crossing an Alexander Hamilton. George Washington, Thomas Paine, Abraham Lincoln, William Lloyd Garrison, John Brown, Emerson, Whitman, Thoreau, Henry George, Louis Sullivan - such as these and their kind were her sons. In them the original ideal was held clear."
- 3 See, for example A.C. Nelson (1995) *The Planning of Exurban America: Lessons from Frank Lloyd Wright's Broadacre City*, *Journal of Architectural and Planning Research* 12 (4) (winter, 1995): pp. 337-356, note illustration p. 347, interestingly attempting to situate Broadacre into a Central City/Garden City/Edge City planning model.
- 4 It is interesting to note that, according to John Hejduk, Rowe and Hejduk quit the Texas Rangers because of their incompatible views about Wright: they'd taken tours visiting Wright's projects, Rowe starting out as a Wright advocate, and Hejduk an advocate of Le Corbusier - by the end of the tour they'd swapped positions, passionately. Of course, they each went on to their own academic careers, notably influencing their students - many of whom are now successful architects, with works strongly reflecting the attitudes of their mentors. For example, Elizabeth Diller was a student of Hejduk, and is very open to these Wrightian influences; Eisenman was a student of Rowe, and clearly was not so inclined to openness - at least in later years. Bernard Hoesli, another Texas Ranger, seems to have been the peacemaker, usefully integrating both Wright and Le Corbusier in his curricula.
- 5 This exchange between the author and Peter Eisenman was documented at the Berlage Institute in Rotterdam, and can be seen on video at The Berlage (The Berlage, 2010).
- 6 Job 3:1-8; also see Hailey, 1994, p. 49.
- 7 Payne, 1980, 1: p. 472



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