

# Weltbauen: Territory and the Architectural Imaginary

The spirit now wills his own will, and he who had been lost to the world now conquers the world.<sup>1</sup>

Thus Spoke Zarathustra, Friedrich Nietzsche

In the nineteenth century, the politics of imperialism brought the geography of the entire planet into focus. In 1881, in *Hopes and Fears for Art: The Prospects for Architecture in Civilization*, British writer William Morris abstracted that architecture had to find a new role in the face of the challenges of modernity. "A great subject truly, for it embraces the consideration of the whole external surroundings of the life of man; we cannot escape from it if we would so long as we are part of civilization, for it means the molding and altering to human needs of the very face of the earth itself, except in the outermost desert."<sup>2</sup> At stake was nothing more than the affair of Western reason with the totality of the world unfolding in the complete restructuring and reshaping of the entire surface of the earth: "peopling the desert; for breaking down the walls between nation and nation; and the earth we tread on."<sup>3</sup>

At the beginning of the twentieth century the world was confronted with the realities of World War I. Inspired by artists and writers like Max Ernst, Paul Scheerbart, Friedrich Nietzsche, Johann Wolfgang von Goethe, or Oswald Spengler, architects like Bruno Taut and Hermann Sörgel saw a new role for the narrowly defined agency of architecture in what they referred to as "Weltbauen."<sup>4</sup> Translated from the German as world-building or world-making, Weltbauen envisioned architecture as a larger totality away from designing every frame separately.

Partly engineering and partly utopian in meaning, Weltbauen recovers a geographically aligned aesthetic from the long intellectual and political history of modernity and illuminates conflicts in the relationship between aesthetics and territorial form. In fact, Weltbauen referred to more than William Morris' concept of the totality of planning across the entire planet. The First World War united architects in search for chiliastic hope, cosmic depth, pacifistic spirit, and technology that could not be abused by war. Its protagonists wanted to

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<sup>1</sup> Nietzsche, Friedrich Wilhelm, and R. J. Hollingdale. *Thus Spoke Zarathustra : A Book for Everyone and No One*. Penguin Classics. Harmondsworth, Middlesex, Eng.: Penguin Books, 1969.

<sup>2</sup> Morris, William. *Hopes and Fears for Art. Connoisseurship, Criticism, and Art History in the Nineteenth Century*. New York: Garland Pub., 1979.

<sup>3</sup> Ibid.

<sup>4</sup> Voigt, Wolfgang. *Atlantropa: Weltbauten Am Meer. Ein Architekturtraum Der Moderne*. Hamburg: Dölling and Gallitz. M.A.T. Music Theme and Licencing, 2007, p. 29.

Figure 1: The Hand of Elizabeth I of England on the Globe



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disengage architecture from history and move it beyond own constraints into a new dialogue with geopolitics and the complete restructuring of global territories after the war. Within these frameworks architects saw a possibility to extend architecture through geographically articulated designs that envisioned new territories and advocated new world orders built upon the rewriting of the surface of the earth.

This paper turns to the early twentieth-century self-proclaimed “Weltbauermeister” in an attempt to recast our understanding of the relationships between politics, utopia, technology, and the environment in which architecture contains territory, and extends itself through it. In contention are questions of the restructuring of radical geographies, and how architecture as an expanded and geographically idea inspires, structures, shapes and produces complex territories, and planetary systems. Through the lens of the critique of ideological, political and technopian orders, this paper analyzes Bruno Taut’s Alpine Architecture and Hermann Sörgel’s Atlantropa projects, and questions central concepts and motives of the twentieth-century that were forged by its Weltanschauungen [worldviews] seeking to illuminate the relationship between territory, world-making, and architectural form.

#### ALPINE ARCHITECTURE

The Russian revolution of 1918, the defeat of Germany in World War I, and a worsening inflation left many architects in a state of despair in the early twentieth century. With no commissions most architects found themselves dismissed from the service of the bourgeoisie, commerce, and industry; many architects turned to imaginary projects and proposed to engage with the world through a new lens. In Alpine Architecture, a book in which Bruno Taut published his utopian fantasies, he argued that new visions after a global war were necessary to make “earth a good dwelling.”<sup>5</sup> His main concept was to reimagine architecture and present it in its own right as an empathetic interpretation of natural forms after a the incomprehensible slaughter of the First World War, a mass surrender of individual lives to a war machine on a scale previously unknown in European history.

Figure 2: Earth on the American Side, Bruno Taut, Alpine Architecture

His vision saw the war machinery dismantled in a world in which all humans could live united under the task to peacefully carve elegant crystalline structures beautifying the earth’s mountain ranges. The crystalline forms of Alpine Architecture synthesized society with territory by the means of architecture projecting the complete reconstruction of the world in the spirit of empathy. He imagined buildings and mountains, in fact the entire planet as living organisms capable of transcending architecture with the entire Earth.

Many writers, artists and philosophers who heavily influenced the architecture of the time also addressed the divergent relationship between Mensch und Maschine [humankind and machine] in relation to nature and complex territorial transformations. In his painting Europe after the Rain I, Max Ernst processed the tragedy of the war by depicting an imaginary relief map of a completely “reterritorialized” Europe. <sup>6</sup> Europe after the Rain I illuminates an emotional desolation,



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physical exhaustion, and fears of the destructive power of combined warfare—the rain of fire, the biblical deluge, and the reign of terror. Ernst’s painting reveals amorously altered territories that utilized the disengagement from history and place to negotiate new environments somewhere between centrality, peripherality, social and cultural identity.

But it was writer and theorist Paul Scheerbarth and philosopher and psychologist Gustav Theodor Fechner that inspired Taut in his pursuit of new architectural narratives. Scheerbarth’s Weltanschauung resonated in Taut’s ideas and helped him to further focus on the separation of man and machine, and the encroaching technologization of humanity. In Scheerbarth’s world entire landscapes were filled with spiritual architecture that transcended people and even the cosmos with the desire to unite “normal everyday people (Volk) with an infinite, mystical, transcendental reality connected by the way of the spirit (Geist).”<sup>7</sup>

According to Taut, Scheerbarth was the true architect of Alpine Architecture who provided him with principles of empathy using it as a foundation for

<sup>6</sup> Friedrich Neumann, Der Deutsche Stil, Hellerau, n.d. (1912), p. 13- Peter Jessen, ‘Der Werkbund und die Grossmächte der Deutschen Arbeit’, in Jahrbuch des Deutschen Werkbundes 1912, Jena, 1912, pp. 2ff.- Hermann Muthesius, Die Zukunft der Deutschen Form, Stuttgart, 1915 (Der Deutsche Krieg. Politische Flugschriften, L, p.36

<sup>7</sup> Salter, Chris. Entangled : Technology and the Transformation of Performance. Cambridge, Mass.: MIT Press, 2010, p. 27.

Figure 3: Was ist Atlantropa? Hermann Soergel, 1931



8 Taut, Bruno. *Alpine Architektur*. Folkwang, Hagen i.W., 1919. P. 27.

9 Ibid. p.28.

10 Bletter, Rosemarie Haag. "Global Earthworks." *Art Journal* 42, no. 3 (Autumn 1982): 222-25. P. 55.

11 Not only Scheerbart's fantastical writings determined a foundation for Taut's *Alpine Architecture*, but also Friedrich Nietzsche's "perspectivism" resonated with his ideas. In his writings Nietzsche rejected history, the bourgeois world and established authorities. His theories and metaphors set the foundation for Taut's understanding of *Weltbauten*. With his philosophical novel *Thus Spoke Zarathustra*, Nietzsche told the story of Zarathustra who lived in a perilous solitude of the mountains. It was the purity of the icy heights of the peaks that stood in stark contrast to the conditions in the metropolis—an indication for Nietzsche's anticipation of the hostility to all things urban that characterized the period. However, Nietzsche's understanding of society, culture and politics was not calling for an external relationship of architecture, as Taut envisioned, it was his sense for beauty that determined his *Weltdenken* [world-thinking] that externalized architecture from the environment, and enabled it to disengage from history. That made the scenery of the Alps the ideal geography to accomplish these rather ambitious trajectories. Rugged angles and polished surfaces characterized his new forms of architecture and aesthetics. Nietzsche's influence on Taut was so big that he even annotated his sketches with quotes from his work: "The time may come when man has the power ... to play with mountains as a child plays with sand. To create works of art as high as the Himalaya, formed from his imagination as the jeweler forms a casket for his jewels, perforated like lace, with stone used like metal, forest and field like jewels, glaciers like pearls, and water like crystal."

12 Bletter, Rosemarie Haag. "The Interpretation of the Glass Dream-Expressionist Architecture and the History of the Crystal Metaphor." *The Journal of the Society of Architecture Historians* 40, no. 1 (1981): 20-43.

13 Reterritorialization is the restructuring of a place or territory that has experienced deterritorialization. Deterritorialization, characterized as the design of a new power, is a term created by Deleuze and Guattari in their philosophical project *Capitalism and Schizophrenia* (1972-1980). Deleuze, Gilles, and Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. London: Athlone Press, 1988.

interpretations of natural forms. The extend of World War I, led the world believe that it was possible to imagine buildings, mountains and planets as living organisms capable of transcending life with architecture and the entire earth. However, if Scheerbart was the father of the subject and apostle of Taut's moral compass, his ideology was reflected in formal properties intrinsic to nature, it was Fechner who "provided the aesthetic and philosophical framework for Taut's dramatization of the world of form."<sup>8</sup> Fechner's materialistic perspective, shaped by Darwin and Haeckel, saw everything, including every natural appearance, embedded in relation to larger contexts. In his view, "the eye of God and the consciousness behind it are inscrutable to us ... why not consider the senses of sight and touch—despite their division in the mundane world into countless individual points of view—as the workings of God, a superordinate consciousness of which the denizens of the Earth are merely a part and whose wholeness they, being parts, are unable to comprehend."<sup>9</sup> Fechner hypothetically imagined the entire globe as a single great eye contained with all individual points of view in the mundane world transcending. (Folio 28: The Spheres, The Circles, The Wheels)

Within this context it is also worth mentioning John Ruskin, Gottfried Semper, and French neo-Gothic architect Eugene Emmanuel Viollet le-Duc. Semper and Ruskin both saw in nature order and ornament. Ruskin even devoted an entire volume of his *Modern Painters* to the 'beauty of the mountains'. Whereas, Viollet le-Duc's Montblanc massif and its viewing of natural mountain formations rested on the same geometric principles as architectural orders. In fact, Viollet le-Duc declared geometric forms to be primal forms, which preceded all nature and all art.

According to Taut, the crystalline aesthetic recovered the critical relationship between nature, geometry, ethical geographies and the role of humankind. In a typical expressionist manner, Taut conceptualized the role of the body as object and how the aesthetic of his work may deflect, define or resist the territorial scale; typically the artist assigns everything to its place and light casts its radiance over all: "The earth itself sparkles with the new; as the impossible becomes possible, "hard" reality yields up miracles."<sup>10</sup> However, the timelessness and the absence of history and the human object in his drawings were by no means meant as an antihumanist gesture. On the contrary, the territories he transformed addressed the very changes of society external to nature. His "perspectivism"<sup>11</sup> aligned, if not redefined agencies of architecture while responding to a totality that symbolically determined architectural autonomy within the territory. His fusion of territory and architecture represented the change of nature and society: "That is, this man made nature does more than just signify a new political man. The change itself, the public's engagement in this reconstruction, is the means to a new peaceful condition."<sup>12</sup>

#### ATLANTROPA

A sense of urgency in the "reterritorialization", or as a matter of fact "detrterritorialization"<sup>13</sup> of the planet after the war also motivated another fellow *Weltbaumeister*. Hermann Sörgel, the mastermind behind *Atlantropa* proposed the complete restructuring of the culturally and politically complex Mediterranean region. In his geographically inspired vision, Sörgel, contrary to Taut, saw in technology an ally. In his mind he could not imagine that human beings alone could be capable of accomplishing macro-transformations of the Earth's surface. In fact, he argued for technology and engineering to achieve unprecedented accomplishments. In his eyes technology no longer misused by

war and profit could not only give positive impulses in transforming the globe, but also help *Atlantropa* become reality.

What started, as an exhibition in the early 1930s in Germany and Switzerland became one of the boldest architectural visions ever seen. The architect engineer Hermann Sörgel presented a scheme on such a grand scale that it even outshined the fantasies of a novelist like Jules Verne. *Atlantropa*, which was first known as "Panropa," was a proposition that restructured the entire Mediterranean region, from the Western Mediterranean and the Straits of Gibraltar to Israel in the East, and from Northern Italy to the Sahara desert in Africa. A 35-kilometer-long dam in the Straits of Gibraltar was the key element of his design and disconnected the water supply from the Atlantic Ocean to the Mediterranean Sea. As a result, *Atlantropa* was born and created a new super-geography of what was once known as the Mediterranean.

His idea of a gigantic dam set the foundation for a project that gradually dried up the Mediterranean Sea and reduced the water level by over 200 meters. The territory affected by this shrinkage was the largest geographical transformation ever imagined. Sörgel's vision created up to 600,000 square kilometers of new arable land where the sea had been. At the core of his designs were several trans-Mediterranean arteries that supported the flow of people, cars, trains, and natural resources between Europe, the Eurasian peninsula west of the Ural Mountains and Persia, including the Arabian Peninsula, and Africa.

He proposed infrastructural systems on never before seen dimensions; he essentially completely restructured and envisioned the entire Mediterranean geography, by actually eliminating it. Nothing that characterized the region remained the same; his project effaced the region's complex systems, and disengaged from its history to enter a new dialogue that was determined by technotopia. It seems as if by eliminating a complex cultural ecosystem, and replacing it with new infrastructures, environmental systems, and distributions of capacities and power. <sup>14</sup> Within his framework Sörgel wasn't primarily interested in who would be the people populating these new territories, but the fact that *Atlantropa's* would become a new geopolitically and resource-driven supercontinent.

With the Great Depression, World War I, and a looming World War II, Europe was in desperate need of a vision for the future. Sörgel's angle on the problem, was not only to change the geography of the entire Mediterranean, but also of the transform the African continent. European racist ideologies of that time saw Africa as an empty continent devoid of history and culture. For him, it was always integrated in his geopolitical considerations and part of his belief in technology's political power. His vision was an alternative to anything ever imagined, and with the larger geopolitical goal of venturing deep into the Congo Basin to secure the vast natural resources of Africa with European engineering, he turned Africa into a "territory useful to Europe."<sup>15</sup>

At a time in which apocalyptic visions determined the *Zeitgeist* and the politics of imperialism were dominant, Sörgel placed his project within larger geopolitical orders. Part of his ideological foundation followed a Social Darwinist and colonialist school of thought, declaring, "the fight for survival is a fight for territory."<sup>16</sup> His plans for *Atlantropa* aimed to revolutionize the north-south connection between Europe and Africa, and convert the global west-east imbalance into a "harmonious coexistence" of the three A's: America, Asia, and *Atlantropa*, which he considered *Kontinentale Grossräume* (continental megaspaces) that

<sup>14</sup> Ranciére, Jacques. *Aesthetics and Its Discontents*. English ed. Cambridge ; Malden, MA: Polity Press, 2009.

<sup>15</sup> Voigt, Wolfgang. *Atlantropa: Weltbauten Am Meer*. Ein Architekturtraum Der Moderne. Hamburg: Dölling and Gallitz. M.A.T. Music Theme and Licencing, 2007. P. 29.

<sup>16</sup> Ibid.

would coexist in a new world order of supercontinents. As a result, Atlantropa not only completely obliterated the Mediterranean, but it completely sacrificed its cultural complexity for the promise of continental European economic security and energy independence.

In its early stages, Atlantropa was created in the political context of the Pan-European Union, founded in 1923. The assembly brought together by the Austrian (geo)-politician Richard Coudenhove-Kalergi sought political unification of the European continent after the devastating First World War. When in 1929, Sörgel's vision took on the name Panropa, he wanted to emphasize its close connection to the Pan-European Union. However, in 1932 Sörgel replaced Panropa with the official project name, Atlantropa, to avoid confusion with the Pan-European Union. He changed the name primarily because he did not believe in the Union's ideological principles, and disagreed with Coudenhove-Kalergi politically and morally. Sörgel believed that only an economic union could bring Europe together, and advertised the guaranteed profit of Atlantropa and its economic benefits and energy independence. The change of name was also an expression of the ways in which Sörgel's geopolitical ambitions went far beyond Coudenhove-Kalergi's organization. Atlantropa, the term invented by Sörgel, meant new territory at the Atlantic Ocean [Festland am Atlantik], and stood for the idea of politically and geographically uniting Europe with Africa into a supercontinent of tomorrow.

It was his interest in geography that shaped his Weltanschauung. The German geographer Friedrich Ratzel and the philosopher Oswald Spengler were elemental to Sörgel's self-assessment as Weltbauer. Both shaped this understanding in very different ways. Ratzel was fundamental to Sörgel's concept of an architect as possessing a chiliastic spirit that liberated him to aim for cosmic depth, and a pacifist spirit that aspired to create new borders. Ratzel's theory was that of der Staat als Organismus [the state as organism], in which he equated dams, autobahns, railways, and bridges to the digestive and circulatory systems in natural organisms. Ratzel argued that the more extensively and qualitatively these systems were built, the more the organism, the Lebensraum [living environment] of a nation-state, would thrive.

Spengler, on the other hand, had a much deeper and more personal influence on Sörgel. Both were friends from the time they lived in Schwabing, Germany. In 1918, Spengler published his book, *Der Untergang des Abendlandes* [The Decline of the West], whose pessimistic prophecies about the extinction of western culture through "civilization" and "overpopulation" captured Sörgel's attention.<sup>17</sup> Sörgel, however, had a more positive outlook and believed in the technical advancements of modern societies. He shared Spengler's critique of the nineteenth century and that uncontrollably growing urban environments were a sign of weakness of western civilizations. While Spengler looked at technology as a demonic force that destroyed culture, Sörgel believed in technical and artistic urban planning solutions for the future. In one of his countless publications, and movies, *Atlantropa: Der neue Erdteil, Das Land der Zukunft* [Atlantropa: The New Continent, Land of the Future], Sörgel responded to the Spenglerian despair of civilization with his engineering megalomania and the desire to solve all major problems of the European continent.

Forged between Europe and Africa, his supercontinent in the Mediterranean did not only challenge anything ever imagined technologically, but it also was a massive public works project in which he promised it would relieve the

unemployment crisis on the entire continent after the war. Sörgel not only aimed to address the challenges of energy production, but he understood that energy is space, and it "exploits space as a resource, an environment for consumption, and a place for capital accumulation."<sup>18</sup> Sörgel looked at planning as a totality that extended to every corner of the planet. He was convinced that in order to remain globally competitive with the technologically and economically advanced United States, and an emerging Pan-Asia continent, Europe needed to be self-sufficient, which required possession of territories in all climate zones.<sup>19</sup>

## CONCLUSIONS

In the aftermath of World War I, with the entire planet as emerging subject, new discourses about the role and extend of architecture were formulated, and radically new territories were discovered somewhere between utopia and macro-scale engineering. Weltbaumeister Bruno Taut and Hermann Sörgel conceptualized the relationships between architecture and territory in which they saw new models of ethics and techno-environmental geographies emerging. In contention were not only the terms of morphological characteristics of new territories, or as a result its forms and aesthetics, but also the metamorphosis of the agencies that shape it.

The critical evaluation of Taut and Sörgel's approach to Weltbauen gives perspective to our ability to recognize, deconstruct, or counteract more recent incarnations of environmental transformations in theory and practice. The way Weltbauen redefined aesthetics and narratives, both, as an investigation and geographically infused practice, illuminates deeper conflicts between the environment, matters of territorial autonomy, world-making and form. I argue Taut and Sörgel used Weltbauen as a position against the isolationism of the taken-for-granted scheme of the "urbanization of the territory". Weltbauen could function as a framework of the "territorialization of the urban" giving us perspective and unearth systems, materialistic and territorial characteristics that address the political significance of the spaces between the "urban and non-urban"<sup>20</sup>, or as a matter of fact, between the hinterland, nature and the "urban fabric."<sup>21</sup> Furthermore, beyond an epistemological framework, Weltbauen, above all, recovers morphological possibilities of continuously migrating peripheries and illuminates ethical as well as formal positions in response to the isolationism of the urban consumer culture separated from the landscapes of resource production and nature itself. Both, Taut and Sörgel were concerned about a world separated into two distinct political systems based on too much focus on the metropolis and the ramifications of its overpopulation. Alpine Architecture, as well as Atlantropa addressed this political division and unearthed critical perspectives of global design recovering inequalities between the distribution of space and time, and the distribution of capacities and power. The role of nature, however, couldn't just simply be introduced as the politics of nature<sup>22</sup> or as I would argue, the territorialization of the urban, Weltbauen of the early twentieth century addressed the political significance of nature as the space between the overpopulated metropolis and the hinterland with a perspective that foregrounded systems and aesthetics of territories in which the hinterland functioned as a (re) source for the consumption of ethics and aesthetics (Alpine Architecture) and resource production (Atlantropa).

Taut aestheticized the hinterland as geography with an external relationship to architecture. He demanded that the extension of architecture as a force resisted the larger technologization of society and transformation of nature into



<sup>17</sup> Spengler, Oswald. *Der Untergang Des Abendlandes : Umriss Einer Morphologie Der Weltgeschichte*. Ungekürzte Sonderausgabe in einem Band. ed. München: C.H. Beck, 1980.

<sup>18</sup> Ghosn, Rania. "Landscapes of Energy." *New Geographies 2* (2009). P. 7.

<sup>19</sup> His plan had the objective to position Europe as a sustainable global player among the US, Great Britain—which he believed could not maintain its empire in the long run—and Asia—still a mystery to Europeans—his plan was to produce infinite amounts of electric power.

<sup>20</sup> Brenner, Neil. *Implosions/Explosions : Towards a Study of Planetary Urbanization*. Berlin: JOVIS, 2014.

<sup>21</sup> Merrifield, Andy. *The New Urban Question*. London: Pluto Press, 2014.

a commodity. However, the externalized aesthetic of his crystalline mountains did not simply represent the redesign of nature as an anarchist event in which he envisioned new architectural forms that aligned, if not redefined, entire geographies, but he symbolically determined new architectural autonomies within the territory.

Hermann Sörgel, on the other hand, was driven by the binary relationship between technology and the environment. His understanding of architecture on the scale of the planetary stood as a measure of analysis, utopia, and geography of intervention. As a matter of fact, he believed that the framework of *Weltbauen* was imperative for analyzing and shaping new territorial forms. His idea of expanding a systems based analysis expanded the confined agencies and aesthetics of architecture while respecting its totality by substitution.

For both, Taut and Sörgel, the environments they generated were a production of a combination of architectural concepts and architectural matter. The territories of Alpine Architecture and *Atlantropa* are the outcomes of other territories, “but they are not the outcome or the mere extension, or analogous visualizations, of environmental conditions.”<sup>23</sup> Rather, they explore the very nature of territory, with all its political, economical, social, environmental and cultural systems, as they attempt to recode their surroundings, and ultimately reshape the world ‘in their own color’ as they remain autonomous in the world (within the world). Taut and Sörgel’s visions about the relationship between their territories and “the rest” were largely aligned providing an intellectual foundation for new discourses. However, Taut and Sörgel’s visions also clearly reveal the limits of technopian ideologies and their ability to reshape socio-spatial structures and its relationships to architectural form. The distance between the spheres in which they operated as *Weltbauer* became less significant than the environment that held them together; distance and scale were not indicators to the human body, agency, or the relationship between technology and the environment, of either proximity or separation. Neither Bruno Taut nor Hermann Sörgel engaged with one of the long-standing principle metaphors for architecture. The way they replaced it, and the way they regarded the body as “agent” or “agency,” offers an opportunity to consider the metaphorical, theoretical, and praxis based impact on architecture both as metaphor for epistemology, and as practice aspiring a reformulation of aesthetic assumptions and geopolitical relations upon which the totality of urbanism rested.

22 Latour, Bruno. *Politics of Nature : How to Bring the Sciences into Democracy*. Cambridge, Mass. ; London: Harvard University Press, 2004.

23 Gissen, David, ed. *Ad Architectural Design*. Vol. 3/2010, *Territory: Architecture Beyond Environment*: Wiley, 2010. p.14.