Utilité publique: Architecture, Urbanism, and Aesthetic Reform in Turn of the Century France

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Submitted to the Department of Architecture on January 8, 2016, in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Architecture: History and Theory of Architecture

Abstract

This dissertation documents how the aesthetic dimension of architecture came to be seen as an object of public utility in late nineteenth and early twentieth century France. It examines the work of a network of architects, artists, political representatives, art critics, poets, archaeologists, pedagogues, and other intellectual elites, who argued, through journals, pamphlets and books, and various legislative debates, that architecture's aesthetic capacity could both remedy public problems and reform the public itself. The study casts these "aesthetic reformers" as motivated not only by a wish to serve the public, but moreso by a desire to serve architecture itself, rehabilitating its social status through claims to its own utility.

Drawing forth the influence of contemporary theories of philosophical aesthetics, psychology, and pedagogy on these aesthetic reformers, I demonstrate how they concluded that architecture's social utility lay in its ability to improve the morality of the French public. The project argues that this conclusion accordingly reoriented architecture's focus to from the building itself, to the city, and finally to entirety of the environment over the course of approximately forty years, as architecture became increasingly invested in its relationship to the public. I substantiate this argument through studies of private associations and societies which collectively sought to intensify the aesthetic affect of the built environment through the preservation of both buildings and natural features, the promotion of architecture as a form of art for the public, and the new practice of urban planning. In bringing this moment when architecture's aesthetics were conceived as public utility to light, my study offers a new genealogy of the idea that architecture could better society.

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Introduction

In late nineteenth and early twentieth century France, a network of "aesthetic reformers" — architects, artists, art historians, political representatives, and other intellectual and literary elites — sought to revive architecture's role in society and rehabilitate its esteem. Critical of the "historical styles" associated with the École des Beaux-Arts system, and arguing for an architectural practice concerned with what architecture could do for the future, rather than being mired in the past, they sought to remedy the perceived irrelevance of architecture in French society. "The public is ignorant of [architecture], and indifferent when they pass in front of it," wrote Paul Planat, editor of the journal *La Construction moderne*, in 1885. "Its true beauty," he continued, "has long since disappeared from contemporary constructions. Everyone still knows, at this moment, how to appreciate a painting — or at least how to pretend that one does. If nothing else, people show interest. With architecture? Not a word."¹ To rectify architecture's fallen status, the goal of these reformers was not to produce new architectures, but rather, to advocate in the public sphere on behalf of architecture by demonstrating its social usefulness — or in French, its *utilité publique*.²

Thirty-eight years later, in 1923, the avant-garde publication G, a mouthpiece for modern architects such as Mies van der Rohe, Adolf Behne, and Ludwig Hilberseimer, printed a

¹ Paul Planat, "Introduction," *La Construction moderne*, 1 (1885), 2. All translations are mine unless otherwise indicated.

² The term *utilité publique*, a signifier of that which is of use to the public, derived from the Latin *utilitas publica*, or "common good," has a long history in France. Yet, even within law, the term escapes any further definition. For a useful and interesting history of the various inflections of meaning of the term from its Roman origins to its development in France from the Middle Ages to present, see Alain Guéry, "The State: The Tool of the Common Good," in *Rethinking France: Les Lieux De Mémoire*, ed. Pierre Nora (Chicago: University of Chicago Press, 2001).

quotation attributed to Karl Marx as a graphic element on the pages of its first volume. The quotation read: "Art should not explain life, but rather change it."³ [Figure 0.1] Interestingly, this is a misquotation of Marx, who did not make this claim at all. Marx's Eleventh Thesis on Feuerbach, which this quotation rephrased, criticized *philosophers* for having explained life but not yet changed it.⁴ This rather audacious revision not only supplanted philosophy with art as a possible agent of social change, but also reoriented the statement from a criticism of the past to a dictum for the future, reflecting the new confidence that modern architecture had gained in the nearly four decades since Planat's rebuke.

My dissertation examines a change that occurred in the understanding of architecture's relationship to society in France between the dismay voiced by Planat and Modernism's post-World War 1 conviction that it could address and redress the problems of the contemporary world. In bringing to light this gradual and sometimes knotty change, on the one hand I offer a critique of Modernism's claim to have invented *de novo* the idea that architecture should better society, in reaction to its complete absence in the history that preceded it. In this sense, my work participates in a still fecund field of historical studies that locates the intellectual groundwork of Modernism outside of Modernism's canon, proposing that this groundwork was created by complex processes occurring over stretches of time, rather than the "revolutionary" ideas of a few figures.

On the other hand, my work offers a new perspective on the architectural history of nineteenth century France, moving beyond the "architecture versus industry" narrative invented

³ "Kunst soll das Leben nicht erklären, sondern verändern." Detlef Mertins, and Michael William Jennings, G: An Avant-Garde Journal of Art, Architecture, Design, and Film, 1923-1926 (Los Angeles: Getty Publications, 2010), 103.

⁴ "Die Philosophen haben die Welt nur verschieden interpretiert, es kommt darauf an, sie zu verändern." Karl Marx, "Theses on Feuerbach," in *Karl Marx and Frederick Engels Collected Works*, Vol. 5, (Moscow: Progress Publishers, 1976), 5.

by Modernist historians, in which the importance of Beaux-Arts architecture was eventually eclipsed by that of industrialized building. This narrative has been challenged by more recent histories, which have argued for the equal relevance of these two strands of building production in the nineteenth century, or have attempted to dismantle the conceptual boundary between the two altogether. However, unlike these revisionist studies, I do not set out to challenge Modernism's schematization of the French nineteenth century, but rather to circumvent it altogether. I do this by drawing attention to a movement in French architectural culture established without drawing upon either the Beaux-Arts system, or the emergence of industrialized building technology and structural rationalism. In studying this movement, spearheaded by the aforementioned aesthetic reformers, my work identifies changes in architecture's role in society, which until now have been assimilated as part of Modernism's myth of its own newness.

The change that my dissertation traces begins with the notion that architecture needed to somehow *make itself* useful to society, and ends with the idea that that architecture, in a newly expanded sense of the word, *is* useful to society. My work studies both the ideas, arguments, and solutions put forth by groups of aesthetic reformers in order to make architecture relevant to the French public, and the propositions for new forms and sites of architectural operation that followed from their efforts. I call these figures "aesthetic reformers" not because they sought to reform the aesthetics of architecture, but instead, because they concluded that architecture could reform society — and have *utilité publique* — through an intensification and distribution of its aesthetic affect.

Modernist architects have criticized aesthetic reformers as "professional romantics," who had "ceased to understand elemental, vital facts because they think exclusively in terms of

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morality and aesthetics.⁵⁵ My dissertation dismantles this criticism from a point of view outside the intellectual framework and values of Modernist thought. Showing how aesthetic reformers discovered "morality and aesthetics" through contemporary philosophic and scientific thought, precisely as a means to engage with the specific conditions, problems, and what they felt were "elemental, vital facts" of their time, I argue that there is no one, exclusive way to understand the "elemental, vital facts" of the world that architecture seeks to improve. In this sense, an underlying goal of my study is to turn this Modernist criticism back on itself, proposing a conceptual disentanglement of two of Modernism's distinct mandates — one for architecture's social utility and another for its adoption of industrialized building techniques. The longstanding conflation of these two prescriptions has underwritten the urge, developed among Modernist architects yet still present in contemporary architectural culture, to frame science and technology as the "exclusive" way to endow architecture with social agency. I seek to prompt a reevaluation of this idea through an example in which different means — those of aesthetics — were formulated as a solution to a shared goal of making architecture useful in society.

In crafting this history of aesthetic reformers and the groups they formed, I seek neither to assess their success or failure in actually bringing about social change, nor to evaluate the cogency of their arguments on contemporary grounds. Rather, I mine this moment in architectural history to make visible how architecture, in late nineteenth and early twentieth century France, became public. In one regard, my study shows how architecture emerged from the walls of the École des Beaux-Arts and the pages of journals with a strictly architectural audience *into public* — what Jurgen Habermas would call "the public sphere." In another, it traces how aesthetic reformers proposed that architecture could operate *in public*, shifting

⁵ "ABC demands the dictatorship of the machine," in *Programs and Manifestoes on 20th-Century Architecture*, ed. Ulrich Conrads (Cambridge, MA: MIT Press, 1970).

architectural attention from the scale of the building to the urban realm. It also examines aesthetic reformers' belief that architecture, through its aesthetic affect, could operate *on the public*. Finally, at the foundation of these narratives is the desire to for architecture to find its own public, and to demonstrate architecture's *utilité publique*.

Operating neither within the confines of state institutions of architecture nor as a faction entirely within state political bodies, although their members were affiliated with both, these groups of aesthetic reformers constituted architecture's foray into civil society, which itself was undergoing a significant maturation in France in the late nineteenth century.⁶ As private societies and associations, groups such as the Société des Amis des monuments parisiens, the Congrès d'art public, the Société de l'Art à l'école, and the Société pour la Protection des paysages français were able to put forth new ideas that both architectural and political institutions were too calcified to conceive on their own. Formed at a time when the very idea of public, both as an adjective and as a noun, and hence what was useful for it, were in the midst of significant change as French society continued the processes of modernization, these aesthetic reformers were able to offer new visions of an architecture with *utilité publique* which were calibrated, and re-

⁶ In the preface to their theorization of civil society, Jean L. Cohen and Andrew Arato give a useful definition of civil society as "a sphere of social interaction between economy and state, composed above all of the intimate sphere (especially the family), the sphere of associations (especially voluntary associations), social movements, and forms of public communication." By "between" economy and state, Cohen and Arato mean "outside" of economy and state. Jean L Cohen, and Andrew Arato, Civil Society and Political Theory (Cambridge, MA: MIT Press, 1994), ix. On the rise of French civil society during the Third Republic, see Philip G Nord, The Republican Moment: Struggles for Democracy in Nineteenth-Century France (Cambridge, MA: Harvard University Press, 1995). Philip Nord also provides a useful account of the rise of civil society in *fin-de-siècle* Europe in Philip Nord, "Introduction," in Civil Society Before Democracy: Lessons From Nineteenth-Century Europe, ed. Nancy Bermeo, and Philip Nord (Lanham, MD: Rowman & Littlefield Publishers, 2000). Architecture's entrance into civil society through reform groups — not only aesthetic, but hygienic as well — in the late nineteenth century should not be confused with other developments within architecture that occurred outside of the Académie and École des Beaux-Arts in the nineteenth century, which I would argue are not constitutive of civil society, as they lack the engagement with society at large. Namely, here I am referring efforts to professionalize architecture as well as the development of an independent architectural press, both of which sought to change the way architects operated internally rather than change the relationship between architecture, as a practice and as building, and society at large.

calibrated, to the changing ideas and realities in French society in the turn of the century period. My study thus examines a number of these calibrations of public utility over the course of the late nineteenth and early twentieth centuries.

Historic and Historiographic Contexts

Given that these aesthetic reformers proposed that beauty could the alleviate social problems of their time, the social, political, and intellectual contexts surrounding these reform movements constitute an important background for my study. A dominant narrative in the dissertation is the capacity of architecture, art, and the built environment to solve "*la question sociale*" — a phrase invented during the Third Republic (1870 - 1940), still in use today, that pervaded political discourse in French politics and civil society at the time.⁷ Jacques Donzelot has theorized "the social question" as an aporia emerging from the gap between the "political imaginary" of republicanism and "reality of the social order."⁸ Particularly at the end of the

⁷ In the twentieth century, "*la question sociale*" has come to refer primarily to the question of social security — that is, how to allay precarity through the establishment of social welfare. The solutions proposed for "the social question" have become increasingly immaterial since the term's emergence in the nineteenth century. Whereas nineteenth century reformers proposed changes in physical infrastructure, twentieth century policy makers have created financial mechanisms such as insurance and financial redistribution to "solve" the same issues. For a long history of French treatments of "the social question" that date from far before the invention of the term, see Robert Castel, *Les Métamorphoses de la question sociale: une chronique du salariat* (Paris: Fayard, 1995). On the rise of the welfare state in France, see Henri Hatzfeld, *Du Paupérisme à la sécurité sociale; essai sur les origines de la sécurité sociale en France, 1850-1940* (Paris: A. Colin, 1971) and François Ewald, *L'Etat providence* (Paris: Grasset, 1986).

⁸ Jacques Donzelot, L'Invention du social: essai sur le déclin des passions politiques (Paris: Fayard, 1984), 33. On the "political imaginary" of French republicanism, see James R Lehning, To Be a Citizen: The Political Culture of the Early French Third Republic (Ithica, NY: Cornell University Press, 2001); Katherine Auspitz, The Radical Bourgeoisie: The Ligue de l'Enseignement and the Origins of the Third Republic, 1866-1885 (Cambridge: Cambridge University Press, 2002); Claude Nicolet, L'Idée républicaine en France - Essai d'histoire critique (1789-1924) (Paris: Gallimard, 2014); Nord, The Republican Moment: Struggles for Democracy in Nineteenth-Century France; Sanford Elwitt, The Making of the Third Republic: Class and Politics in France, 1868-1884 (Baton Rouge, LA: Louisiana

nineteenth century, this question focused attention on the newly created and newly visible underclasses of French society, asking how their conditions of life, in large part produced through modernization, could be improved so as to achieve the Republic's promise of the equality of all citizens. Yet as Donzelot points out, inextricable from elites' desire to change these social conditions was a fear that the reforms themselves could potentially upend French social structure. Hence social reformers, including aesthetic reformers, in a way sought to placate the underclasses by changing material conditions just enough to both avert uprisings that would result from a complete absence of reforms and protect the power of the elites that would disappear if reforms aimed to achieve true class equality. It was in this attempt to solve "the social question," perhaps more aptly called "the social problem," that these aesthetic reformers saw an opportunity to make architecture and art relevant to society.

Aesthetic reformers' proposals were only one type of reforms devised in response to the social question. Others which preceded them, such as those of the hygiene movement, placed their faith much more in science and technology to address the issues at hand, reflecting the at large valorization of science and its offspring in French culture during the first fifteen or so years of the Third Republic. Comte's theory of positivism, developed mid-century, established the

State University Press, 1975); and Sudhir Hazareesingh, *Political Traditions in Modern France* (Oxford: Oxford University Press, 1994). On the "reality of the social order," see chapter 5 and 6 of Dana Simmons, "Vital Minimum," (2015); Timothy J Clark, *The Painting of Modern Life: Paris in the Art of Manet and His Followers* (Princeton, NJ: Princeton University Press, 2015); Louis Chevalier, *Laboring Classes and Dangerous Classes in Paris During the First Half of the Nineteenth Century* (Princeton, NJ: Princeton University Press, 1981); Alain Corbin, *The Foul and the Fragrant: Odor and the French Social Imagination* (Cambridge, MA: Harvard University Press, 1986); Nicholas Bullock, and James Read, *The Movement for Housing Reform in Germany and France*, *1840-1914* (Cambridge: Cambridge University Press, 1985); William A Cohen, and Ryan Johnson, *Filth: Dirt, Disgust, and Modern Life* (Minneapolis, MN: U of Minnesota Press, 2005); Ann-Louise Shapiro, *Housing the Poor of Paris* (Madison, WI: University of Wisconsin Press, 1985); and Andrew Aisenberg, *Contagion: Disease, Government, and the "social Question" in Nineteenth-Century France* (Stanford, CA: Stanford University Press, 1999). Also of great use to me in understanding the social context and issues of the time such that I would be remiss in not mentioning it was Peter Watkins' film *La Commune (Paris, 1871). La Commune (Paris, 1871)*, directed by Peter Watkins (Brooklyn, NY:First Run/Icarus Films, 2000), DVD.

parameters of not only philosophic and scientific discourse during the 1870s and 1880s, but politics as well, with many of the prominent leaders of the Third Republic having developed their republican beliefs through that positivist societies and publications that dissented against the authoritarianism of the Second Empire.⁹ Yet as positivism's prophesy of a society whose orderliness and progress were created through scientific knowledge failed to come to fruition, doubt about the French future began to set in. Political scandals such as the Dreyfus Affair and the failure of the Panama Canal, the assassination of president Sadi Carnot, the ever increasing piles of garbage in Paris which overwhelmed Haussmann's waste-disposal infrastructure, the overtaxed laborers whose workplace accidents lowered industrial productivity, the plunging birthrate, the appearance of sexual promiscuity on the street, and the demise of the family structure all created an atmosphere of pessimism and fear of moral decrepitude and "degeneration," in which science, celebrated without qualification for much of the French nineteenth century, was declared "bankrupt" in many fields, including the sciences themselves.¹⁰

⁹ Comte's most definitive works on positivism are his Cours de philosophie positive (1830 - 1842) and his Discours sur l'ensamble du positivisme (1848). Émile Littré, perhaps Comte's most influential legatee, explains his understanding of positivism in Émile Littré, "Les Trois Philosophies," La Philosophie positive, 1, no. 1 (1867). For more contemporary secondary sources on Comte and positivism, see Robert C. Scharff, "Comte's Positivist Dream, Our Post-Positivist Burden," in *The Routledge Companion to Nineteenth Century Philosophy*, ed. Dean Moyar (London: Routledge, 2010); Annie Petit, Auguste Comte: Trajectoires positiviste, 1798-1998 (Paris: L'' Harmattan, 2003), ; Walter Michael Simon, European Positivism in the Nineteenth Century an Essay in Intellectual History (Ithica, NY: Cornell University Press, 1963); and Donald Geoffrey Charlton, Positivist Thought in France During the Second Empire, 1852-1870 (Oxford: Clarendon Press, 1959). It is interesting to note that, despite the ease with which "positivist" continues to be thrown around as an insult in contemporary intellectual banter, there are few recent studies on the theory's historical origins.

¹⁰ On the fear of moral decline and degeneration see: Robert A Nye, Crime, Madness and Politics in Modern France: The Medical Concept of National Decline (Princeton, NJ: Princeton University Press, 1984); Sylvia Schafer, Children in Moral Danger and the Problem of Government in Third Republic France (Princeton, NJ: Princeton University Press, 2015); Judith Surkis, Sexing the Citizen: Morality and Masculinity in France, 1870-1920 (Ithica, NY: Cornell University Press, 2006); chapter 1 of Eugen Weber, France: Fin De Siècle (Cambridge, MA: The Belknap Press of Harvard University Press, 1986); chapter 2 of Susanna Barrows, Distorting Mirrors: Visions of the Crowd in Late Nineteenth-Century France (New Haven, CT: Yale University Press, 1981); chapter 6 of Joshua Cole, The Power of Large Numbers: Population, Politics, and Gender in Nineteenth-Century France (Ithica, NY: Cornell

Hence toward the end of the century, the broad-scale question that motivated much debate in French discourse was whether science and technology could solve social problems, or whether in fact, they were incommensurate with this task, perhaps even worsening the conditions they were attempting to improve.

The increasing visibility of these problems and failures in French society, due to their concentration in the metropolis as well as through new techniques of observing and documenting social change, brought about a "revolt against positivism" which rejected the idea that the world could be explained by observable "facts" and reason alone.¹¹ Around 1890, this revolt yielded what has been called "idealism," "neo-idealism," "spiritualism," "vitalism," or "organicism" — a philosophical movement interested in explanations beyond those of materialist philosophies.¹²

University Press, 2000); chapter 1 of Richard Thomson, *The Troubled Republic: Visual Culture and Social Debate in France, 1889-1900* (New Haven, CT: Yale University Press, 2004); and chapter 3 of Michelle Facos, *Symbolist Art in Context* (Berkeley, CA: University of California Press, 2009). For primary sources on "degeneration," see Alfred Fouillée, "Dégénérescence? Le passé et le présent de notre race," *Revue des deux mondes*, 131 (1895) and Max Nordau, *Degeneration* (New York: D. Appleton and Company, 1895). Émile Durkheim's coinage of "*anomie*," a term referring to the fundamental incompatibility of the modernity's individual and society, is one of the best known signifiers of the fear of the moral disintegration of French society in the period. See Emile Durkheim, *Suicide: A Study in Sociology* (London: Routledge, 2002) and Idem, *The Division of Labor in Society* (New York: Simon and Schuster, 2014). On the "bankruptcy" of science, see Harry W Paul, "The Debate Over the Bankruptcy of Science in 1895," *French historical studies* (1968).

¹¹ New methods of observing society included the use of population statistics; the development of the fields of sociology, physical anthropology, and experimental psychology; and the advent of photography, among others. The phrase "revolt against positivism" was coined in chapter 2 of H. Stuart Hughes, *Consciousness and Society: The Reorientation of European Social Thought, 1890-1930* (Piscataway, NJ: Transaction Publishers, 2002). A elaboration of this new movement as exemplified by Alfred Fouillée, which attempts to clarify the relationship between science and this "spiritualist" philosophy is Larry S McGrath, "Alfred Fouillée Between Science and Spiritualism," *Modern Intellectual History* 12, no. 02 (2015).

¹² Notable figures from this new movement include Félix Ravaisson, Alfred Fouillé, Maurice Blondel, and Henri Bergson. On this turn, see Ferdinand Brunetière, *La Renaissance de l'Idéalisme* (Paris: Fermin-Didot, 1896); Alfred Fouillée, *Le Mouvement positiviste et la conception sociologique du monde* (Paris: Germer Baillière et Cie, 1896) and Idem, *Le Mouvement idéaliste et la réaction contre la science positive* (Paris: Germer Baillière et Cie, 1896). Particularly with regard to art, see Sandrine Schiano-Bennis, *La Renaissance de l'idéalisme à la fin du XIXe siècle* (Paris: H. Champion, 1999). On the formulation of the Third Republic's programs of solving the social question through an idealist conception of moral

Despite the rejection of positivism's unwavering faith in science, the new means that arose in this time in fact very much framed themselves as scientific modes of inquiry. As such, the movement in large part explored to the immaterial workings of the mind, bringing about a new focus on psychical explanations of the world, exploring themes such as morality, intuition, vital forces, and memory. Alongside this shift in philosophy was a blossoming of an experimental and physiological psychology through figures such as Théodule Ribot and Pierre Janet, which used observation to explain formerly unknowable workings of the mind, seeking to bring together evolutionary and neo-idealist lines of thought.¹³ Literature, poetry, and the visual arts also rejected modes of production that attempted to represent the world "accurately," such as Realism and Naturalism, turning instead to methods that engaged with questions of perception and the psyche instead.¹⁴ This new focus on the mind caused many to understand "the social question" as a moral or psychological problem rather than a material one. This was reflected in aesthetic reformers' conclusion that the transmission of aesthetic sensation had the capacity to change the morals of society.

Intellectual culture's new interest in the interior of the mind occurred at the same time as a new degree of attention was being paid to architectural interiors, both domestic and

improvement, see chapter 7 of Nicolet, L'Idée républicaine en France - Essai d'histoire critique (1789-1924).

¹³ For an overview of French psychology in the nineteenth century, see Jaqueline Carroy, Annick Ohayon, and Régine Plas, *Histoire de la psychologie en France XIXe-XXe siècles* (Paris: La Découverte, 2006). On the scientificity of early French psychology, see Jaqueline Carroy, and Régine Plas, "The Beginnings of Psychology in France: Who Was a 'Scientific' Psychologist in the Nineteenth Century?," *Physis* 43, no. 1-2 (2006). On the academic institutionalization of psychology, see Serge Nicolas, and Agnès Charvillat, "Introducing Psychology as an Academic Discipline in France: Théodule Ribot and the Collège De France," *Journal of the History of Behavioral Sciences* 37, no. 2 (2006). On early French psychology's interest in psychical phenomena, see Régine Plas, "Psychology and Psychical Research in France Around the End of the 19th Century," *History of Human Sciences* 25, no. 2

¹⁴ On this movement in visual arts, see Facos, *Symbolist Art in Context*. In the literary arts, see Richard Cándida Smith, *Mallarmé's Children: Symbolism and the Renewal of Experience* (Berkeley, CA: University of California Press, 2000).

commercial. A number of scholars frame this as a retreat from an exterior world where all of the ills related to "the social question," and indeed, to society at large, became manifest.¹⁵ Architectural and art histories, particularly those which look at nationalist efforts to reinvigorate the decorative arts in the turn of the century era have helped to mold this interdisciplinary narrative of interiority through interrogating the relationship between the design of interior objects and the design of the individual or the self.¹⁶ Within architectural history, this emphasis on the interior, in conjunction with the field's only now disappearing preference for histories in which science and rationality reign supreme, have allowed historians overlook the question of how the "revolt against positivism" affected the exterior environment — a question that is of primary concern in my dissertation.

¹⁵ Even literature of the time recognizes the comfort that the interior brought to the bourgeois class. Many scholars look to Joris-Karl Huysman's 1884 novel, *À Rebours* as the epitome of this idea of the interior as a retreat, and also the territory for the formation of the individual. In contrast, the fear of the outside, and the masses that could accumulate there, can be prominently see in Gustave Le Bon's 1895 *Psychologie des foules*. For secondary literature on the interiorization of bourgeois life, see chapter 4 of Sharon Marcus, *Apartment Stories: City and Home in Nineteenth-Century Paris and London* (Berkeley, CA: University of California Press, 1999) and chapter 3 of Lisa Tiersten, *Marianne in the Market: Envisioning Consumer Society in Fin-De-siècle France* (Berkeley, CA: University of California Press, 2001).

¹⁶ Debora Silverman's work was foundational in establishing this narrative, drawing together psychological and political discourses to offer a synthetic, intellectual history of the design of interiors and the decorative in turn of the century France. Debora Silverman, Art Nouveau in Fin-de-Siècle France: Politics, Psychology, and Style (Berkeley, CA: University of California Press, 1992) Rossella Froissart Pezone's work provides additional insights on the role of the architectural interior at the time, examining a movement that advocated for a renewal of the decorative and industrial arts which posited, in a fashion similar to the aesthetic reformers of my dissertation, that the decoration and forms of the interior effected the morality of its inhabitants. Rossella Froissart Pezone, L'Art dans tout: les arts décoratifs en France et l'utopie d'un art nouveau (Paris: CNRS, 2004). There is an interesting discrepancy here between the idea of the construction of the self and the Third Republican notion of constructing the citizen which again sets up a private/public dichotomy, in which difference, and individuality is constructed in the interior, and the individual — produced in the same mold as one's neighbor — is constructed through the public (state) programs in public, or exterior spaces. One could then see the market and the marketplace as a mediator of these two realms - public in the sense that it was open to all and attracted masses of people (though not necessarily the masses), and also became a realm perceived as immoral and unpredictable - and private in the sense that the consumer realm gave people, and in particular women, a change to construct their own image. For a more detailed analysis of the market, and in particular, the department store, in comparison with "civic space," as well as of the fahioning of the individual through consumption see chapter 1 and chapter 5, accordingly, of Tiersten, Marianne in the Market: Envisioning Consumer Society in Fin-De-siècle France.

Many studies of the development of urbanism in the turn of the century era examine analogous reform movements within civil society to create a "healthy" population. Often having begun earlier in the century, these reform movements, such as those of hygiene and low-cost housing, placed faith in scientific knowledge and principles of economy to solve issues related to "the social question."¹⁷ A less materially oriented, yet related body of work examines the relationship between solutions to "the social question" operating at the scale of the city and the rise of the French welfare state. Although the welfare state was built primarily through financial mechanisms, these studies provide an interesting complement to those previously mentioned, invoking questions about the role of material objects, including architecture, in social reform as capitalism continued to advance.¹⁸ Collectively, these discourses of urban reform and re-

¹⁷ On this reform movement at large, see Christian Topalov, ed. Laboratoires du nouveau siècle: La nébuleuse réformatrice et ses réseaux en France, 1880-1914. (Paris: Écoles des Hautes Études en Sciences Sociales, 1999). On hygiene, see Jack D Ellis, The Physician-Legislators of France: Medicine and Politics in the Early Third Republic, 1870-1914 (Cambridge: Cambridge University Press, 1990) and Aisenberg, Contagion: Disease, Government, and the "social Question" in Nineteenth-Century France, as well as Fabienne Chevallier, Le Paris moderne: Histoire des politiques d'hygiène, 1855-1898 (Rennes: Presses universitaires de Rennes, 2010), which most closely relates the hygienic discourse to architecture and urbanism. On the relationship between hygiene and the development of low-cost housing, see Shapiro, Housing the Poor of Paris and Roger-Henri Guerrand, Les Origines du logement social en France (Paris: Éditions ouvrières, 1967). On low-cost housing see also Marie-Jeanne Dumont, Le Logement social à Paris 1850-1930: les habitations à bon marché (Paris: Editions Mardaga, 1991) and Bullock, and Read, The Movement for Housing Reform in Germany and France, 1840-1914. A noteworthy work which also examines developments in architecture, urbanism and the built environment in France, yet is too broad in its scope to be classed with studies that primarily look at turn-of-the-century movements, is Paul Rabinow's superb French Modern: Norms and Forms of the Social Environment. While the work sacrifices depth for scope, parts of the study relate to my dissertation through their examination the work of both the "scientific" reformers who also appear in Topalov's volume and the work of architects and planners one generation younger than the figures in my work. Yet the work is more significant as a methodological example, examining architecture from its borders with fields such as politics, science, aesthetics, and economics. Rabinow's identification of the aforementioned architects and planners as "techno-cosmopolitan" -- conceptually modern without modernism's formal component -emphasized the book's exploration of the relationship of architecture to modernity without recourse to Modernist schematizations and canons of architectural history.

¹⁸ Janet Horne draws connections between early twentieth century movements to improve the French population through changes to the built environment and the rise of the welfare state in Janet Horne, *A Social Laboratory for Modern France: The Musée Social and the Rise of the Welfare State* (Durham, NC: Duke University Press, 2002). François Ewald examines the creation of the welfare state from a less material perspective, through the invention of insurance. See Ewald, *L'Etat providence*.

formation at the turn of the century productively counterbalance the plethora of historical studies of Haussmannization, whose magnitude too easily suggests that Haussmann's renovations of Paris constitute the entirety of thought on urbanism in the French nineteenth century. However, while this scholarship on urban reform through science, technology, and economic rationality thus illuminates previously understudied questions in the history of French urbanism, given that much of this work has come from field such as history and history of science, questions of architects' involvement in the process, and of design and aesthetics, are yet to be explored.¹⁹

Studies of the contributions of architects and artists to the design of the physical, and particularly, the urban environment in the late nineteenth and early twentieth century are scant, at best. The early third Republic has been treated, particularly within Anglo scholarship, as an architectural wasteland — a time without innovation in the academic tradition of the École des Beaux-Arts and still awaiting the coming of Modernism.²⁰ Hence in Modernist histories, this period of time is represented only by French engineers such as Eiffel and Freycinet, which Modernism would claim as the sole French contribution to their movement.²¹ Even revisionist Modernist histories, such as Reyner Banham's *Theory and Design of the First Machine Age*, which goes as far as to insert Julien Guadet's turn of the century teaching at the École des

¹⁹ Although still not focusing on the role of the architect per se, the work of Norma Evenson and Anthony Sutcliffe examines changes in to the Parisian built and architectural environment during the Third Republic. See Norma Evenson, *Paris: A Century of Change, 1878-1978* (New Haven, CT: Yale University Press, 1979) and Anthony Sutcliffe, *Autumn of Central Paris: The Defeat of Town Planning, 1850-1970* (Montreal: McGill-Queen's Press-MQUP, 1971).

²⁰ This claim is best made through the lack of material to footnote. One exception to this binary that twentieth century histories have recognized is the work of Viollet-le-Duc, whose structural rationalism and interest in science has prompted his framing as a proto-modern architect.

²¹ This narrative is best, and was originally articulated by Sigfried Giedion in Sigfried Giedion, *Building in France, Building in Iron, Building in Ferroconcrete* (Los Angeles: The Getty Center for the History of Art, 1995). Nikolaus Pevsner repeated it without further investigation. Seeking to find the nineteenth century roots of Modern architecture, Pevsner traces a trajectory from William Morris to the Bauhaus, excluding innovations in France with the exception of late nineteenth century French painting, and a chapter on both French engineers and Viollet-le-Duc.

Beaux-Arts into the history of Modernism, only address French architecture as it developed in the twentieth century, ignoring the end of the nineteenth century completely. Although the 1977 *Architecture of the École des Beaux-Arts* exhibition at MoMA drew attention to architecture from the first half of the nineteenth century, in suggesting a reappraisal of the Beaux-Arts system as a means to find alternatives to an insufficiently humanist Modern architecture, it merely reinforced the narrative of an absolute divide between early and mid-nineteenth century French architecture and Modernism.²²

If one chooses to trace change through the evolution of either the teaching at the École des Beaux-Arts, or through the state commissioned, "monumental" architecture that typically occupied the school's Prix de Rome winners as their careers matured, then the twentieth century perception that architecture in France sputtered out at the end of the Second Empire does reflect, to some extent, a reality. I propose that, in order to understand the changes in architecture and architectural ideas in the Third Republic, history needs to bring to light events outside of the Beaux-Arts system, in lieu of rehashing the now standard questions of the Beaux-Arts' engagement with contemporary society and the invention of a properly new style driven by concerns interior to the history of architectural theory. Additionally, I contend that this history needs to look at developments in architecture and architectural culture in aggregate rather than looking to individual buildings or events as markers of innovation. French scholars have recently begun this project, with studies of the design of Republican schools and bathhouses alongside

²² The two prominent works to come out of the reprisal of Beaux-Arts architecture in the late 1970s are Arthur Drexler, and Richard Chafee, eds. *The Architecture of the École Des Beaux-Arts*. (Cambridge, MA: MIT Press, 1977) and Robin Middleton, ed. *The Beaux-Arts and Nineteenth-Century French Architecture*. (Cambridge, MA: MIT Press, 1982). On Parisian architecture through the Second Empire, see also David Van Zanten, *Designing Paris: The Architecture of Duban, Labrouste, Duc, and Vaudoyer* (Cambridge, MA: MIT Press, 1987) and Idem, *Building Paris: Architectural Institutions and the Transformation of the French Capital, 1830-1870* (Cambridge: Cambridge University Press, 1994), both of which reinforce the prominence of the state institutions of architecture and the Beaux-Arts system.

studies of the turn of the century development of scientific aesthetics, yet this territory remains ripe for investigation.²³ Moving away from histories of architectural institutions allows scholarship to trace changes that occurred as architecture itself, as a practice, moved away from its traditional institutions, with architects entering into a less mediated relationship with the public through their professionalization.

In addition to the historical narratives that have obscured late nineteenth and early twentieth century French architectural culture from view, so too has the location of primary source material. The wealth of scholarship on architecture under the Beaux-Arts system, including that on buildings produced or conserved by the state, reflects French ideas of heritage and practices of archiving state history that date back to the French Revolution. In contrast to the copious if not overwhelming amount of material preserved in the Archives nationales, archived in accordance with legal mandates, the architecture culture that developed outside of the state system — a defining characteristic of the aesthetic reformers of my dissertation who operated as a part of civil society — had no official mechanism of archiving. In contrast to the archival documents of private Modernist architects from the interwar period and beyond, which in France are often donated posthumously to the state, these aesthetic reformers had no sense of their own singularity as cultural operators that would have made them save their work for posterity. Hence I drew on a range of other sources in constructing my project. First are the published documents produced by the various groups and conferences discussed in the study. These documents consist primarily of the groups' official bulletins --- nationally distributed publications containing

²³ On the architecture of Third Republic schools, see Anne-Marie Châtelet, *La Naissance de l'architecture scolaire: les écoles élémentaires parisiennes de 1870 à 1914* (Paris: Honoré Champion, 1999). On the architecture of bathhouses, see chapter 5 of Chevallier, *Le Paris moderne: Histoire des politiques d'hygiène, 1855-1898*. On the development of scientific aesthetics, see Estelle Thibault, *La Géométrie des émotions: les esthétiques scientifiques de l'architecture en France, 1860-1950* (Paris: Editions Mardaga, 2010).

summaries of issues discussed in their meetings — as well as articles produced by individual members. A variety of other printed sources were used as well: many publications of individual reformers, articles printed in general interest journals such as *La Revue des deux mondes*, articles from architectural journals, parliamentary proceedings, and publications from a host of philosophers, engineers, and politicians.

Dissertation Organization

My chapters proceed in a roughly chronological order, yet are thematic in nature. Running throughout the chapters are the network of figures who comprise the various groups that advocated for aesthetic reform. These figures unify the chapters by appearing in different roles in multiple associations in multiple chapters. Bringing together otherwise strange bedfellows, the overlapping membership in these groups, which united archaeologists with Radical-Socialist politicians, proto-Modernist architects with championship sportsmen, and symbolist poets with pedagogical theorists, testifies to a new locus of concern around the relationship between the built environment and society at large.

Chapter 1 — Utility Aesthetics and Aesthetic Utility

In the first chapter, I trace an expansion of the term *utilité publique*, as a legal status, from its initial application in the first half of the nineteenth century to *travaux publics* — state infrastructural projects that used the this status to demolish buildings — to its application to the historic building, for which it was used to preserve buildings. The chapter first examines how regimes of science and engineering demonstrated their *utilité publique*, and shows the

development of a specifically French aesthetics of *travaux publics* that resulted from this particular means of formulating a project's utility. Hinging on a new law of expropriation from 1887 which afforded historic buildings, from a legal perspective, the same social status as *travaux publics*, the chapter then examines how the preservationist group, the Société des Amis des monuments parisiens, changed contemporary understandings of both the historic building and preservation itself as a practice. After a century of rhetoric surrounding the importance of historic buildings as souvenirs of history belonging to the nation at large, the Société des Amis proposed that the utility of historic buildings in fact lay in their beauty, rather than their capacity to remember history. Concomitantly, they argued that preservation should be understood as a practice that seeks not to hold on to remnants of the past for the sake of the past, but rather that it should be undertaken as a means of planning the city of the future.

Chapter 2 — "The Social Question Will Be Resolved by Aesthetics"

In the second chapter, I switch from a legal to a intellectual conception of the term *utilité publique*, examining how aesthetic reformers associated with the Congress d'art public sought to create an architectural and artistic practice of *art public* that would be of use in the public realm. The chapter begins with an examination of the aesthetic philosophy of Jean-Marie Guyau, whose philosophy was used by aesthetic reformers to justify their idea that art — and particularly, its beauty — could better society. I then delve into the development of the idea of urban aesthetics, which argued that the city should be designed as an aesthetic object. Although initially this idea was separate from the proposal for beauty's social agency, the chapter goes on to study the works written by a number of aesthetic reformers who united Guyau's proposition for art's social utility with urban aesthetics' idea of designing the city. Finally, the chapter concludes by showing how

art public played a founding role in the institutionalization of urbanism in early twentieth century France.

Chapter 3 — Drawing Nature, Planning Nature

In the third chapter, I examine the new prominence of nature as a particular form of beauty that aesthetic reformers believe could best serve their goal of creating an *art public* of utility to the public. This chapter sees aesthetic reformers bring nature into two types of spaces: the school and the urban environment. The first portion of the chapter looks at two intertwined phenomena: the movement to use nature, and particularly art representing nature, as a didactic tool within the classroom, and the movement to reform primary school drawing curricula such that "geometric" drawing was replaced by drawing "from nature." I contextualize both of these movements in developments in child psychology which, in seeking to understand the nature of children, determined that children were best able to learn from the unadulterated natural world. The second section of the chapter then studies the incorporation of nature into the built environment and the incorporation of the build environment into nature. It examines how, through the efforts of aesthetic reformers, nature and the new idea of the espace libre, gained cultural currency. While "nature" was deemed an entity worth protecting as a utilité publique, on account of its beauty, the espace libre was put forth as a new means of constructing the urban environment by choosing not to construct. The dissertation ends at a moment in which infrastructure, architecture, and nature, three entities which in many ways had been understood as mutually exclusive or even antagonistic to one another, all have attained the same status of having utilité *publique* and are equally constitutive of elements in the planning of the built environment.

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My dissertation asks why, at a moment when the discipline of architecture had retreated inside its own walls, figures with disparate backgrounds and differing points of view within French society would collectively adopt the built environment, and the art and architecture of which it was composed, as an agent of social reform. I show how these aesthetic reformers, by virtue of their positions outside of mainstream architectural institutions, were able to reconceive the purpose of architecture and identify a new territory for architectural operation developments that stemmed directly from their engagement with the intellectual, political, and social currents of the turn of the century era rather than with intellectual traditions interior to architecture itself. In reconstructing the discourse among and actions of aesthetic reformers, I contribute to the body of scholarship which seeks to reorient the idea of modern architecture from one centered on the Modernist canon to one that incorporates architecture, in the expanded field, based on the modernity of ideas involved. More polemically, I submit this dissertation as a critical evaluation of the values of Modernist architects that continue not only to underlie contemporary architectural practice, but to serve as the values of much architectural history as well.
CHAPTER ONE Utility Aesthetics and Aesthetic Utility

Just after the turn of the nineteenth century, two very different ideas were put forth regarding the value of architecture, by two very different figures: the architect Jean-Nicholas-Louis Durand and the economist Jean-Baptiste Say. In his *Précis des leçons d'architecture données à l'École polytechnique*, initially published between 1802 and 1805, Durand proposed that the goal of architecture was to furnish "public and private utility, the happiness and protection of individuals and of society."¹ Part and parcel of this dictum was the assertion that the beauty of architecture derived from the economy with which it was able to satisfy its requirements of this utility. For Durand, this notion of economy was in no way metaphoric. The task of the architect, and the measure of his talent, lay in the "solution of two problems: (1) in the case of private buildings, how to make the building as fit for its purpose as possible for a given sum; (2) in the case of public buildings, where fitness must be assumed, how to build at the least possible expense."² From this Durand concluded that, "in architecture, there is no incompatibility, and no mere compatibility, between beauty and economy: for economy is one of the principle causes of beauty."

In his 1803 *Traité d'économie politique*, the French liberal economist Jean-Baptiste Say put forth his own thoughts regarding the utility of architecture:

¹ Jean-Nicolas-Louis Durand, Précis of the Lectures on Architecture: With, Graphic Portion of the Lectures on Architecture (Los Angeles: Getty Publications, 2000), 84.

 $^{^{2}}$ Ibid., 86. With regard to my choice of gender to ascribe to "architect" in this sentence, note that throughout the dissertation, I will refer to architects, generically, as men, since this reflects almost the entirety of the reality at the time.

I shall not here attempt to enumerate the great variety of works requisite for the use of the public; but merely lay down some general rules, for calculating their cost to the nation. It is often impossible to estimate with any tolerable accuracy the public benefit derived from them. How is one to calculate the utility, that is to say, the pleasure that the inhabitants of a city derive from a public terrace or promenade? It is a positive benefit to have, within an easy distance of the close and crowded streets of a populous town, some place where the population can breathe a pure and wholesome atmosphere, and take health and exercise, under the shade of a grove, or with a verdant prospect before the eye; and where schoolboys can spend their hours of recreation; yet this advantage it would be impossible to set a precise value upon.³

Surprisingly, Say, the economist, refused to quantify the value of architecture, while Durand, the professor of architecture, related the value of a building directly to its cost.

These two very different understandings of the value of architecture reflected Durand and Say's different concepts of utility, as well as their different fields of inquiry. Durand's idea of utility did not veer far from the Vitruvian formulation of *utilitas*. Utility was a measure of the extent to which a building served its programmatic function. As such its utility was ostensibly for the "users" of the building, whether they be private clients or the ministries that performed their functions in public buildings. Yet in fact, its utility was able to be assessed when the building was a mere drawing, according to preconceived ideas about the relationship between various functions of a building and form. What the building's eventual inhabitants thought of its function was of no consequence. Durand reprises this disregard for the building's user in proscribing the act of designing a building specifically to "give pleasure" — in other words, to consider any psychological effect that it would have on its inhabitants.⁴ This reflected architecture's focus at

³ Jean-Baptiste Say, A Treatise on Political Economy, or the Production, Distribution, and Consumption of Wealth trans. Clement C. Biddle. (Philadelphia: Lippincott, Grambo, & Co., 1851), 441-42.

⁴ Durand, Précis of the Lectures on Architecture: With, Graphic Portion of the Lectures on Architecture, 86.

the time on the composition, and the singular building, at the exclusion of consideration of architecture's value to its public.

For Say, the utility of architecture lay specifically in the pleasure that it bestowed, and the benefit that was accorded through its material existence. Unlike Durand's theory, in which the utility of a building was a fixed quantity, under Say's theory — and this holds true of his larger economic theory as well — utility was not a property inherent to any material thing, but rather was relational. This utility could be assessed through markets for saleable items, but for public terraces and promenades, for which there was no market, utility remained unmeasurable. With economics asking questions about the relationships between many people and many things, it would have been extremely unlikely for Say to understand the value of a building as something intrinsic to the design itself. Rather for Say, the value of architecture was necessarily its value to society at large.

Chapter One examines how the value of architecture transformed in the late nineteenth century as the modernization of the built environment forced architecture to argue for its value to society at large, or otherwise put, for its public utility. It shows how the public works undertaken in France in the nineteenth century through the end of the Second Empire, and more specifically, their incursions into the metropolis, placed architecture, particularly in the form of historic buildings, in the public eye, and made its value a subject of public debate. These public works, and the laws created to enact them, established the terms to which architecture would be held accountable in demonstrating its utility, forcing architects to consider forms of utility other than those prescribed by theories internal to the discipline, such as Durand's. The chapter hence looks at how the new antagonism between modernization and the historic building precipitated a new

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kind of preservation movement in the latter half of the nineteenth century, and proposed a new understanding of historic buildings: rather than being understood as physical archives of the past, they became understood as aesthetic objects. I contend that the contest of territory that arose between public works and the historic building, and the movement it yielded, shifted the scope of preservation, both spatially and temporally. Spatially, it awakened a new idea of urban aesthetics — that is, an aesthetics that operated at the same large scale as public works. Temporally, it transformed preservation into a practice with greater concern about the future of the built environment than its past. Otherwise put, the chapter traces how preservation became embedded in the nascent field of urbanism, and transformed from a practice opposed to the destructions brought about by modernization into one that understood itself as part and parcel of modernism itself.

While the late nineteenth century developments in preservation addressed in this chapter responded to the modernization of the French landscape, what is typically considered the origin of preservation in France — the 1830 founding of the Service des monuments historiques and subsequently, the founding of the Commission des monuments historiques — responded to very different conditions. For the ministers of the July Monarchy, architectural preservation was part of a larger intellectual project of defining, cohering, and inventing the French nation after decades of divisive politics, beginning with the Revolution and lasting through the Bourbon Restoration.⁵ Just as the nation, as a historical entity, needed to be both healed and reinvented, so too did its material history, including its buildings, many of which at the time stood in various

⁵ On preservation initiatives under the July Monarchy, see Arlette Auduc, *Quand les monuments construisaient la nation: le Service des Monuments historiques de 1830 - 1940* (Paris: Comité d'Histoire du Ministère de la Culture, 2008); Dominique Poulot, "Naissance du monument historique," *Revue d'histoire moderne et contemporaine* 32 (1985); and Jean-Michel Leniaud, *Les Archipels du passé: le patrimoine et son histoire* (Paris: Fayard, 2002).

states of disrepair due to revolutionary destruction as well as lack of upkeep. This enterprise of history building persisted through the nineteenth century, with the Commission des monuments historiques amassing longer and longer lists of buildings worthy of protection and restoration. Although these demands of these lists far exceeded the funding available, the Service des monuments historiques took on ambitious restorations of structures considered "the most complete models of the art of each different period, which bring together all of the characteristic features of the style to which they belong."⁶ These included Viollet-le-Duc's famous "creative restorations," such as Notre-Dame de Paris, the chateau of Pierrefonds, the walled city of Carcassone, and the Abbey of Vézelay, reconstructed so as to interject a new consciousness of French history into the present.

This task of recuperating a material national history was also furthered by a number of regional "sociétés savants," with the most significant being Arcisse de Caumont's Société française d'archéologie pour la conservation des monuments historiques, founded in 1834.⁷ While these societies shared the goal of the conservation of artifacts from the French past with the Commission des monuments historiques, they differed from that institution in the means with which they undertook this goal. Limited in their funding, these societies were also intentionally limited by the Commission des monuments historiques who sought to control the nation's conservation policies and programs, in their capacity to physically intervene in the maintenance

⁶ France. Ministère d'état, Note, circulaires et rapports sur le Service de la conservation des monuments historiques (Paris: Imprimerie Impériale, 1862), 4.

⁷ On "sociétés savantes," see Jean-Michel Leniaud, "L'Etat, les sociétés savantes et les associations de défense du patrimoine: l'exception française," *Patrimoine et passions identitaires*, (1997) and Jean-Pierre Chaline, *Sociabilité et érudition: les sociétés savantes en France, XIXe-XXe siècles* (Paris: Comité des travaux historiques et scientifiques, 1998) On Caumont, see Vincent Juhel, *Arcisse de Caumont (1801-1873): érudit normand et fondateur de l'archéologie française: actes du colloque international organisé à Caen du 14 au 16 juin 2001* (Caen: Société des antiquaires de Normandie, 2004).

of artifacts.⁸ Hence the means that the Société française d'archéologie took to impede the disappearance of various buildings and artifacts primarily involved the cataloguing of monuments they deemed significant. They aimed to "enumerate the totality of French monuments, describe them, arrange them in chronological order, and publish them as the *statistique monumental de la France*, through a regularly appearing bulletin."⁹ In this sense, Caumont's society operated in a manner more similar to the Société de l'histoire de France, founded in 1833 by Guizot to create organized archives of French historical documents, than it did to the Service des monuments historiques, creating a written history of the French material environment rather than participating in its physical upkeep and protection of historic buildings. The regional proliferation and local focus of these societies allowed the project of heritage building to permeate into the capillaries of French territory, perhaps more so than could the centrally-administered Service des monuments historiques which could only focus on the most noteworthy buildings in the country.

These movements were intended to invent a new conception of a long French past and to resolve the issues of the destruction of buildings and artifacts that had occurred in the last four decades. This orientation toward the past was also reflected in their continued cries of "vandalism" in discussing the destruction, entire or partial, of historic buildings.¹⁰ The term *vandalism* had been coined during the revolution by the Abbé Gregoire, as a means to condemn the destruction of a building as a near crime, no matter what the reason for the building's

⁸ Leniaud, "L'Etat, les sociétés savantes et les associations de défense du patrimoine: l'exception française," 55-56.

⁹ Société français d'archéologie pour la conservation et la description des monuments, *Congrès archéologique de France* (Paris: Alph. Picard, 1896), v-vi.

¹⁰ On the question of preservation during the revolution, as well in the years preceding the July Monarchy, see Frédéric Rücker, *Les Origines de la conservation des monuments historiques en France (1790-1830)* (Paris: Jouve & Cie., 1913).

demolition or modification.¹¹ Yet the culprit of this vandalism began to change significantly by the 1840s. Archaeologists, historians, and other *erudites* that made up *sociétés savantes*, grew less concerned at this time with lingering destructions associated with selling off and privatization of the *biens nationaux* into the hands of the speculators of the *bande noire*.¹² Rather, this new form of "vandalism" was committed by a new actor: the state itself, and the state's efforts to extend new, modernizing technologies through, initially, the French countryside, and then into both metropolises and towns alike. This constituted what the architect Charles Normand, founder of the Société des amis des monuments parisiens, the principle preservation society of the late nineteenth century, would call "the destruction of France, by France."¹³

The destructions of buildings that these figures objected to were carried out primarily in service of large scale public works projects, undertaken by the Corps des Ponts et Chaussées. Protests against these destructions unsurprisingly coincided with the early development of railroads in France, which began in 1838, and expanded dramatically through the law of 1842

¹¹ See, for example, the May 15, 1846 report from Merimée, then Inspecteur générale des monuments historiques to the Minister of the Interior, as well as Adolphe Didron's attempt to catalog "vandalism" occurring in France in the *Annales archéologiques*. France. Ministère d'état, *Note, circulaires et rapports sur le Service de la conservation des monuments historiques*, 88; Adolphe Didron, *Annales archéologiques* (Paris: Bureau des Annales Archéologiques, 1845), Vol. 3, 240-56. On the coining of *vandalism* during the revolution, its meaning, and its use, see Henri Grégoire, *Rapport sur les inscriptions des monuments publics* (Paris: Imprimerie nationale, 1794), 9; Idem, *Rapport sur les destructions opérés par le Vandalisme, et sur les moyens de le réprimer* (Paris: Imprimerie nationale, 1794); Daniel Hermant, "Destructions et vandalisme pendant la Révolution française," *Annales* (1978); AH Merrills, "The Origins of 'Vandalism'," *International Journal of the Classical Tradition* 16, no. 2 (2009); Joseph L Sax, "Heritage Preservation as a Public Duty: The Abbé Grégoire and the Origins of an Idea," *Michigan Law Review* (1990); and Anthony Vidler, "The Paradoxes of Vandalism: Henri Grégoire and the Thermidorian Discourse on Historical Monuments," in *The Abbé Grégoire and His World* (Houten: Springer Netherlands, 2000).

¹² On the sale of *biens nationaux* and the *bande noire*, see Bernard Bodinier, Éric Teyssier, and François Antoine, "L'Événement le plus important de la Révolution": la vente des biens nationaux en France et dans les territoires annexés (1789-1867) (Paris: Société des études robespierristes / Éditions du CTHS, 2000).

¹³ Société des Amis des monuments parisiens, *Bulletin* (Paris: 1885), Vol. 1 (1), 12.

that sanctioned a nationwide plan for railroads. In 1845, Aldolphe Didron, founder of the periodical *Annales archéologique*, bemoaned the effects of public works on historic buildings. "Why must archaeology pay so dearly for the development of railroads?" he wrote. "One could say that engineers take perverse pleasure in walking all over the bodies of our monuments."¹⁴ Later, the archaeologist and member of the Commission des Monuments historiques, Ferdinand de Guilhermy, described this new "vandalism" as such:

The *bande noire*, that disastrous organization, no longer exists. But the army of civil engineers has not stopped destroying the monuments of the past. The vandalism of 1833 evokes a second-hand dealer crying out: 'old lead, old trinkets, scrap iron for sale!' That of 1861 takes a more sophisticated form, appearing as a builder of roads, a piercer of boulevards that unfurl before him in a straight line, without regard for what might stand in his way.¹⁵

As Guilhermy suggests, the new form of destruction that emerged in the mid-nineteenth century was much more systematic than earlier destructions by proto-entrepreneurs looking to sell off building materials of already damaged buildings. Not only was it undertaken by the state, but it was done through the mechanism of laws of expropriation. Initially instituted through the Napoleonic Code to protect the right to private property, these laws were modified over the course of the century, beginning in particular with the law of 1841, to facilitate and hasten the development of public works projects. At times, when these projects threatened to demolish historic buildings, campaigns were mounted to convince engineers to redirect their proposed routes. For example, a railroad route planned in 1845 that would have destroyed the ramparts of Avignon was eventually rerouted.¹⁶ In the case of proposed destructions to be carried out on a

¹⁴ Didron, Annales archéologiques, 242.

¹⁵ Ferdinand de Guilhermy, "Trente ans d'archéologie," Annales archéologiques 21 (1861), 254.

¹⁶ France. Ministère d'état, Note, circulaires et rapports sur le Service de la conservation des monuments historiques, 88.

local scale rather than by state engineers, the Commission des monuments historiques, in some cases, would try to persuade the Ministry of the Interior to purchase the buildings that would be otherwise expropriated and demolished. Yet for the most part, the development of *voies des communications* — the network of roads, canals, and railroads that connected France and facilitated the intensification of its capitalist economy — proceeded unimpeded. Initially, these projects primarily affected the French countryside, connecting cities to one another with their internal layouts remaining unchanged. However, eventually, their spatial logic penetrated into cities themselves, expropriating and demolishing substantial numbers of existing buildings. It was the increasing pervasiveness of this logic, founded on the idea of utility, its assertion of its inevitability, and its resultant aesthetics that the preservation groups formed in the wake of these modernization projects attempted to disrupt and combat.

Defining Utility

In post-Revolutionary France, the construction of public works, as well as their expropriations, were justified both politically and legally through the concept of public utility, or in French, *utilité publique*. Public utility had long been the subject of philosophic debate, conceived as the needs of the collective that should be held as more important than the needs of the individual in a society.¹⁷ Yet in the early nineteenth century, *utilité publique* was, for the first time, enshrined into laws which determined what kinds of projects justified the expropriation of property, and, if necessary, the destruction of buildings. Public utility served as a litmus test for expropriation. If a project was declared to be "of public utility," then it was allowed to

¹⁷ Francine Markovits, "Utility," in *Encyclopedia of the Enlightenment*, ed. Michel Delon (London: Routledge, 2001).

expropriate land, a right that was essential for the completion of large-scale public works. If the project failed to secure a *déclaration d'utilité publique*, the proposal either disappeared or was reworked until the *déclaration* was obtained.

Legally, this idea that expropriations could only be undertaken when they were deemed to be of utility for the French public stemmed from Article 17 of the *Déclaration des droits des hommes et du citoyen* of 1791, the last article of the document, introduced late in its drafting.¹⁸ This article made a condition on Article 2, which established the right to private property alongside such lofty ideas such as liberty and security. The article conceived property as "an inviolable and sacred right, [which] no one shall be deprived thereof except where public necessity, legally determined, shall clearly demand it, and then only on condition that the owner shall have been previously and equitably indemnified."¹⁹ Although it limited private property, but rather, in light of the expropriations undertaken with absolute authority under the *ancien régime*, to limit expropriations only to those that were absolutely necessary, that is to say, of "public necessity."²⁰ The article also sought to ensure indemnification, rectifying abuses the *ancien*

¹⁸ On the history of expropriation in France before the Revolution, see Jean-Louis Harouel, *Histoire de l'expropriation* (Paris: Presses Universitaires de France, 2000) and Susan Reynolds, *Before Eminent Domain: Toward a History of Expropriation of Land for the Common Good* (Chapel Hill, NC: University of North Carolina Press, 2010), 17, 54-64 For an account of specific laws pronounced before the Revolution to govern expropriation, see Georges Ferrière, *Le Droit de l'expropriation pour cause d'utilité publique: principes et technique leur évolution* (Bordeaux: Imprimeries Delmas, 1943), 21-25 Allegedly the earliest evidence of a law for expropriation for a public purpose dates to an ordinance from 1301. See A Legott, "Expropriation," in *Dictionnaire de l'économie politique*, Vol. 1, ed. Ch. Coquelin, and Guillaumin (Paris: Librarie de Guillaumin et Cie, 1854), 751

¹⁹ "Declaration of the Rights of Man." The Avalon Project: Documents in Law, History and Diplomacy accessed February 10, 2015, http://avalon.law.yale.edu/18th_century/rightsof.asp On the history of article seventeen, see Harouel, *Histoire de l'expropriation*, 57-60.

²⁰ Note that various versions of the *Declaration* by various authors used different terms — "*necessité publique*," "*utilité publique*," and "*l'intérêt publique*" to express the same concept. See Ibid., 59. The term was officially changed to "*utilité publique*," arguably a more moderate term than "*necessité*

régime, when, particularly in the eighteenth century as the newly established Corps des Ponts et Chaussées undertook a nationwide program of road building, indemnities often came decades late, if paid at all.²¹

Curiously, despite the fact that it was enshrined into law in an age of growing belief in exactitude, *utilité publique* has never been legally defined, either as a quality or a quantity.²² The first law to establish administrative procedures for the approval of expropriations was passed in 1810. Article 2 of this law specified that expropriation could only be approved if the project's utility had been proven by "the forms established by the law," yet in Article 3, these forms were defined as "an imperial decree which alone can order public works or the purchase of terrain or structures to be used for objects of *utilité publique*."²³ In reality, the procedure for the approval the kinds of public works that would seek to expropriate property initially involved a hearing in front of a departmental tribunal, who would either approve or reject the proposal.²⁴ Under the July Monarchy, when budgetary matters fell under the auspices of the legislative body rather than under Napoléon's autocracy, 1831 modifications to the 1810 law, and its 1833 revision, required that projects be approved by either the national legislature, the Conseil d'État, or a departmental decree, depending on their scale. However, there was still no stipulation for what

publique" in articles 544 and 545 of the Napoleonic Code, which reiterated these conditions of expropriation. See Legott, "Expropriation," 751.

²¹ Harouel, *Histoire de l'expropriation*, 50-51.

²² Ferrière, Le Droit de l'expropriation pour cause d'utilité publique: principes et technique leur évolution, 55, also note 5.

²³ Léon de la Monnoye, Les Lois d'expropriation pour cause d'utilité publique expliquées par la jurisprudence (Paris: Auguste Durand, 1859), IX.

²⁴ Theodore M Porter, "French State Engineers and the Ambiguities of Technocracy," in *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life* (Princeton, NJ: Princeton University Press, 1996), 118-21; Monnoye, *Les Lois d'expropriation pour cause d'utilité publique expliquées par la jurisprudence*, XI.

constituted *utilité publique*.²⁵ With no definition given by the law, the term public utility was, on the one hand, a reflection of the state's understanding of the idea, influenced by contemporary, extra-legal discourse around the term. On the other hand, the term became an empty signifier onto which political interests could attach in the approval or rejection of any particular project.

At the same time that expropriation laws were being formulated, public utility was being redefined in the French intellectual and political spheres. This occurred in large part through new discourses of political economy, developed within the same engineering institutions whose projects were responsible for the majority of expropriations, changing the predominant framework for conceiving public utility from that of morality to that of economics.²⁶ These new definitions of utility reflected the shift in early nineteenth century political priorities away from the ideological questions of the Revolution and toward a program of increasing the wealth of the nation.²⁷ In his 1837 *Des Intértêts materielles en France*, Michel Chevalier, the École Polytechnique-trained Saint-Simonian, and eventual chair of political economy at the Collège de France, underscored the new monopoly that wealth accumulation held over the goals of the nation, stating that, "the highest ambition of the French nation…is to play an important role in the world, to answer all of the important questions of the human race…But heretofore, there will no longer be any stately nations, or powerful nations, there will only be rich nations."²⁸

²⁵ Préfecture de la Seine. Direction de l'extension de Paris, *Lois sur l'expropriation pour cause d'utilité publique* (Paris: Imprimerie Chaix, 1919), 4.

²⁶ For an extended discussion of concepts of utility in the eighteenth century, particularly focusing on its moral dimensions, see Markovits, "Utility".

²⁷ See Chapter 3 of Bernard Grall, Économie de forces et production d'utilités : L'Émergence du calcul économiques chez les ingénieurs des Ponts et Chaussées (Rennes: Presses universitaires de Rennes, 2003); François Etner, Histoire du calcul économique en France (Paris: Economica, 1987), 113-15; and François Vatin, "Jules Dupuit (1804-1866) et l'utilité publique des transports, actualité d'un vieux débat," *Revue d'histoire des chemins de fer*, no. 27 (2003), 42.

²⁸ Michel Chevalier, *Des Intérêts matériels en France: Travaux publics. Routes-canaux-chemin de fer* (Paris: Charles Gosselin, 1838), 4-5.

The primary theorization of utility in the French context came from the *polytéchnicien* and later, professor at the École des Arts et métiers and then the Collège de France, Jean-Baptiste Say, and his 1803 *Traité de l'économie politique*. This enormously influential text served as the foundation of the liberal economic thought that pervaded French politics through the midnineteenth century, and put the idea of utility at the forefront of French political intellectual consciousness.²⁹ For Say, utility was homologous to wealth. "To create objects which have any kind of utility, is to create wealth; for the utility of things is the ground-work of their value, and their value constitutes wealth," he wrote.³⁰ Say argued that wealth was accumulated not though the production of primary materials, but rather, through their transformation into things that were more useful than they were in their raw state:

All that man can do is, re-produce existing materials under another form, which may give them a utility they did not before possess, or merely enlarge one they may have before presented. So that, in fact, there is a creation, not of matter, but of utility; and this I call production of wealth...It is not to be estimated by the length, the bulk, or the weight of the product, but by the utility it presents.³¹

It was this new value of an item to the consumer — the value that was acquired through some

form of transformation — that Say called utility.³² That is to say, woven silk had more utility to

²⁹ Dennis Sherman, "The Meaning of Economic Liberalism in Mid-Ninteenth Century France," *History of Political Economy* 6, no. 2 (1974). See also François Vatin, *Le Travail: Économie et physique, 1780-1830* (Paris: Presses Universitaires de France, 1993), 26-30; and Etner, *Histoire du calcul économique en France,* 106.

³⁰ Say, A Treatise on Political Economy, or the Production, Distribution, and Consumption of Wealth, 62. On Say and his influence on nineteenth century political economy, see chapter 3, "Political Economy and the Logic of the Will," in Cheryl Welch, *Liberty and Utility: The French Idéologues and the Transformation of Liberalism* (New York: Columbia University Press, 1984).

³¹ Say, A Treatise on Political Economy, or the Production, Distribution, and Consumption of Wealth, 62.

³² This can be contrasted with Diderot's eighteenth century definition of utility given in the *Encyclopédie*, which extricated utility from financial gain, distinguishing it from both *avantage* and *profit*. "Avantage stems from something's existence as a commodity, *profit*, from what is gained, and *utilité*, from the service it renders. This book is *useful (utile)* to me; it's lessons are *profitable* to me, and its commerce

clothing manufacturers than silk thread, and woven silk had more utility after having been shipped to Paris, where infrastructure existed to sell it at a higher price to London, than it did in Lyon.³³ In this sense, Say's conception of utility broke with a number of other theories of wealth. Drawing on Adam Smith's theories of moveable wealth, it countered the ideas of the Physiocrats who, in the late eighteenth century, understood wealth as a function of agricultural production, and hence land. Additionally, it rejected Say's contemporary, Ricardo's theory of wealth, which associated value with the cost of production rather than the price that one was willing to pay for use.³⁴

Say's prominence in the sphere of French political economy in the early nineteenth century, alongside observations and envy of British industrial growth, thus reoriented French economic policies away from land-based production toward the accumulation of wealth through trade and the mobility of goods. In this sense, manufacturing created utility, yet according to Say, so too did public works. Specifically, public works created utility for both the state, and, from Say's perspective, focusing on the consumer as the driver of the economy, for the republican notion of a public:

Roads and canals are costly public works, even in countries where they are under judicious and economical management. Yet, probably, in most cases, the benefits they afford to the community far exceed the charges...Were we to calculate what would be the charge of carriage upon all the articles and commodities that now pass along any road in the course of a year, if the road did not exist, and compare it with the utmost charge under present circumstances, the whole difference that would appear, will be so much gain to

creates for me avantage." Denis Diderot, "Avantage, Profit, Utilité," in *Encyclopédie, ou dictionnaire* raisonné des sciences, des arts et des métiers, etc., Vol. 10, ed. Denis Diderot, and Jean le Rond d'Alembert University of Chicago: ARTFL Encyclopédie Project, Spring 2013).

³³ For further discussion by Say on the role of transportation in increasing utility and wealth, see Jean-Baptiste Say, *Des Canaux de navigation dans l'état actuel de la France* (Paris: Déterville, 1818), 6.

³⁴ Vatin, Le Travail: Économie et physique, 1780-1830, 27.

the consumers of all those articles, and so much positive and clear net profit to the community.³⁵

Say, as a primary figure in the promotion of liberal economics in France, contended that private interests could produce, in the construction of public works, the same utility at a lower cost.³⁶ Yet drawing on Say's notion of measuring utility through consumption rather than production, French state engineers in the nineteenth century eagerly set out to demonstrate that only state-planned and state-financed public works could effectively create public utility.³⁷ Their argument combined Say's theories with the eighteenth century reasoning of Rodolphe Perronet, the first head of the Corps des Ponts et Chaussées from its formation in 1775. Perronet argued that the public utility of a project should be measured by its indirect returns. For example, rather than measuring the funds that could be gained through tolls, which would be direct returns, a theory of indirect returns measured gains by the decrease in the collective costs of transport nationwide that would occur if tolls, or the cost of use, were eliminated. This metric advocated for an initial capital investment by the state, as well as an initial comprehensive plan, for the construction of the transportation network, rather than the toll-funded privately financed projects undertaken piecemeal that characterized public works in Britain.³⁸

³⁵ Say, A Treatise on Political Economy, or the Production, Distribution, and Consumption of Wealth, 443.

³⁶ On Say's liberal recommendations for the construction of public works, see Idem, *Des Canaux de navigation dans l'état actuel de la France*, 7.

³⁷ The question of whether the state or private companies would undertake the actual construction of the work was separate from the question of planning and financing. Although eventually private companies were created to build the railroads, planning remained in the hands of the Corps des Ponts et Chaussées throughout the nineteenth century.

³⁸ On the development of the Corps des Ponts et Chaussées, their monopoly over public works projects under the *ancien régime*, and the threat posed by private contractors in the 1830s and 1840s, see Cecil O Smith, "The Longest Run: Public Engineers and Planning in France," *The American Historical Review* 95, no. 3 (1990), 659-71.

The Aesthetics of Utility

The first railroads in France, the Paris-St. Germain and the Paris-Versailles lines, were in fact products of private design, construction and financing, backed by the Rothschild-Pereire and Fould groups. Yet in 1842, a law was passed authorizing what was known as the Legrand Star, a plan, initially proposed in 1838 by head of the Service des Ponts et Chaussées, Victor Legrand. Legrand's plan entailed five different lines emanating from Paris, terminating in major ports or cities along frontiers. Not only did the passage of this law inaugurate the construction of a coordinated, national railways system, but, ending a number of years of debates over whether public or private railroads were more advantageous, granted the Corps des Ponts et Chaussées authority for the design of the entirety of the railroad system. The ratification of Legrand's plan confirmed the arguments of state engineers that only they could act on behalf of public utility.

In order to both advocate for the utility of their projects, as well as to determine the particular shapes that their projects would take, engineers developed elaborate methods to calculate public utility. Initially developed by Say, further developed by Navier, and then later overhauled by Jules Dupuit, another engineer from the École des Ponts et Chaussées, these formulas allowed engineers to compare the economic benefits of multiple different routes, and to advocate for their projects in front of the tribunals responsible for issuing a *déclaration d'utilité publique*. Dupuit, in his 1844 "De la mesure de l'utilité des travaux publics," argued for a more substantive approach to the question of a project's public utility than what administrative procedures could offer, maintaining that, "all of the tribunals, laws, and ordinances cannot make a road, a railroad, or a canal useful, if they, in reality, are not. Law can only confirm the facts

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demonstrated by political economy.^{**39} The sentiment that only engineers, and not tribunals of bureaucrats could truly understand the utility of a project was echoed by L.-L. Vallée, the chief engineer of the Canal du Centre and later the designer of the Paris-Belgium railroad. "In the case of major public works," he argued, "[local administrators] have neither the initiative nor the responsibility nor the requisite education necessary to thoroughly comprehend the goal that is to be achieved."⁴⁰ Furthermore, he contended that local officials, in making decisions about expropriation, were called on to both protect the property rights of their constituents and, as officials of their respective municipalities, support the efforts to expropriate land for public works that would increase access to their town or city, and thus were incapable of fairly representing either party. Generally, representatives from *départements* and municipalities did vote to approve a railroad or canal's *utilité publique* based on the benefit — or profit — it would bring to their home locale, voting against proposals that would direct the work elsewhere.⁴¹

Although the quantification of public utility might have been framed as as objective measure by engineers, in fact, as François Vatin argues, these formulas were developed in response to, and hence were unique to, the political decision made to establish France as a market-less environment for public works, in which use would be free and the state responsible for their design and construction.⁴² This control of railroad planning, and conceptions of public

³⁹ Jules Dupuit, "De la Mesure de l'utilité des travaux publics," *Revue française de l'économie* 10, no. 2 (1995), 55-56.

⁴⁰ L.-L. Vallée, "Opérations qu'il faut confier aux ingénieurs en matière d'expropriation," *Journal du Génie civil, des sciences, et des arts* 8 (1830), 469.

⁴¹ Porter, "French State Engineers and the Ambiguities of Technocracy," 119.

⁴² Vatin, "Jules Dupuit (1804-1866) et l'utilité publique des transports, actualité d'un vieux débat," 47-48. The differences between methodologies are insignificant for the discussion here; however, are fascinating the the context of the history of economics. Vatin usefully and succinctly summarizes the differences between the Say-Navier method and that of Dupuit. For a mathematically detailed analysis of the quantification of public works in the French nineteenth century, see Chapter 5, "L'utilité des travaux publics, 1815-1852" and Chapter 6, "Les chemins de fer de Freycinet" in Etner, *Histoire du calcul*

utility, by the Corps des Ponts et Chaussées translated into an aesthetic of public utility particular to French railroads. In both Britain and the United States, the development of railways by private entrepreneurs, eager to cut costs and maximize their own profit, led to routes with sharp curves and steep grades. In contrast, the specifications required by Louis Navier, the engineer placed in charge of executing Legrand's plan, called for routes to be planned with the greatest extent of straight-line track as possible.⁴³ "The same principle which rendered the establishment of a Railway desirable, in order to obtain a mode of transport quicker than any other, requires that the shortest lines be sought after, and even to prefer them when sometimes they appear to be disadvantageous in other respects," wrote Navier in his 1835 Note sur la comparaison des avantages respectifs de diverses lignes de chemins de fer, et sur l'emploi des machines locomotives.⁴⁴ French engineers' pursuit of the straight line occurred at both the territorial and the mechanical scales. The various lines were to emanate from Paris and travel in the most direct line possible to principle cities and international borders. A number of lines were controversially planned to traverse relatively undeveloped plateaus, making a more or less straight line to their destinations, rather than traveling along more populated yet serpentine paths along river

économique en France. See also Chapter 7, "La Conquête de l'espace national" and Chapter 8, "De l'invention à innovation" in Antoine Picon, *L'Invention de l'ingènieur moderne* (Paris: Presses de l'École nationae des Ponts et Chaussées, 1992). For an extended discussion of Dupuit's contributions to modern economic theory, see Robert B Eklund, Jr., and Robert F Hébert, *The Secret Origins of Modern Microeconomics* (Chicago: The University of Chicago Press, 1999). For an overview of the relationship between engineering and economics in the nineteenth century, see Vatin, *Le Travail: Économie et physique, 1780-1830*.

⁴³ In 1832, Navier was made responsible by Victor Legrand, then director general of the Corps des Ponts et Chaussées, to oversee the railroad commission that was to actualize Legrand's radial plan for railroads across France. For further information on the development of the Legrand Star, including an argument refuting the notion that it was Saint-Simon who was responsible for the radial planning of the French railroad, as well as an explanation of how the Legrand plan was later realized through a combination of state planning and private construction, see Smith, "The Longest Run: Public Engineers and Planning in France," 669-75.

⁴⁴ Louis Navier, On the Means of Comparing the Respective Advantages of Different Lines of Railway trans. John MacNeill. (London: Roake and Varty, 1836), 8.

valleys.⁴⁵ In the layout of tracks, Navier, in the law of 1842, limited curves to a minimum radius of one thousand meters, and grades to 1 in 200, such that proposed routes were considered in three dimensions.⁴⁶ [Figures 1.1, 1.2] The calculations in support of these strategies were made in part according to the mechanical properties of materials, but more so according to the economic calculations designed to quantify, and maximize, the "public utility" of a public works project.⁴⁷ The resultant aesthetic, and the choice of how to design a railroad, was, according to Navier, "always…founded upon considerations of the general interests of the country," which "is, in this respect, 1st, the establishment of a very rapid mode of transport…[and] 2nd, the increase in wealth."⁴⁸

Although Paris was the hub of Legrand's Star Plan, the national railroad's spatialization and aestheticization of utility, and of wealth, as a network of straight lines took time to penetrate into Paris itself. Plans dating to 1825 proposed to bring the railways into the center of Paris, including the theoretical plans of Saint-Simoniens, such as Charles Duveyrier, and Fourierists, and engineers such as Victor Considerant and the pseudonymous Perrymond.⁴⁹ Émile Perèire,

⁴⁵ François Caron, *Histoire des chemins de fer en France, Tome 1: 1740-1883* (Paris: Fayard, 1997), 126-32.

⁴⁶ Navier, On the Means of Comparing the Respective Advantages of Different Lines of Railway, 10.

⁴⁷ On the debates over straight line planning and the relationship between straight line routes and costs, see Caron, *Histoire des chemins de fer en France, Tome 1: 1740-1883*, 126-32 and Smith, "The Longest Run: Public Engineers and Planning in France," 671-76.

⁴⁸ Navier, On the Means of Comparing the Respective Advantages of Different Lines of Railway, 10 Perhaps ironically, Navier's specifications proved to be wildly expensive in comparison to British and American railroads, despite his idea that they maximized the state's return on investment. Built by private contractors, British and American railroads, while shortcutting safety measures, and growing haphazardly as opposed to as part of a national plan, required no initial investment by the state, and sought to maximize profits for the individual companies rather than for the state economy at large.

⁴⁹ On Duveyrier, Considerant, Perrymond's plans for a Parisian railway system, see chapters 3 and 4 of Nicholas Papayanis, *Planning Paris Before Haussmann* (Baltimore: Johns Hopkins University Press, 2004). For further detail on Perèire's plan and its defeat, see Stéphanie Sauget, "Où construire des gares de chemins de fer à Paris?," *Histoire urbaine* 22, no. 2 (2008), 109-11. Papayanis is careful not to inflate the role of Saint-Simonians in the planning of French railroads, presenting their ideas for Parisian

financier of the Paris-Saint-Germain line, proposed in 1836 that Paris's first railroad station, the Gare Saint-Lazare, conveniently the terminus of his own line, serve as a central hub for all lines coming into Paris. Unsurprisingly, other railroads objected.⁵⁰ Ultimately, an individual station was built for each line of the railroad around the periphery of the not-yet expanded boundary of the city. Seven stations were inaugurated between 1837 and 1849, with four on the Right bank, and three on the Left. In 1851, Napoléon III ordered the construction of the Petit Centure, a railroad line encircling Paris to connect terminals of the separate railway lines, initially designed to transport merchandise.⁵¹ Finally, in August 1853, Napoléon III wrote a letter to count Henri Siméon, two months after Haussmann had been appointed as Prefect of the Seine, asking Siméon to form a commission that would carry out the Emperor's wishes regarding the restructuring of Paris.⁵² The letter listed seven priorities that the commission was to fulfill, and began: "The Emperor wishes to establish the following principles: 1. That all great thoroughfares lead to train stations."⁵³

railroads a paper schemes that were part of a corpus of urban thought about the city as a circulatory system that preceded Haussmann. For an analysis of scholarship on the relationship between Saint-Simonians and French railways, whose aim is to temper early scholarship that inflates their significance in this domain, see Smith, "The Longest Run: Public Engineers and Planning in France," 668n2.

⁵⁰ Allan Mitchell, "La Gare centrale: un rêve avorté," in *Paris et ses chemins de fer*, ed. Karen Bowie, and Simon Texier (Paris: Action Artistique de la Ville de Paris, 2003), 95.

⁵¹ Bruno Carrière, "La petite centure," in *Paris et ses chemins de fer*, ed. Karen Bowie, and Simon Texier (Paris: Action Artistique de la Ville de Paris, 2003).

⁵² On Haussmann's rebuilding of Paris, which has been treated enough times that I will omit all but pertinent details here, see Jeanne Gaillard, *Paris, la ville: 1852-1870* (Paris: Honoré Champion, 1977); David H Pinkney, *Napoleon III and the Rebuilding of Paris* (Princeton, NJ: Princeton University Press, 1958); Chapter 1 of Clark, *The Painting of Modern Life: Paris in the Art of Manet and His Followers*; David P Jordan, *Transforming Paris: The Life and Labors of Baron Haussman* (New York: Simon and Schuster, 1995); Gérard Lameyre, *Haussmann, "Préfet de Paris"* (Paris: Flammarion, 1958); and André Morizet, *Du vieux Paris au Paris moderne* (Paris: Hachette, 1932).

⁵³ Henri Siméon, Commission des embellissements de Paris. Rapport à l'empereur (Paris: Rotonde de la Villette, 2000), 47.

Paris was not connected by rail through its center until the implementation of the Métro in 1900. Yet Haussmann's renovations of Paris, which, despite his minimization of the Siméon Plan in his Mémoires, and the concomitant historiographical overestimation of Haussmann's exclusive power in remaking the city, clearly drew heavily from Napoléon's letter to Siméon and its mandate to connect railway stations within Paris.⁵⁴ While Haussmann made little mention of the importance of connecting the railroads of Paris to both one another and to the city's center in his Mémoires, formally, Haussmann's newly created avenues, which did in fact, connect to railroad stations, recapitulated the aesthetics of the national railroad system that preceded it, bringing the spatial and formal logic of the railroad into the center of the city. Of the precision to which he aspired for his works, Haussmann remarked: "A single error was never found in the remarkable works of my geometers and their eminent leader."⁵⁵ Additionally, and perhaps most significantly, like the plans for railroads, Haussmann's renovations of Paris were contingent on the leveling of the terrain on which all new roads would be built. His renovations of the Tour Saint-Jacques-la-Boucherie, originally perched on a hill along the path of the new Rue de Rivoli, provide a striking example of Haussmann's commitment to the flattening of Paris. He declared that while the tower could remain, the hill had to be removed in order to extend the street, and

⁵⁴ The other six principles stated in Napoléon's letter were the following: 2. That the height of houses always be equal to the width of the street and never exceed it; 3. That in the plans for large streets architects create as many angles as necessary in order to avoid monuments for beautiful houses, all while maintaining the width of the streets, so that one does not become a slave to the tyrrany of the straight line; 4. That a map indicating the totality of the urban projects be printed and made public; 5. That the project extend to the fortifications; 6. That the public works be undertaken equally on the Left and Right Banks; 7. That the urban improvement projects begin: A, with the extension of the Rue de Rivoli to the Ru du Faubourg Saint-Antoine; B, with the extension of the boulevard de Strasbourg up to the quai; C, with the boulevard Malesherbes; D, on the Left Bank, with the extension of the Rue des Écoles up to the place Saint-Marguerite on one side and the platform of the Orélans railway, intersecting the Jardin des Plantes, on the other. Ibid.

⁵⁵ Georges-Eugène Haussmann, Mémoires du baron Haussmann (Paris: Victor Havard, 1890), 13.

that cutting a trench through the hill was out of the question.⁵⁶ Hence Haussmann made the decision to temporarily raise the building on stilts, while inserting a new foundation to allow the tower to stand on the newly leveled ground.⁵⁷ [Figures 1.3, 1.4] Additionally, Haussmann had the Pont Notre-Dame, judged to have too steep of a slope, demolished and rebuilt anew in a flat form, so as to facilitate easier movement from one side of the Seine to the other. For Haussmann, the rebuilding and flattening of this bridge was significant enough that he noted that it "marked the debut of my foray into the *Grand Travaux Publics.*" [Figures 1.5, 1.6] In his commentary on Haussmann's renovations of Paris, *Paris nouveau et Paris futur*, the writer Victor Fournel made the connection between Haussmann's leveling of the Parisian terrain and the insistence on the straight line in the construction of railroads explicit: "This mathematical character of [Haussmann's] streets is found in even the smallest details. He mows over everything in the path of the straight line, both vertically and horizontally. In order to avoid a curve, even one invisible to the eye and imperceptible to the foot, he cuts into the terrain just as railroads tunnel through mountains."⁵⁸

The physical similarities between Haussmann's leveling, his broad, flat, piercing avenues and the aesthetics of the French railway, in addition to Haussmann's use of avenues to connect the various rail stations to each other were not the only relationship between Haussmann's urban network of circulation and the *voies de communication* of the railroad that allowed for the circulation of goods and people throughout France. Both of these projects were facilitated

⁵⁶ On the visual significance of the tower to Haussmann's conception of Paris, see Lauren M O'Connell, "Afterlives of the Tour Saint-Jacques: Plotting the Perceptual History of an Urban Fragment," *The Journal of the Society of Architectural Historians* (2001).

⁵⁷ Haussmann, Mémoires du baron Haussmann, 17.

⁵⁸ Victor Fournel, *Paris nouveau et Paris futur* (Paris: Jacques Lecoffre, 1865), 40.

through amendments to expropriation laws, expanding the scope of what kinds of takings by the state, and subsequent destructions, were allowed in the name of *utilité publique*.

Expropriation laws, initially created to protect private property, were strengthened to achieve that goal through 1833, at the height of French liberalism.⁵⁹ An 1841 law reversed the greater costs of expropriation and slower process associated with the law of 1833, and most notably, stipulated that the expropriator was allowed to acquire property before the indemnity had been paid in full.⁶⁰ This law, passed the year before the Legrand Plan, and several years after railroads had begun to develop in France allowed the state, who was financially responsible for the construction of railways given the rejection of the British and American systems of private construction, the ability to begin railroad construction before dispensing funds to property owners, opening the door to debt financing in the construction of public works.

Eleven years later, on March 26^{*}, 1852, a year and a half before Louis-Napoléon established the Siméon commission, and two months after the new constitution of 1852 effectively suppressed all of the powers of the French legislature granting the emperor both executive and legislative power, another expropriation law was decreed, vastly expanding the types of expropriations that could be undertaken specifically in Paris. This audacious decree gave Haussmann, who began his work reconfiguring the city the next year, nearly unlimited legal capacity to expropriate properties and do with them as he wished. While expropriations had been permitted for road widening since 1806, previously, the extent of property that could be

⁵⁹ Modifications that were added in the 1833 law established an even more lengthy and costly review process for the expropriating parties, which at that point consisted primarily of the Corps des Ponts et Chausssées, and most notably, instituted a new system of juries, composed of other property owners in the vicinity of the expropriation, to determine indemnities. These juries turned out to prove incredibly costly for the state, as their members not only acted in sympathy with their fellow property owners, but also stood to gain themselves from elevated property assessments nearby their own land. For further explanation of the law of 1833, see Ferrière, *Le Droit de l'expropriation pour cause d'utilité publique: principes et technique leur évolution*, 27.

⁶⁰ Harouel, *Histoire de l'expropriation*, 87.

expropriated was restricted to such a minimum, in seeking above all to protect the interests of private property, that buildings were often only partially expropriated, with only a part of the building being demolished. With the 1852 law, the expropriation of "the totality of dilapidated buildings, when it is determined that their expanse or their forms prevent the construction of healthy buildings" was now permitted⁶¹ The law continued, stipulating that, "the administration could also expropriate properties beyond those required for the construction and widening of streets (alignements), if their acquisition is necessary for the demolition of old streets that were judged to be unuseful."⁶² Much has been made of the fact that Haussmann's planning of Paris operated on a truly urban scale, "organizing space relations," as David Harvey stated, rather than merely planning at the scale of the building or the single street.⁶³ The law of 1852, in essentially lifting all restrictions on expropriation within the city of Paris, in combination with the law of 1841 and its authorization of expropriations with delayed payment for the land, allowed Haussmann to execute his works at this scale. Most notably, it allowed him to demolish the entirety of housing on the Île de la Cité in between 1853 and 1865, transforming it into not only the center of Paris, but also the center of France. Not only did Haussmann eliminate housing, much of which was medieval in origin and considered a cesspool of filth, in favor of new and restored administrative buildings such as the Palais de Justice, the Caserne (barracks) de la Cité, the Tribunal de Commerce, and the Conciergerie, the Île de la Cité was the gateway to the Left

⁶¹ Paris, Lois sur l'expropriation pour cause d'utilité publique, 25.

⁶² Ibid.

⁶³ See Chapter 4, "The Organization of Space Relations," in David Harvey, *Paris, Capital of Modernity* (New York: Routledge, 2003). As Nicholas Papayanis as well as Anthony Vidler have demonstrated, Haussmann was hardly the first to plan at the urban scale, yet due to the extent to which his plans were implemented, and the extent to which they overhauled the fabric of Paris, his works are often credited as the origin of urban planning. See Papayanis, *Planning Paris Before Haussmann*; and Anthony Vidler, "The Scenes of the Street: Transformations in Ideal and Reality, 1750-1871," in *On Streets*, ed. Stanford Anderson (Cambridge, MA: MIT Press, 1978).

Bank from his "Grande Croisée," a perpendicular intersection of widened streets that served to connect the north, south, east, and west sides through its cruciform arrangement. Although Paris still had no railroad station connecting the national network of rails — the representatives of utility and wealth — at its very center, the Île de la Cité could be said to fulfill this role symbolically. There, the utility and wealth not only of Paris but of France at large as well, were represented by Haussmann's erasures, *pour cause de l'utilité publique*, of all but the aesthetics of the straight line.

The Utility of Aesthetics

In 1856, the comte Léon de Laborde proposed an alternate idea of utility for the French nation. He maintained that the development of the French economy was contingent not only on industry and the circulation of goods and capital, but, additionally, on art and its pervasion of French society. For Laborde, art included not only fine arts, but architecture as well, and more significantly, the experience of architecture in an urban environment. At the time, architecture, as taught at the École des Beaux-Arts, was very much conceived as an autonomous object, existing independent of its environment, as demonstrated by both the programs and the characteristic watercolor renderings produced for the all-important competitions. Yet three decades later, not only would architecture's utility to the French nation be confirmed by a law that put the historic building on par, in terms of significance, with the public works that were so critical to Say's conception of utility, but additionally, through efforts to preserve historic buildings, an idea of the metropolis as an artistic environment would emerge.

Five years after the first International Exhibition in London, Laborde, France's representative to the jury of the section of Fine Arts, submitted a report warning that the widelyacknowledged French supremacy in the quality of manufactured goods was "under attack" by other nations, particularly England.⁶⁴ According to Laborde, who peppered the report with military metaphors throughout, the preeminence of any nation's industrial economy rested on two criteria: "bon marché" and "bon goût."⁶⁵ Bon marché (roughly, a good deal) was a function of the amount of capital invested in industry. Greater capital investment allowed for larger scales of production, which could lower prices of raw materials, manpower, and so forth, allowing industrial production to proceed economically and efficiently, from a financial perspective. Bon goût (good taste) was manifest through the quality of fabrication and careful execution of details, and for Laborde, was a value that, at that point, France alone had committed to elevating, both financially and in its mentality. However, Laborde's consternation came from his observation that England, and even the United States, would perpetually outpace France in their economy of production (bon marché), due to better access to raw materials, and higher population growth rates. Additionally, he noted that both Germany and England had, largely in response to the wares and fine arts displayed at French national industrial exhibitions earlier in the century, undertaken programs to improve the artistic and technical quality of their manufactured goods.

⁶⁴ Laborde, Léon de, *Exposition universelle de 1851. Travaux de la commission française. VIe groupe. XXXe jury, Application des arts à l'industrie* 1856), Vol. 8, 382. Curiously, Laborde's concerns about the inadequacy of French artistic production mirrored hose of Henry Cole and the English design reform movement: while the British feared the dominance of French artistic production, and established a state museum and school of design to account for this, the French feared the possibility of British ascendance in the arts, despite the fact that the French won more awards than any other country in the fine arts, even with painting, France's strongest offering excluded from the Exhibition by the British organizers, on the grounds that it was insufficiently related to industry, though possibly because the British were uninterested in putting the clear dominance of French painting on view. Patricia Mainardi, *Art and Politics of the Second Empire: The Universal Expositions of 1855 and 1867* (New Haven, CT: Yale University Press, 1987), 25, 30.

⁶⁵ Laborde, Léon de, Exposition universelle de 1851. Travaux de la commission française. VIe groupe. XXXe jury, Application des arts à l'industrie, 383.

Thus if England were to elevate its *goût* to that of France, it would clearly overtake France in what Laborde termed the international industrial war of the nineteenth century.⁶⁶

Laborde's proposal to ensure that France remained industrially competitive was not to suggest that France should attempt to lower its production costs, but rather that two interrelated results needed to be achieved: first, the fine arts needed to be better integrated with industrial production, and second, the taste of ordinary French consumers needed to be raised. Both of these goals were to be met through changes in education. The design of industrial art needed to be incorporated into fine arts education, and additionally education in the arts, from lessons in drawing to those in the history of art and architecture, needed to be given to the populace at large. Laborde contended that with these two changes in place, professional artists would produce consumable goods of high artistic and material quality, while the general public, having acquired the ability to discriminate between refined commodities and those which were of poor design and quality, would create a demand for the high quality goods that would allow France to retain industrial superiority. Although Laborde, still bearing a memento of feudalism in front of his name, felt no affinity whatsoever for the radical or populist politics brought forth several years prior in the Revolution of 1848, he interestingly refrained from a completely elitist view of art, arguing that, "art is neither aristocratic nor for the popular classes; it is neither industrial not rarified; art is one...it is the source of all progress."⁶⁷ In this sense, Laborde, repeating Say's

⁶⁶ Ibid., 382-84.

⁶⁷ Ibid., 407-08. Note that four years prior to Laborde's report, a "central committee" of artists involved in the 1848 revolution, led by Jules Klagmann, put forth a petition calling for greater incorporation of industrial workers into the arts, and vice versa. Although unsuccessful in their demands, they called for the opening of a school for the teaching of drawing, the organization of public exhibitions, and the foundation of a museum of decorative arts. See Rossella Froissart, "Socialization of the Beautiful and Valorization of the Useful: The Decorative Arts in France, From the Utopias of 1848 to Art Nouveau," *West 86th* 21, no. 1 (2014), though note the mistranslation of the French *dessin* into the English "design" in this article. Although drawing (*dessin*) and design are certainly related, arguably the latter, as something that is more applied that mere drawing, is a twentieth century construct.

emphasis on consumption as the motor of the French economy, and thus international superiority, offered a solution to stoking the French economy that Say would never have imagined: the suffusion of art through society.

The integration of the arts with industry developed in France over the course of the second half of the nineteenth century. Efforts to combine these two types of production came primarily at the scale of the decorative arts. A number of organizations were founded, primarily by elites associated with the École or Académie des Beaux-Arts, to spur advancement in "art industriel" or later, "arts décoratifs," many inspired by the South Kensington museum in London and associated school of design: the Société de progrès de l'art industriel (1854), the Union centrale des beaux-arts appliqués à l'industrie (1864), and the Société du musée des arts décoratifs de Paris (1876), the latter two of which merged to form the Union centrale des art décoratifs in 1882. At the same time, the idea of planning the urban environment as a whole developed through concerns hygiene, public health, the provision and standardization of sanitation services, and other such concerns that are typically associated with Haussmann's renovations.⁶⁸ Hence while much attention was paid to the spread of art into the private environment through manufactured objects, and the urban environment came to be understood as an entity to be managed, far less was done during the Second Empire to examine how France's artistic superiority could pervade society through the works of architects, or to realize Laborde's notion of an artistic, public environment.

In 1885, the Société des amis des monuments parisiens, the first of the new preservation groups founded in the wake of the modernization of France through railroad expansion and urban redevelopment, sought to bring Laborde's prescriptions for the development of art in French

⁶⁸ On the "rational" or "scientific" development of Paris, primarily looking at issues of hygiene, in the nineteenth century, see Chevallier, *Le Paris moderne: Histoire des politiques d'hygiène*, 1855-1898.

society to the metropolis, drawing on his prescriptions for French ascendance in the "industrial war of the nineteenth century."⁶⁹ In summarizing the purpose of their society, Charles Normand, who had founded the group in the previous year, wrote, "already thirty years have past since M. le marquis de Laborde, in his *Idées sur la direction des Arts et le maintien du gôut public,* recalled that France could compare its many magnificent works to the splendors of foreign countries. He also said that the delicate taste of perfection must penetrate throughout the country, to combat the natural tendency toward vulgarity, and that the education of the populace must come, above all, through the eyes. How much time has been lost since these lines were written! It is this time that the Society strives to regain."⁷⁰

In many ways, the society was conceived, and conceived itself as an organ in the legacy of preservation groups and institutions founded in the first half of the nineteenth century, such as the Commission des monuments historiques and the Société des française d'archéologie. It resembled archaeological societies in its publication of newly constructed histories of various buildings, sculpture, and architectural fragments, primarily those in France but also through new discoveries made in the Mediterranean region, including North Africa. Like the Commission des monuments historiques, it identified buildings that merited preservation. Yet rather than either undertaking restorations themselves, or merely cataloguing objects and buildings, the group declared that it sought to preserve, and argue on behalf of buildings that had already been slated for demolition. "We spread warning of dangers, stave off the first blow, stop the ruin from falling down. We seek out the condemned, we plead their case, and let the others be devoted doctors who care for the weakening members of these beauties that are judged to be outmoded," wrote

⁶⁹ Note that Paris was not the only city to undergo "Haussmannization" during the Second Empire. See for example, Michel Lacave, "Stratégies d'expropriation et haussmannisation: l'exemple de Montpellier," *Annales* (1980).

⁷⁰ Société des Amis des monuments parisiens, *Bulletin* (Paris: 1886), Vol. 1 (2), 23.

Normand.⁷¹ He continued: "Is there already another institution that works toward the same goal? One can boldly reply: no. A superficial examination might lead one to think of the Commission des monuments historiques; but the differences are both categorical and essential...We are concerned, moreover and in particular, with questions that interest not only the past (as with the Commission des monuments historiques), but above all with *modern* Paris, and the measures we can take to develop monumental and picturesque forms in it."⁷² In other words, the society was interested in the ways in which preservation, in the legacy of Laborde, could create a more "artistic" environment for the Paris of the future.

The society was founded in 1884 by Normand, a recent graduate of the architecture section of the École des Beaux-Arts, at the end of a thirteen year period during which the Palais de Tuileries sat in ruins in the center of Paris; Normand hoped there was a way to save the remains of the building before they completely disappeared. The Tuileries had been burned in the spring of 1871 during the insurrection of the Paris Commune primarily as a strategy of self-defense, but one whose symbolism was not lost on the Communards or their supporters.⁷³ Debates after the establishment of the Third Republic government about the fate of its remaining walls, which were largely intact despite the complete absence of both the cupola over the central pavilion and the building's windows, went on in the French legislature for more than a decade, with practical concerns about the technical capabilities of the building being restored tinged with political overtones regarding whether to rebuild Philibert de l'Orme's famous work of

⁷¹ Idem, *Bulletin*, 10-11.

⁷² Ibid., 10.

⁷³ According to Maxime du Camp, Bergeret, leader of the National Guard, while watching the spectacle from the north wing of the Palais du Louvre, dispatched a note to the Hôtel de Ville, which read, "The last vestiges of the monarchy have just disappeared; I wish that this fate follows for all of the monuments of Paris."Maxime Du Camp, *Les Convulsions de Paris* (Paris: Hachette, 1883), Vol. 2, 209.

architecture or once and for all destroy the former palace of the French monarchy.⁷⁴ In an attempt to save the building while neutralizing the political associations of the building, a commission of architects proposed turning a restored building into a museum to display the work of contemporary French artists.⁷⁵ In 1882, the French Sénat finally slated the building to be demolished. It was subsequently sold for 33,000 francs to the builder Achille Picard, who planned to sell off what he could from the building before demolishing what remained.

On February 7, 1884, Normand convened a group of meeting of approximately forty architects, artists, politicians, and intellectuals, at the headquarters of the Cercle Saint-Simon in Paris, with the hopes that the collected prominence of the figures in the room could be wielded to, at the very least, salvage fragments of Delorme's former royal palace and install them collectively elsewhere.⁷⁶ Figures at the inaugural meeting included many members of French academies, some of the most prominent figures in French architectural and museological cultures at the time, as well as members of the press. These included Charles Garnier, Albert Ballu, Jules Cleretie, Auguste Choisy, Edouard Corroyer, Louis Courajod, Honoré Daumet, Robert de Lasyterie, Henri Lemonnier, Albert Lenoir, Charles Lucas, Eugène Muntz, Paul Planat, Antonin Proust, Arthur Rhoné, Victor Ruprich-Robert, Paul Sedille, Charles-Auguste Questel, and Émile

⁷⁴ France. Assemblée nationale constituante, Archives parlementaires de 1787 à 1860: recueil complet des débats législatifs et politiques des Chambres françaises. Première série, 1787 à 1799 (Paris: Paul Dupont, 1877), Vol. 9, 330-32.

⁷⁵ The proposal for a museum was designed not only to underscore the importance of the arts, including the Tuileries palace itself, to France, but additionally, and explicitly, to prevent the palace from becoming the home of the head of state again. In 1877, it was not altogether determined that there would not be another restoration of a monarch, given that there had been a monarchist majority in the National Assembly since 1870. Given that the current head of state under the provisional Third Republic government had no official residence, a first in French history, to many, a rebuilding of the Tuileries. Ibid., 331.

⁷⁶ Charles Normand, "Société des Amis des monuments parisiens," *Bulletin. Société historique et Cercle Saint-Simon*, 2 (1884).

Vaudremer.⁷⁷ On June 25, Charles Garnier reported back to the society that, after investigating, it appeared that nothing could be done to prevent the dispersion, and in some cases, literal pulverization of the remains.⁷⁸ While the group failed in its initial endeavor, it soon thereafter reconvened as a more permanent force "with the goal of watching over the artistic monuments and physiognomy of Paris."⁷⁹ Having no administrative authority within the government, their goals were to be met through Laborde's notion of educating the public, and in this case, state officials as well, of the value of historic buildings to French society. They employed tactics such as press campaigns and direct letters to legislators, not only arguing for preservation, but advocating for art education, the reversal of laws they felt were detrimental to the aesthetic of the city, and the creation of new laws to protect the existing landscape. They also introduced the

⁷⁷ Although many of these figures are unknown in anglophone architectural history, in fact, they were some of the most prominent figures in the field of architecture in the late nineteenth century. The following is a brief list of their professional and academic appointments: Ballu, architect in the Service des Monuments diocésains; Claretie, journalist and "homme des lettres"; Choisy, chief engineer of the Corps des Ponts et Chaussées, professor at the École des Ponts et Chaussées; Corroyer, architect in the Service des Monuments historiques; Courajod, conservator at the Louvre, professor at the École du Louvre, member of the Comission des Monuments historiques, president of the Société des Antiquaires de France; Daumet, architect of the Palais de Justice; Garnier, architecte of the Opéra, member of the Institut de France; de Lasyterie, professor at the École des Chartres, member of the Commission des Monuments historiques; Lemonnier, Professor at the École des Beaux-Arts; Lenoir, member of the Institut de France, son of Alexandre; Lucas, architect, president of the Société centrale des architectes; Müntz, chief conservator/librarian of the École des Beaux-Arts; Planat, editor of Semaine des Constructeurs and later, Construction moderne; Proust, member of the Chambre des Députés, president of the Union Centrale des Arts décoratifs, president of the Comité des Monuments historiques, former Minister of Fine Arts; Rhoné, Correspondent of the Institut archéologique d'Égypte; Ruprich-Robert, architect, inspecteur générale of Monuments historiques; Sedille, architect of the Magasins du Printemps; Ouestel, architect, member of the Insitut de France; Vaudremer, architect in the Service des monuments diocésains, member of the Institut de France.

⁷⁸ The eventual fates included the installation of disparate parts at the École des Ponts et Chaussées and the Louvre, the reuse of Delorme's "colonnes francayses" on the façade of a private villa in southern Corsica, adornment of Picard's own headquarters with the pediment of the Pavilion d'Horloge, and being ground into dust to make souvenir paperweights available for purchase, along with certificates of authenticity, through the French daily newspaper, Le Figaro. See Janice Best, *Les Monuments de Paris sous la Troisième République: contestation et commémoration du passé* (Paris: Harmattan, 2010), 55; and Société des Amis des monuments parisiens, *Bulletin*, 15-16.

⁷⁹ Société des Amis des monuments parisiens, *Bulletin*, 1.

Parisian public to the architectural history of its city through tours of Paris's historical buildings and sites, giving public lectures, some of which were attended by over a thousand people, and the creation of a guidebook which pioneered new methods to explain architecture to a lay public in an age in which the French public had become, for the most part, architecturally illiterate.

[Figures 1.7, 1.8, 1.9]

Interestingly, despite their stated goals, the group would never again mount a large scale campaign simply to save a building slated for demolition, despite their existence through 1919, shortly before Normand's death. Rather, their primary actions involved campaigns to avert large scale intrusions to the existing fabric of Paris, which would jeopardize numerous buildings at once, either physically, or more typically, aesthetically, changing the context in which the buildings were situated. Their shift away from campaigns to preserve single buildings was due in large part, I contend, to a new law passed in 1887, three years after the founding of the society. Passed by the French Sénat, this law was one more that modified the state's ability to expropriate and demolish buildings in the name of utilité publique. Titled the "Law of 30 March 1887 for the Conservation of Monuments and Art Objects of Historical or Artistic Interest," it represented yet another direction in the enactment of the state's agendas on the appropriate use of land and "organization of space relations," in Harvey's words, through expropriation law. However, rather than facilitate a new types of projects that could be realized through expropriation, as the 1841 law did for railroads and the 1852 law did for urban renovations, the 1887 law in fact restricted expropriations. The law prohibited the destruction of any building that had been "registered" by the Commission des monuments historiques.⁸⁰ Additionally, it prohibited their expropriation by

⁸⁰ France, *Journal officiel* (Paris: Imprimerie et Librarie du *Journal officiel*, March 31, 1887), Vol. 19, no. 89. See specifically Article 4. I am translating the French term "classer" as "registered" here. In the context of monuments historiques, *classer* meant to add a building to the list of monuments that the Commission deemed worthy of protection. Note however, that "registered," (*classé*) in this context, has

the state for projects declared to be of *utilité publique*, effectively ending the unchecked ability for authorities to legally expropriate and demolish any building one wanted in Paris. Finally, the law gave the state the power to expropriate privately held buildings that had been registered as *monuments historiques* such that they could be saved from demolitions or modifications that would be made by private owners.⁸¹

The passage of this bill marked a milestone in status of the *monument historique* in France, establishing an equivalence between it and the *travaux public*, both legally, and if one reads the law as a reflection of the culture which creates it, culturally as well.⁸² Previously, there were no conditions on public works' ability to expropriate, provided that stipulated procedures were followed. Until 1887, projects that needed to expropriate land had the legal right to demolish buildings, even those that the Commission des monuments historiques had identified as having artistic significance, worthy of preservation, upkeep, or restoration. However, the 1887 law gave new protection to historic monuments such that no party in France — neither the state, local authorities, nor private owners — had the right to destroy them.⁸³ While the state, whether federal or local, could no longer expropriate buildings added to the ever-expanding list of

no official legal or administrative meaning. An alternate translation might be "listed." In no way did the *classement* of a building entail any sort of classification.

⁸¹ Ibid. See specifically Article 5.

⁸² Note that recent studies of the "invention" of the French concept of patrimoine have tended to overlook the 1887 law in favor of focusing on the formation of the Commission des monuments historiques in 1837, and what Pierre Rosanvallon calls "le moment Guizot." In my opinion, this turn towards the 1830s as the decisive moment in French preservation history is a response to late-nineteenth and early-twentieth century French histories of monuments historiques that gave at least equal weight to 1887 as 1837, perhaps due to the temporal proximity to the passing of the law. My argument here is that the "moment Guizot" was a response to a fundamentally different kind of destruction than that which the 1887 law responded to, and thus these two moments need to be understood as distinct rather than in a hierarchical relationship of importance. See Dominique Poulot, "The Birth of Heritage: 'La Moment Guizot'," *Oxford Art Journal* 11, no. 2 (1988), 56n95.

⁸³ On the historical context of the laws drafting, debate, and passage, see Auduc, *Quand les monuments construisaient la nation: le Service des Monuments historiques de 1830 - 1940*, 181-201. Essentially, the law was a triumph for the centralized state over the rights of departmental and local authorities.

monuments historiques in the name of *utilité publique* to tear them down, the centralized state, or more specifically, the Minister of Beaux-Arts, could now expropriate historic buildings when the buildings would be "destroyed, even in part, [or] the object of restoration, repair, or any other form of modification."⁸⁴ In other words, even if a public work would previously have been considered more important to public interest than a single building, the 1887 law established parity between the creation of public works and the preservation of *monuments historiques*. Notable historic buildings were now considered, in the eyes of the law, to be in the national interest in the same way as the engineered public works that modernized France, such as roads, canals, railways, and the restructuring of cities were. Laborde's notion that that qualitative utility of art was as valuable to the nation as the quantifiable utility of industrialization and modernization was, in a way, finally recognized.

One would think that a law ensuring the permanence of significant historic buildings would have caused an outburst of celebration among the Société des Amis.⁸⁵ The idea of legal protection for buildings had been long awaited. It was over forty years old by the time it was finally enacted: a proposal had been submitted by Montalembert in 1840, during the drafting of the 1841 law of expropriation and rejected. The law of 1887 itself took ten years to craft and finally be approved: the first draft of the law was written by the legal scholar Edmond Rousse, at the behest of the then minister of Beaux-Arts, Henri Wallon, in 1875.⁸⁶ Perhaps the members of the society were in fact elated about news of the law, but surprisingly, it was reported on

⁸⁴ France, Annales de la Chambre des députés (Paris: Imprimerie des Journaux officiels, 1888), Vol. 21, 261.

⁸⁵ For Montalembert's discussion of the matter in front of the Chambre des pairs, see Charles de Montalembert, "*Chambre des paires de France*. Expropriation des monuments historiques (Séance du 12 mai 1840)," in *Œuvres de M. le comte de Montalembert*, Vol. 5, (Paris: Bourdier et Ce, 1861).

⁸⁶ Auduc, Quand les monuments construisaient la nation: le Service des Monuments historiques de 1830 - 1940, 183.

relatively briefly and factually in the society's *Bulletin*. There, text of the law was reprinted in full, with a short introduction: "Just as this Bulletin was about to be printed, we read in the *Journal des Arts* that the long awaited for law had just been passed. We will reprint the text here; this decision interests us a great deal, as on a number of occasions our Society has raised its voice in favor of legislation that would protect buildings."⁸⁷ There is no indication elsewhere in the group's bulletins, the primary record of their activities from 1885 to 1898, or in *L'Ami des monument*s, the journal the group begun in 1887 that would encompass the content of the *Bulletin* after 1898, of any change in direction or goals of the group in response to the passage of the law.

In fact, from the first issue of *L'Ami des monuments*, which set out to expand the group's purview to the entirety of France, and the group's readership, with copies sent regularly to England, Germany, and Italy, to an international audience, a feature titled, "Le Vandalisme dans les départements," appeared regularly through the end of the journal's run in 1819, alongside similar columns such as "Paris qui s'en va," "Paris qui disparaît," and "Paris disparu" covering comparable destructions in the capital. The frequency of these features, and cries of vandalism throughout the journal, might make one forget the fact that the Law of 1887 had been enacted. However, the scale of what constituted vandalism, as well as its deleterious effects, were significantly changed from those that were echoed during the Revolution, the July Monarchy, or even in the debate over the fate of the Tuileries. The type of vandalism that the society reported on was hardly politicized, nor did it decry the destruction of any kind of major monument, which by 1887, would have been protected by law. Rather, these features primarily examined small

⁸⁷ Société des Amis des monuments parisiens, Bulletin (Paris: 1887), Vol. 1 (5), 257.
modifications to existing structures. It is worth repeating one of these notices in full to better

explain this kind of reporting:

Dinan is a small town of 10,000 inhabitants that foreigners enjoy visiting for its picturesque views along the banks of the Rance, for is churches, and for the vestiges of its fortifications...A few years ago, on the coast of the *département* of Nord, one entered [the town of Dinan] by the Brest gate, with its vault flanked by two towers. The architecture was not particularly remarkable, but the overall impression (aspect) was picturesque. The passage was too narrow; hence, one would have had to cut the old rampart on the right or on the left of the gate in order to create a new entry while leaving the monument in tact. Instead, they demolished the rampart and gate, and made an open plaza. A road was necessary to get to the railways station, and they could have made it along the old walls. Rather, they put ugly, shoddy housing in front of the old walls, and put the road beyond it. On the promenade called "des Fossés," which is still a bit of a tour of the town, the old walls still exist, but they are masked by stables, sheds, depots of all sorts, and heaps of manure which are of no appeal whatsoever. Considering the situation from a utilitarian perspective, it seems to me that Dinan, in not taking better care to conserve its archaeological capital, has committed an economic mistake.⁸⁸

Here, the society's correspondent, Yves Guyot, an economist and representative in the Chambre

des Députés, argues that the picturesque aesthetic of the town in fact is of more utility, precisely

in the sense of the term established by Say at the beginning of the century, than the

modernization of the town through better connection to the road network.⁸⁹ These types of

modifications to towns were prevalent in the Third Republic, particularly as France's capillary

(vicinal) road and rail networks continued to be developed throughout the provinces, and

institutions holding historic buildings, especially the Church, continued to dwindle in

⁸⁸ Idem, L'Ami des monuments (Paris: 1887), Vol. 1, 14.

⁸⁹ It is interesting to note that in 1829,that " Joseph Cordier, then chief engineer of the Service des Ponts et Chaussées, had noted specifically how existing ramparts were detrimental to the French economy, writing, "Another obstacle still retarding our maritime commerce in comparison to that of Great Britain is that in Britain, the places of commerce are not surrounded by fortifications. This is in comparison to ours which are closed off, and under the purview of the military. Commerce is essentially the enemy of these constraints: one cannot even calculate the harm caused to the state and its citizens by these ramparts, these pits, these enclosures which are so onerous during peacetime, and completely useless in times of war." J Cordier, "Essais sur la construction des routes, des ponts suspendus, des barrages, etc.," *Journal du Génie civil, des sciences et des arts* 4 (1829), 591.

significance in contemporary French life.⁹⁰ So numerous were these changes in the physical structures of French towns that it would have been unfeasible for the Société to actively combat them.

Yet what is notable about their many reports of "vandalism" in France, which speak both to the extent of the group's network of correspondents as well as to the interests of the group itself, was the diminished scale of destruction that was deemed worthy of reporting. With the law of 1887, no longer was the destruction of a single building or artifact a concern. Rather, destructions were now treated in aggregate, both within the city and in France at large. The group, as demonstrated in the example above, showed greater concern for the affect produced by ensembles of buildings and built features, none of which need be of particular architectural value, than the single building. In this sense, vandalism, what Normand had called "the destruction of France, by France," changed from being a crime against history through the destruction of a souvenirs in the form of buildings, to a crime against the aesthetics of the built environment. Although the columns documenting French "vandalism" continued to be published, other critiques of vandalism in the pages of the journal eventually appeared under titles such as "L'Œuvre d'enlaidissement du XIXe siècle" (The Work of Making Things Ugly in the Nineteenth Century) and "Réflexions sur l'enlaidissement progressif des villes qu'on embellit" (Reflections on Beautified Cities Growing Uglier).⁹¹

⁹⁰ On the destruction of roads and rails during the early Third Republic, see Eugen Weber, *Peasants Into Frenchmen: The Modernization of Rural France*, 1870-1914 (Stanford, CA: Stanford University Press, 1976)@195-220}.

⁹¹ Société des Amis des monuments parisiens, *Bulletin* (Paris: 1889), Vol. 3 (11), 92-110. Note that Arthur Rhoné's essay "Reflexions sur l'enlaidissement progressif des villes qu'on embellit" was originally published in the *Chronique des Arts* "Du vandalisme à Paris" in 1885. The name was changed upon its publication in the *Bulletin* four years later.

Concomitantly, as the most prominent preservationists in France in the late nineteenth century, the group, as they claimed, shifted the idea of preservation to one which, above all, was concerned with the contemporary forms and form of the city, and at the same time, suggested a change in the focus of architectural aesthetic attention from the individual building to the urban scale. Curiously, the Société never mentioned expropriations and demolitions in the name of *utilité publique* under Haussmann, clearly the most prolific demolisher in aggregate, and one who immediately preceded their formation.⁹² Yet it was the repetition of the aesthetics of utility, famously brought into Paris by Haussmann, which to the group represented an aesthetic of destruction, that were most deplored. This manifested through campaigns intended to avert the intrusion of forms and technologies that visually represented expropriations and destructions, no matter how impotent these technologies had become in the actual destructions of buildings.

The primary campaigns waged by the Société attacked the incursion into Paris of the railroad. Coincidentally, or perhaps not, articles published throughout both the *Bulletin* and *L'Ami des monuments* were riddled with remarks about the fear, or abuse or the original aesthetic of the railway: the straight line. The dislike of the straight line was not unique to the group nor was it a new phenomenon in the late nineteenth century. Earlier in the century, it had been taken up by a number of both predictable and surprising figures. For example, the Fourierist and Polytechnicien Victor Considerant objected to the straight-line plans for the French railway, calling them inflexible and ugly, suggesting instead that railways should follow sinuous paths in accordance with the natural formation of the earth.⁹³ Louis-Napoléon himself in fact cautioned against becoming a "slave to the tyranny of the straight line" in this letter outlining his vision for

⁹² For statistics on the expropriations undertaken under Haussmann, see Maurice Halbwachs, *Les Expropriations et le prix des terrains à Paris (1860-1900)* (Paris: E. Cornely & Cie, 1909), 186-88.

⁹³ Victor Considerant, Déraison et dangers de l'engouement pour les chemins en fer (Paris: Bureaux de la Phalange, 1838), 12, 45, 51, 54, 55.

Paris, which inaugurated the Siméon Commission.⁹⁴ More predictably, Victor Hugo took up the straight line in 1862 in *Les Miserables*. In the novel, Boulatrouelle, an "excavator and robber" followed a man through the forest, pick axe in hand, with the presumption that the man held a treasure that Boulatrouelle could steal. Hugo mocks Boulatrouelle for thinking that cutting a straight path through the densely brushed and thorny forest would be more expedient than taking the already cleared and established, yet winding, paths:

By beaten paths that make a thousand winding turns, it would take a good quarter of an hour. In a straight line through the underbrush, which is at that spot singularly dense, thorny, and most aggressive, it would take at least a half hour. This is what Boulatruelle was wrong in not understanding. He believed in the straight line; a respectable optical illusion, but one which had ruined many men...'Let us go by the Rue de Rivoli of the wolves,' said he. Boulatruelle, accustomed to going in crooked paths, this time committed the error of going straight.⁹⁵

Undoubtedly, this is a thinly veiled critique of what Hugo believed was Haussmann's errant use of the straight line in his renovations.

However, the Société des amis, in the wake of Haussmann's insertion of this aesthetic of utility throughout the city, injected a new burst of energy into the spread of this sentiment, complaining with great frequency of the "*monotonies géométriques*" that the form produced. "In a Paris which is becoming more hygienic," Normand argued in his report on the activities of the group in its first year of existence, "we do not want to see boredom triumph above all: we want an originality to the perspectives of the city, which is incompatible with the odious *abuse* of the straight line."⁹⁶ Albert Robida, the illustrator, science fiction writer, amateur historian, and member of the Société des amis, published a set of drawings in *L'Ami des monuments* titled

⁹⁴ Siméon, Commission des embellissements de Paris. Rapport à l'empereur, 47.

⁹⁵ Victor Hugo, Les Miserables, trans. Jules Gray. (Edinburgh: John Grant, 1903; repr., 35-36.

⁹⁶ See for example, Société des Amis des monuments parisiens, *Bulletin*, 29. See also Ibid., 19.

"Transformisme," caricaturing the transformations of Paris. The last drawing in the set featured a highly geometricized figure of a woman, entitled, "Saint Straight Line."⁹⁷ [Figure 1.10] Drawn with a square head, triangular shoulders and hips, and rectangular feet, mouth, eyes, and fingers, the figure holds a t-square, a plumb bob, and a triangle, and stands on a pedestal in front of a crossed pick axe and a shovel. She is sarcastically captioned as "Patron of good cities, ideal of picturesque beauty, shining light of town representatives, star of the municipal council! Cut, dig, demolish, scrape, raze, clean out, align, in the name of the holy Saint Straight Line and create the modern style, the grand, the delicious, the superb style of the nineteenth century, also known as a flamboyant cretin." Below and to the left of the figure is a cannon on wooden wheels, firing at the figure, on the side of which reads "Comité des monuments français," behind which is a flag flown with the words, "L'ami des monuments / 51 Rue des Martyrs." The cannon is captioned, "Guerre aux démolisseurs," and reads, "Luckily a Committee to preserve the poor, old monuments of yesteryear which are threatened everywhere has been formed to fight against the sectarians of the straight line, which demolishes and razes all. The organ of the Comité l'Ami des monuments has located their offices on the rue des Martyrs, of course." The drawing is remarkable the way that the simplicity, flatness, and angularity used in rendering the figure of Saint Straight Line presciently foreshadow the aesthetics of architectural Modernism that would appear in France some twenty-five years later.

The group conducted two campaigns, primarily through letters written to political representatives and the solicitation of additional voices of protest from other cultural figures, to avert the further intrusion of the straight line into the center of Paris, prompted by discussions around and the eventual construction of a metropolitan railway through the city. The first of

⁹⁷ Société des Amis des monuments parisiens, L'Ami des monuments (Paris: 1888), Vol. 2, 246.

these efforts involved an attempt to reject the plans for a metro that would have run alternately above ground and in open trenches. The first detailed metro proposal, submitted in 1876 by the head engineer of the Ponts et Chaussées, Edmond Huet, proposed a central station at the Palais-Royale, with the majority of lines running underground, modeled on the London Underground which had opened in 1863. While this was the preferred schema of both the state and the city of Paris, political strife between the city and the state over who would ultimately be responsible for the construction and operation of the rail network, and more significantly, questions regarding the feasibility of the long tunnels this would have entailed, prevented the plan from coming to fruition. While long tunnels, in particular one that would have run underneath the Seine, were an opportunity to demonstrate technological superiority in building tunnels that were longer than the longest in England, they posed a problem of ventilation and fumigation that was proportional to their length, even if their construction were feasible. Ultimately, the inability to solve this technological problem prompted the state to solicit additional proposals — a process which continued through the 1880s. In 1885, when the Société des Amis was formed, the establishment of an open-air metro system was a popular solution to the problems posed by underground tunnels.98

Charles Garnier, then president of the Société des Amis, president of the Académie des Beaux-Arts, and Inspecteur général des Bâtiments civils, led the Société's campaign against this solution, critiquing in particular the proposal of the engineer Paul Haag, which had been submitted for consideration in 1885, and at the time of Garnier's communications, was the leading proposal. Haag's plan, along with previous plans submitted by the engineer Jean Chrétien and the architect Paul Heuzé in 1879 and 1881, respectively, suggested a system of

⁹⁸ Allan Mitchell, "Le Métro: bataille technologique," in *Paris et ses chemins de fer*, ed. Karen Bowie, and Simon Texier (Paris: Action Artistique de la Ville de Paris, 2003).

tracks elevated on viaducts.⁹⁹ Based on the metro system in Berlin, Haag proposed the creation of four lines, two which would connect the *banlieux* to the center of Paris, and two to bring the national railroad traffic, currently terminating at the principle stations of Paris, into the center of the city. In order to construct the viaducts, he proposed cutting new boulevards at right angles to the existing boulevards, at a minimum of 36 meters wide.¹⁰⁰ Interestingly, given the reaction of the Société des Amis, Haag proposed his solution as an aesthetically pleasing option to a train running at street level, which would "disfigure the most beautiful streets of Paris," given that an underground solution was infeasible.¹⁰¹

Garnier wrote to then Minister of Public Works, Charles Baïhaut, on behalf of the society, to propose that the Société des amis serve as an unofficial commission providing aesthetic guidance on and assessment of the various metro proposals submitted for consideration, which led to him submitting a report to both Baïhaut and the Conseil municipale. The complaints of the group were predictable in their affect of lament. Normand noted in his summary of the Société's meeting on December 29, 1885, that

the office of the Amis des Monuments parisiens, having studied the question, will publicly make known, through the voice of the press, that the current plans [for the metro] will destroy the physiognomy of a number of monuments, mutilate the impressions (*aspects*) of some of the most beautiful views in the city of Paris, and that

⁹⁹ Note that the plans of both Heuzé and Chrétien proposed the creation of additional new streets, just wide enough for the elevated track, via expropriation and demolition. The streets would remain exclusive to the elevated railway, with pedestrian access below, rather than being opened to traffic. This presaged later developments in the separation of different types of traffic seen in proposals of both Eugène Hénard and Le Corbusier, although they were likely unaware of the schemes. On Heuzé, see Louis Heuzé, *Paris, chemins de fer métropolitains à air libre dans une voie spéciale, avec passage couvert pour piétons* (Paris: A. Levy, 1879). On Chrétien, see Jean Chrétien, *Chemin de fer électrique des boulevards à Paris* (Paris: J. Baudry, 1881).

¹⁰⁰ Paul Haag, *Le Métropolitain de Paris* (Paris: Alphonse Lemerre, 1883), 3-9. See also: Société des ingénieurs civils, "Séance du 17 Octobre 1884," *Compte rendu des travaux de la Société des ingénieurs civils*, 2 (1884), 336-48.

¹⁰¹ Haag, Le Métropolitain de Paris, 6.

important modifications must be made such that Paris remains the city of elegance...a work that can so highly influence the taste of the public must be rest on motives that are studied by those with taste themselves.¹⁰²

Garnier elaborated this sentiment in his report to Baïhaut and members of the Paris Conseil municipal, which examined the Haag's planned routes for the railway, identifying moments that he deemed unacceptable from the perspective of the Société des amis. Garnier called for slight modifications — turns, tunnels, and diversions — of the proposed routes to avoid buildings of historic interest that would lie close to the tracks, and possibly would have to be demolished. Many of these buildings were churches, such as those of Saint-Eustache and Saint-Leu. Additionally, Garnier expressed concern about the possible demolition of the Hôtel du Sens and the Hôtel du Beauvais, two of the more elaborate hôtels in Paris that had yet to be "registered" by the Commission des monuments historiques.

While Garnier clearly expressed concern about demolitions of historic buildings, he was equally, if not more, concerned with the visual "mutilations" of architecture that would remain standing. For example, Garnier drew attention to what in his mind was a problematic relationship between the proposed rail and the church of the Trinity (Trinité) and that of Notre-Dame de Lorette. Unlike the aforementioned buildings, it was not their physical destruction that concerned Garnier, as they were not in the direct path of the railway, but rather, the effect that the elevated platform would impose on the buildings, dividing the façade, visually, into two parts. However, this was not all that Garnier had to state about these two churches. Going on in his report, he made a statement almost amusingly telling of the society's latent and undigested tension between interest in the past and interest in the future. In contrast to other buildings, constructed by the

¹⁰² Société des Amis des monuments parisiens, Bulletin, 48-49.

architects Ballu and Lebas, from 1861-1867 and 1823-1836, accordingly. Of this, Garnier had the following to say: "It is true that some assert that, these buildings being new, it is of little importance to take them into account. But these new churches will be old one day, and we must think of the future."¹⁰³

Albert Robida added to the campaign in a more public way through dedicating an issue of the periodical he edited, La Caricature, to "The Beautifying of Paris by the Métropolitain," in which he offered a number of satirical drawings of the new metro proposal. The cover of the magazine featured the head and shoulders of a female figure representing the city, crowned by the windmills of Montmatre with the cityscape surrounding her shoulders. [Figure 1.11] Projecting out of her ear, mouth, and neck are railway lines high above the city, which also pierce the dome of the Panthéon. Other lines which crisscross the space above the rooftops of the city in a chaotic fashion, sometimes held up by tall towers of varying architectural styles. Robida goes on to offer other drawings inside: one of a station on top of Garnier's Opéra, corresponding to a station that Haag had planed to erect just behind the edifice, in one drawing piercing through the proscenium as an opera is staged below. [Figures 1.12, 1.13] Parodying Haag's rejection of a ground-level railway over alleged concerns for the aesthetics of the city, Robida proposes to erect, through the center of Paris's boulevards, a "train" of horse, giraffes, and lion, pulled by a "elegant locomotive" in the form of a dragon, "in a Renaissance style." Robida offers only one underground proposal in his drawings: a steamship with circulates through Paris's tunnels. [Figure 1.14]¹⁰⁴

¹⁰³ Idem, *Bulletin* (Paris: 1886), Vol. 1 (3), 64.

¹⁰⁴ Alfred Robida, "L'Embellissement de Paris par le Métopolitain," *La Caricature*, no. 338 (June 19, 1886).

With Garnier's presentation of his report, the plan for an elevated railway was discussed over the course of more than a week's worth of lengthy meetings of the Conseil municipal, as well as by the Chambre des Deputés. Opinions of members of the Conseil over the matter were relatively split. The councilman Monteil took Garnier's report to task, asking for a parallel report concerning the financing of the more contorted paths that the Société had proposed, arguing that inhibiting the development of the railroad in service of the aesthetics of the city served only Paris's rich, who already lived centrally enough not to have a pressing need for a railroad within the city. Others, such as Eugène de Monorval, a member of both the city council and the Société des Amis, not only were in accord with Garnier's report, shunning the idea of an above ground railway which they claimed, would contribute to a decline in Paris's unique appreciation of the arts, turning it into a New York or a Berlin, but additionally rejected even the idea of the penetration of national railroads into the center of the city, arguing that it would displace Paris's artisans from the center of the city to the "ugly" suburbs, and in this way would threaten the quality of France's artistic production.¹⁰⁵ Ultimately, the Council rejected Haag's elevated proposal.¹⁰⁶

The Société's second campaign against the railway's incursion into Paris centered around a proposal for a new railway terminal between the Seine and the Invalides for the Compagnie des chemins de fer de l'Ouest. The new station had been approved by ministerial decree on December 31, 1885, yet it was only in the early 1893 that the Compagnie received a *déclaration d'utilité publique* to extend the line to the eastern side of the Esplanade of the Invalides.¹⁰⁷ Having missed the opportunity to integrate the station into the infrastructure of the 1889

¹⁰⁵ Conseil municipal de Paris, *Procès-verbaux* (Paris: Imprimerie Municipale, 1886), 1219.

¹⁰⁶ Société des Amis des monuments parisiens, *Bulletin* (Paris: 1887), Vol. 1 (4), 117-28.

¹⁰⁷ France. Assemblée nationale, *Annales de la Chambre des députés. Débats parlementaires* (Paris: Imprimèrie Nationale, 1894), 83.

Exhibition universelle, the Compagnie commissioned the architect Juste Lisch, a member of the Commission des monuments historiques and its *Inspecteur général* from 1878 to 1901, to design a terminal that could be ready by the 1900 Exposition. Situated at the front of the Esplanade des Invalides, Lisch's project, when viewed from the Seine, featured seven meter high, stone pavilions, each projecting approximately one third of the width of the Esplanade, from its side, such that in elevation, they formed a frame for the Invalides in the distance. **[Figure 1.15]** The eastern pavilions continued perpendicularly south, along the edge of the Esplanade, toward the Invalides, serving as the terminal. Administrative functions would have been lodged in a building parallel to the terminal on the other side of the Esplanade. In between the two pavilions was an open air "trench," or pit, three meters in depth, along the width of the Esplanade and traversing equally far to the south, in which the six double lines entering the station would terminate, such that one could look down upon the trains from above.¹⁰⁸

The construction of this rail station on the Esplanade des Invalides was first brought to the attention of the Société des amis in 1890, who decided that the station's insertion along the Esplanade, "one of the most remarkable ornaments of Paris, whose historical interest is considerable, and whose aesthetic value is incontestable," merited an appeal to both the state and the city to stop the project.¹⁰⁹ In 1893, when Lisch's plan was made public, an article in the periodical *Le Temps* was the first to bring the plans for the new station to public attention, concluding that it would result in an "irreparable disaster which would threaten the unique and magnificent ensemble formed by the Invalides, the Seine, the Tuileries, and the Champs-Élysés, which is without parallel in any capital of the world."¹¹⁰ Two days later, Charles Normand wrote

¹⁰⁸ "La Gare des Invalides." *Le Temps*, October 11, 1893.

¹⁰⁹ Société des Amis des monuments parisiens, Bulletin, 57.

¹¹⁰ "La Gare des Invalides".

a letter which appeared in *Le Temps*, pledging the support of the Société des Amis in combatting the station. *L'Architecture*, the official journal of the Société centrale des architectes, France's first professional association of architects, echoed the sentiment, asking that a petition be drawn up among all of the architectural, archaeological, historical, and artistic societies in protest. "We must not let Paris be Americanized and *engineerized (ingénioriser)* in the name of a utility that is otherwise quite disputable," wrote the architect H. Aumont in an article in *L'Architecture*, decrying the project.¹¹¹ The Société des amis became a clearinghouse for protests against the project, publishing a compendium of the numerous articles in the press. The articles and letters charged the project not only with the "mutilation" of the Esplanade, but also of the Invalides itself, which would no longer be seen in its intended fashion from the Quai de la Seine. Additionally, the destruction of the lines of trees along the Esplanade was framed as an equally serious crime.

The debate was eventually brought before the Chambre des Députées, where opposition to the project was led by the deputy and former engineer, and organizer of the Expositions universelles of 1876 and 1889, Georges Berger, as well as Denys Cochin, who would later serve on the Commission du Vieux Paris, and the architect and deputy Émile Trélat.¹¹² In a meeting of the Chambre on January 22, 1894, the open trench plan was defeated. The Minister of Travaux Publics authorized the Compagnie de l'Ouest to continue with the project, under the conditions that the rail lines be entirely underground; that the buildings of the station be reduced in overall size, not exceed one story, would open only to the abutting streets rather than the Esplanade itself, and that they be hidden by trees; that the station serve passengers only, with no goods or

¹¹¹ H. Aumont, "Un Gare de chemin de fer aux Invalides!," L'Architecture 6, no. 40 (1893).

¹¹² Berger shared the direction of the 1889 Exposition with Alphand and Picard.

merchandise, and that the trees already demolished by the Compagnie in preparation for construction be replanted.

A letter written in protest of the Invalides station, published December 11, 1893 by the art critic Gustave Geffroy began with the following statement: "It is not the monument that is under threat, but the vision that one has of the monument. And that is absolutely the same thing."¹¹³ In this sentence, Geffroy succinctly summarizes the way in which, by the end of the nineteenth century, the view, and the visual experience of the environment, had come to supplant the building, and the material of the built environment, as the object of preservation. This attention to what the Société called the "perspective" or "aspect" of the city is evident in many articles in both the Bulletin and L'Ami des monuments addressing threats to particular views. For example, they expressed concern about the transformations to the Champs-Elysées for the 1900 Exhibition, that would have resulted in the removal of its trees, in a way that harkened back to the "mutilation" of the trees on the Esplanade des Invalides. The erection of a large advertisement for pharmaceutical products was deemed to have "destroyed" the view of the Île de la Cité.¹¹⁴ Along the same lines, Garnier launched a prolonged campaign against "irritating posters" (affiches agacantes), which posed much more of a visual threat that a material threat to the buildings onto which they were either painted or pasted.¹¹⁵ "Are you not like me? Are you not offended by the large, industrial signage which is spreading throughout our streets, imposing on our eyes and spoiling the beautiful views of our city?... As for me, these enormous, painted advertisements always give me a terribly disagreeable impression, painful even, and I feel quite

¹¹³ Geffroy, Gustave, "Les Invalides." Le Journal, December 11, 1893.

¹¹⁴ Société des Amis des monuments parisiens, Bulletin, 14.

¹¹⁵ Note that Garnier included painted advertisements on the ends of buildings in his use of the term "affiches."

often a violent rage toward the administrators who allow, or who have allowed, so negligently, the beauty of our city to be compromised by this signage."¹¹⁶

Perhaps the best example of the concern over the *aspect*, or image, of the city as an ensemble, as well as a demonstration of the spread of the Société des Amis' implicit suggestion of preservation as a form of aesthetic planning, was the protest against the construction of a new bridge, the Pont de la Monnaie, across the Seine in 1902, and then again in 1911. Originally planned by Haussmann in 1866, the new bridge would have been a part of the connection of the rue de Rennes, the Haussmannian boulevard that was cut to connect to the Gare de Montaparnasse, to the right bank.¹¹⁷ In 1902, the city began to implement Haussmann's troisième reseau, and hence resumed plans for the extension of the boulevard. Haussmann's original plan, which was the starting point of the 1902 proposal, would have expropriated not only minor residential buildings in the sixth arrondissement, but part of the Institut de France as well, in order to connect the street to the quais of the Seine.¹¹⁸ While the threat of severing the courtyards of the Palais d'Institut from its core solicited protest from members of the academies, the Société des Amis, in addition to the Commission municipal du Vieux Paris, a municipal advisory committee on urban developments in Paris, protested to some degree the destruction of the building, but in large part, focused on the deleterious effects of the construction of the new bridge across the western tip of the Île de la Cité. André Hallays, in a proceeding of the Commission du Vieux Paris, proclaimed that the construction of the proposed bridge to be "the

¹¹⁶ Idem, *Bulletin*, 129-30.

¹¹⁷ When the boulevard was created, it extended only to the Boulevard Saint-Germain.

¹¹⁸ On the proposals for the extension of the Rue de Rennes, see Eugène Hénard, Études sur les transformations de Paris, et autres écrits sur l'urbanisme (Paris: Editions Equerre, 1982), 3-7; André Hallays, "La Beauté de Paris et la Pont de la Monnaie," Séances et travaux de l'Académie des sciences morales et politiques, 75, no. 5 (1911); and Ville de Paris, Commission municipale du Vieux Paris. Séance du jeudi 16 janvier 1902. Procès-verbal (Paris: Imprimerie Municipale, 1902), 14.

loss of the most beautiful and evocative of all Parisian landscapes."¹¹⁹ The architect Eugène Hénard, in an effort to avoid the construction of the Pont de la Monnaie and conserve the view from the Pont des Arts overlooking the Île de la Cité, proposed a bridge further west along the Seine in the shape of an "X," in 1902. In the accompanying text, Hénard too emphasized that what the new bridge threatened to destroy was a visual panorama created by the Pont Neuf and the sum of the buildings on the Île de la Cité, which, as a collective, created a "monument" worth preserving.

In a beautiful ensemble, the Pont Neuf aligns its seven arches on the large branch of the river and its five others along the smaller branch. Almost in the center and in front of the platform a splendid grove of trees grows upwards, pushing on the low bank of the pointe de la Cité. Then along the large branch, are all of the beautiful monuments whose lines break the horizon: the Palais du Justice with its black roofs, a souvenir of the Middle Ages; the Tour Saint-Jacques, the Hôtel de Ville, a souvenir of the Renaissance; the center is dominated by the spire of Saint-Chapelle, gracious and gilded. On the side of the small branch, the summits of Notre-Dame appear in the distance; closer, one sees the hôtel de la Monnaie, with its seventeenth century arrangement; and finally, in the foreground, all of the fluvial and picturesque life of the Seine blossoms outwards...it is all this that the Pont de la Monnaie would destroy!...The Pont de la Monnaie would always be insufficient for taking in the ensemble of the pointe de la Cité.¹²⁰

At the turn of the century, when the Pont de la Monnaie was proposed, the Société des Amis was no longer the only society promoting the preservation of the environment in the face of modernization. In fact, the number of groups would be difficult to count, with groups dedicated to the preservation of each arrondissement, others that also focused attention on Paris, such as the Amis de Paris and Les Parisiens de Paris, groups functioning in other major French cities that mimicked the work of the Société des Amis, as well as archeological societies that still

¹¹⁹ Ville de Paris, Commission municipale du Vieux Paris. Séance du jeudi 16 janvier 1902. Procèsverbal, 15.

¹²⁰ Hénard, Études sur les transformations de Paris, et autres écrits sur l'urbanisme, 9-12.

worked to avert "vandalism" across the nation.¹²¹ Yet in 1911, when the bridge was re-proposed after having been struck down by the Conseil municipal in 1902, over twenty of these groups came together in defense of the view of the Île de la Cité, illustrating the extent to which the idea of preservation initiated by the Société des Amis had pervaded erudite Parisian culture.¹²²

La Ville Moderne

In a lecture given on October 18, 1929, in Buenos Aires, Le Corbusier presented a series of drawings that depicted Paris's evolution in urban form. At the top of the first of two sheets of drawings, he had sketched a bird's-eye view of medieval Paris, showing Notre-Dame and a populated Île de la Cité, underneath of which followed successive sketches of highlighting changes to Parisian landscape. **[Figure 1.16]** The first showed Louis XIV's addition of the neoclassical Louvre colonnade, then came a sketch of the city after the construction of the Invalides and its distinctive dome, and finally, all of this is shown with the Eiffel Tower in the foreground, and Panthéon perched on a hill in the background, with the words, "ça, c'est Paris!" written on the paper. At the top of the second sheet of drawings, Corbusier had sketched the same structures from a different perspective, adding the Basilica of Sacré-Cœur and the Arc de Triomphe at the end of the Champs-Elysées, and wrote, "c'est encore Paris!" across the drawing. Below this is his last sketch of the city, with the rectilinear, cross-shaped towers of his Plan Voisin sketched in behind the Panthéon, and the words, "l'académisme dit non!" At the very

¹²¹ For a list of some of these groups, see Société pour la protection des paysages de France, *Bulletin* (Paris: Chaix, 1911), Vol. 43, 9; and Idem, *Bulletin* (Paris: Chaix, 1911), Vol. 45, 1.

¹²² Société pour la protection des paysages de France, *Bulletin*, 9.

bottom of the sheet there is a small, pasted-on label, which reads: "The future of Paris today is confronted with the same ghosts as in 1887."¹²³ [Figure 1.17]

Corbusier argued in his lecture that Paris had long accepted architectural innovations that radically changed the nature of the city. Of Louis XIV's Louvre colonnade, he remarked, "What pride, what contempt for what exists, what a break with harmony! What insolent sacrilege." The dome of the Invalides, and its piercing of Paris's skyline, which at the time consisted of only Gothic spires, he described as "indifference to national traditions, violation of the site, [a] coup d'état!" In this vein, Corbusier aspired for his own place in this Parisian history: "I beg of Paris to make, once more, its historical gesture: to continue."¹²⁴ What is interesting about Corbusier's framing of his Plan Voisin, a project which would have placed eighteen cruciform towers and a network of elevated streets in the center of Paris, is that he positions it not as a discontinuity with Parisian traditions, but rather, a continuation of a lineage of architectural disjunctures that had been formative in shaping the city. Surprisingly, Corbusier casts himself on the side of tradition in defense of his project. On the contrary, what is new, according to Corbusier, alleged prophet of newness, is the prevention of another architectural transgression: "académisme dit: non!"

In his lecture, Corbusier identifies this *académisme* as such: "fanatics among the protectors of the old Paris, the sensitive souls, trembling at the sound of the pickaxe of the demolisher, and finally, the conservationists of old wrought iron."¹²⁵ He identifies these protectors and conservationists more directly in his 1925 *Urbanisme* (*The City of To-morrow and Its Planning*) as the Commission du Vieux Paris. "The 25 years of [the Commission du] Vieux Paris," wrote Corbusier:

 ¹²³ Le Corbusier, *Precisions on the Present State of Architecture and City Planning* trans. Edith Schreiber Aujame. (Cambridge, MA: MIT Press, 1991), 169-214.
¹²⁴ Ibid., 174.

¹²⁵ Ibid., 176.

It is nice to think of how they have limited acts of vandalism. Of course, of course! It is comforting to read that beauty is now ranked among the legitimate needs of citizens...[yet] if one is dying of a sick heart and lungs, one doesn't do wrist-exercises on the harpsichord. Nonetheless *patrie*, poetry, ancestor worship, and the ideal are eloquent words brandished by men in journals whose mission is to influence public opinion. But when the question of demolishing rotting areas of the city full of tuberculosis and despair, they cry out: "but the wrought-iron, what will happen to the beautiful wrought-iron?"¹²⁶

The Commission municipale du Vieux Paris, as previously mentioned, was founded in 1898 by Alfred Lamouroux, a member of both the Conseil municipal de Paris and the Société des Amis des Monuments parisiens, as an adjunct, advisory board to the Conceil municipal, consisting of both elected councilors as well as architects, art critics, members of various Académies, and so forth. In this capacity, it had the power to recommend the purchasing of various sites for preservation, or the rejection of projects that would in someway harm the physiognomy of the city, and was the first group under the purview of the state to take on this task.¹²⁷ The Commission included prominent members of the Société des Amis, including Lucien Augé de Lassus, Jules Claretie, Lucien Lambeau, Charles Sellier, André Hallys, and Charles Normand himself. The goal of the Commission, much like that of Société des Amis, was, "to conserve Paris's influence on the world through its perspectives (*aspects*) and its souvenirs.

¹²⁶ Le Corbusier, *Urbanisme* (Paris: Éditions Vincent, 1966; repr., Éditions Vincent, Fréal & Cie, 1966), 246-47.

¹²⁷ In his proposal for the creation, Lamouroux notes that the Commission des monuments historiques barely played a role in the conservation of buildings in Paris. At the time, the Commission des monuments historiques in fact had fifty-nine buildings registered on their list of buildings to protect. One could argue that in fact, this is no small number of "monuments" to be protected in Paris, and thus that Lamouroux's conception of what merited preservation in Paris was in fact quite different from major monuments. Additionally, but 1889, the Commission des monuments historiques had not yet listed the Panthéon, indicating that their criteria for protection still rested on what Riegl would call "age value" rather than the "artistic" of visual value that the Société des Amis and the Commission du Vieux Paris sought to preserve. See Ministre de l'instruction publique et des beaux-arts, *Lois et décrets relatifs à la conservation des monuments in 1889*, and Société des Amis des monuments parisiens, *L'Ami des monuments* (Paris: 1897) on the founding of the Commission municipale du Vieux Paris.

Along with the material needs inherent to daily life, and along with the pious conservation of the vestiges of the past, we must also plan for, in the incessant march of progress, a reasoned and judicious beautification which must retain, all while beautifying even more, the character of the city of the past." The founding statement of the group continued: "One must not forget that the charm and the beauty that emanate from Paris are the principal element of its prosperity and that they are the hearth which feeds the Parisian artist, the artisan, and worker whose incomparable productions create the city's glory and sparkle. It would be useless to search elsewhere for the source of their good taste and their talent. Assuredly, it is found in the ambiance of this accumulation of beautiful things that unroll without end in front of their eyes."¹²⁸

The work of the Société des Amis, these goals of the Commission du Vieux Paris and Corbusier's attribution of the rejection of his *Plan Voisin* to the group, all reflect the changes that occurred in preservation with the penetration of modernization into the city.¹²⁹ In line with Léon de Laborde's call to suffuse the French environment with beauty as a means to educate the eyes of the French public, the late nineteenth century saw preservation's concern shift from that of material preservation to one of visual preservation, and accordingly from the preservation of history to the preservation of "beauty." In large part, this change can be attributed to the deceleration of demolition after the end of Haussmann's renovations during the Second Empire, and the passage of the law of 1887. This diminution in the scale of "vandalism" by the turn of the century was underscored by Frantz Jourdain, architect of the Samartaine, in an article on "New

¹²⁸ Ville de Paris, Commission municipale du Vieux Paris, 1897-1900 (Paris: Ville de Paris, 1900), 11-12.

¹²⁹ Note that to the best of my knowledge, based on an examination of the Procès-verbaux of the group, Corbusier's *Plan Voisin* was not discussed by the Commission du Vieux Paris. Also note that the similarity in goals between those of the Commission du Vieux Paris and the Société des Amis, alongside the official capacities of the Commission du Vieux Paris, most likely explains the dissipation of the Société des Amis after Normand's death in 1922. The Commission du Vieux Paris still exists, and includes among its members a number of architects as well as architectural historians, particularly those who specialize in the nineteenth century.

Paris." "In the twentieth century," he wrote, "there no longer exists in our capital neither vandals nor iconoclasts, and no one thinks of laying a demolishing hand of sacrilege on the lavish heritage of masterpieces left to us by our forefathers.¹³⁰ Given this condition, preservation aestheticized both the implements of prior expropriation and destruction, as well as the objects that those implements had formerly destroyed, giving birth to the idea that the aesthetics of the urban environment were also a form of *utilité publique*.

Additionally, preservation changed in the scale of its purview. Early preservation efforts from the July Monarchy, and indeed, the continued efforts of the Commission des monuments historiques, focused on the conservation of single buildings. Yet as the network of modernization, namely, the railroad and its attendant spatial configurations, penetrated the metropolis, no longer were single buildings threatened, but rather large swaths of properties. In response, preservationists expanded the scope of their concern from the single building to the terrain of the entire city.

Finally, preservation, through both private societies and the Commission municipale du Vieux Paris, transformed its temporal outlook: although still attentive to historical buildings, it now focused on what the Société des Amis called Paris, or simply *la ville moderne*. That is to say, preservation slowly became a form of planning the future, rather than resuscitating the past. This transformation was neither linear nor necessarily intentional, as demonstrated by some of Garnier's statements in support of preservation in which he seemed to nearly confuse the past and the future. For example, in his report to Baïhaut concerning Haag's elevated metropolitan railroad, Charles Garnier concluded not with a plea to avert the railroad, or to save specific buildings, but rather with a much grander imperative: "Paris must not become a factory. It must

¹³⁰ Frantz Jourdain, "Le Nouveau Paris," L'Architecture 16, no. 23 (1903), 226.

remain a museum!"¹³¹ While this attests to the fact that preservation now concerned itself with the entirety of the city, temporally, Garnier's statement was rather curious, given that the city's preservation strategy thus far had been in fact to contain fragments of an old Paris inside the museum, most notably in hôtels deemed worthy of preservation, such as the Musée du Cluny and the Musée Carnavalet, in which vestiges of the city were placed.¹³² Although there were clearly many buildings of artistic and historical interest in the city, in asking for the city to remain a museum, Garnier, in a manner similar to his thoughts on the Church of the Trinity and Notre-Dame de Lorette, projected his vision of the future onto an idealized vision of the past. Yet by 1925 when Corbusier condemned the Commission municipale du Vieux Paris for making the realization of this *Plan Voisin* a perpetual impossibility, the preservation had come out of its transitional phase and clearly had become an instrument of urban planning. Corbusier was wrong in attributing the new stasis of the Parisian built environment to the law of 1887, in his caption which read: "The future of Paris today is confronted with the same ghosts as in 1887." The law of 1887, in assuring the conservation of important French "monuments," represented the last moment of preservation concerned with the protecting the past. After 1887, new ideas of preservation, intended to ensure architecture's continued presence in the city, made preservation and integral means of *planning the city's future*. It is difficult to imagine Corbusier presenting his *Plan Voisin* in 1887, but certainly the mechanisms and sentiments that dismissed the project in the 1920s were only inchoate in 1887. Yet his assessment that his project would have, in fact, been a continuity of, rather than a rupture with, a long Parisian history of architectural

¹³¹ Société des Amis des monuments parisiens, *Bulletin*, 77.

¹³² The idea for the Musée Carnavalet in fact came from Haussmann himself, who sought to create a repository for architectural and historical fragments that he deemed too precious to completely destroy during his renovations of the city. See Charles Sellier, and Prosper Dorbec, *Guide explicatif du Musée Carnavalet* (Paris: Librarie Centrale des Beaux-Arts, 1903).

transgressions highlights with great acuity preservation's new task at the end of the nineteenth century of planning for a future city that above all incorporated the past. In the words of Lucien Augé de Lassus writing in the *Bulletin* of the Société des Amis des monuments parisiens, "the old is often that which is the most new."¹³³

¹³³ Société des Amis des monuments parisiens, *Bulletin*, 92.

CHAPTER TWO "The Social Question Will Be Resolved by Aesthetics"

On February 14, 1887, just over two years before the 1889 Exposition universelle opened to the public, the French daily newspaper *Le Temps* published a letter protesting the construction of the Eiffel Tower. The letter was signed by members of the French architectural, literary, and artistic elite, including the architects Charles Garnier, Albert Lenoir, Charles Questel, and Emile Vaudremer, Eugène Guillaume, a sculptor appointed the director of the École des Beaux-Arts in 1864, the composer Charles Gounod, the poet René Sully-Proudhomme, and the writers Guy de Maupassant and Alexandre Dumas, fils.¹ The authors argued that the tower was "useless and monstrous," unbefitting of the unmatched artistic glory of Paris that the Exposition was to proudly put on display. They worried that visitors, expecting to admire the city in awe, would arrive and remark: "What! This horror is what the French have created to show us idea of the taste of which they are so proud?" On top of this, Paul Planat claimed in the pages of Construction moderne, the progressive architecture periodical he edited, that "the tower is not a structure with an artistic valor befitting of France."² In 1889, Joris-Karl Huysmans, who in other cases praised the introduction of iron into architecture, called the tower "disconcertingly ugly."³ Although public opinion about the tower changed after its great success once the exhibition opened, resentment among artists and literary figures continued to simmer even into the next century. In 1901, the Symbolist poet Gustave Kahn described the tower as "a giant cartoon," and

¹ "Les Artistes contre la Tour Eiffel." Le Temps, February 14, 1887.

² Paul Planat, "La Tour Eiffel," La Construction moderne (February 17, 1887), 217.

³ Joris-Karl Huysmans, "Le Fer," in Certains (Paris: Tresse & Stock, 1889), 175.

"a folly in iron, an apotheosis of nuts and bolts and rivets...symbol of *non-beauté* and useless ugliness, cobbled together from useful elements. Babel, not from the engineer who seeks to find a certain beauty in his curves, but the Babel of the constructor, of the metal worker who without a purpose and without any advantage arranges various pieces back-to-back, resting on his laurels in front of the rigid heap."⁴

Forty-one years later, Sigfried Giedion heralded the tower as one of the most important forbearers of Modern architecture.⁵ In presenting the structural elements as the entirety of the edifice, Eiffel's tower, according to Giedion, culminated a century-long process that gradually stripped architecture of its decorative façades, resulting in the plain display, and triumph, of a technologically-driven architecture. This new architecture, constitutive of the modern spirit, was to replace the old historicist architecture, in which architects looked to the past for their source of aesthetic inspiration, rather than allowing the forward-looking developments of the present, particularly scientific and industrial innovation, to manifest themselves in architectural form. Indeed, Eiffel himself, in defending his project against the artists' statement, argued that, "the first principle of the aesthetics of architecture is that the essential lines of a monument should be determined by their perfect appropriateness to their end."⁶ Eiffel's first attempt to formulate an aesthetic theory for his work in many ways would be repeated by Giedion and other promoters of modernism in the early twentieth century. Notably, similar to the way that Giedion advanced the notion that technology itself had given rise to new architectural form, Eiffel's seemingly post hoc theory too removed the agency or judgment of the architect from the process of design.

⁴ Gustave Kahn, L'Esthétique de la rue (Gollion, Switzerland: Infolio éditions, 2008), 208.

⁵ Giedion, Building in France, Building in Iron, Building in Ferroconcrete.

⁶ "Les Artistes contre la Tour Eiffel".

Twentieth-century histories have typically relegated the so-called "artists' protest," if mentioned at all, to an introductory remark serving as a foil to the eventual popularity of Eiffel's tower.⁷ The defeat of the artists is typically framed as a manifestation of the triumph of science, engineering, and rationalism by the end of the nineteenth century. Hence there has been no need in these histories to investigate the artists' statement further, given that it was on the "losing" side of history.⁸ And indeed, the idea that the growth of science was the most significant development in knowledge in the French nineteenth century was not merely retrospective. In 1878, Jules Simon, the recent prime minster of France observed that

in walking through the galleries of an international exhibition, it is impossible, even with a distracted eye, to not be overcome by the idea that science has pervaded all human activity...let us begin the holy crusade, the crusade of science. There is nothing more superior nor more certain than that. After all of the revolutions and freedoms that we have made over the centuries, it is no longer possible to ignore the rise of science. It is no longer possible to stop it.⁹

Eiffel's tower celebrated scientific progress, to be sure, through making iron construction technology visible. It also did so through placing the names of seventy-two figures from contemporary French science around the base of the second level.¹⁰ While architecture had

⁷ See sources such as Jules Simon, *Guide officiel de la Tour Eiffel* (Paris: Chaix, 1893); Giedion, *Building in France, Building in Iron, Building in Ferroconcrete*; Roland Barthes, "The Eiffel Tower," in *The Eiffel Tower and Other Mythologies* (New York: Farrar, Strauss, and Giroux, 1979); Henri Loyrette, "The Eiffel Tower," in *Realms of Memory: The Construction of the French Past*, Vol. Volume III: Symbols, ed. Pierre Nora, and Lawrence Kritzman (New York: Columbia University Press, 1998); and Barry Bergdoll, and Lucien Hervé, *The Eiffel Tower* (New York: Princeton Architectural Press, 2003).

⁸ Note however, that broader and more retrospective analyses, such as that of Barthes as well as Henri Loyrette's essay on the tower in Pierre Nora's *Lieux de mémoires*, unequivocally locate the enduring cultural fascination with the tower in its semiotics as a visual object. Barthes description of the tower as a "pure — virtually empty — sign," "ineluctable *because it means everything*" seems to have triumphed over Giedion's framing of the tower as a symbol of either technological prowess or the origins of Modernism. Barthes, "The Eiffel Tower," 4.

⁹ Jules Simon, *Exposition universelle de 1878. Rapport du jury international. Introduction* (Paris: Impimerie nationale, 1880), 572, 576.

¹⁰ Idem, *Guide officiel de la Tour Eiffel*, 14-15.

always been employed to glorify that which was exalted by society during the time of its construction, this particular technique of honoring human achievement through the use of names on the exterior of a structure had famously been used recently by Henri Labrouste in his Bibliothèque Sainte-Geneviève, designed in 1838-1839, an important precursor in the use of exposed iron. As with Eiffel's tower, some architects were skeptical of the rather un-ornamented aesthetics of Labrouste's building, calling it "too simple and mechanical."¹¹ Rather than employ a more traditional architectural ornament, Labrouste had chosen to adorn the building's stone façades with the names of 810 scholars, dating back to Aristotle, referring to the knowledge written down in volumes within the building.

In reprising Labrouste's technique to different ends, Eiffel's tower commented on both the state of general knowledge and the state of architecture. If the library's exterior represented the millennia of knowledge archived inside, the names around the tower's base, which excluded older figures in French math and science such as Pascal and Descartes, indicated a break with that tradition, proposing a new regime of knowledge, fundamentally different from what preceeded it, whose origins lay at the beginning of the nineteenth century. Additionally, unlike those of the Bibliothèque Sainte-Geneviève, the names on the Eiffel Tower could not refer to anything inside the building, or to the building's program, as there was neither an "inside" nor a program. Rather, one could understand the names as a reference to the knowledge embodied in the structure itself. Whereas Labrouste uses architecture to represent a knowledge distinct from itself, Eiffel's tower renders architecture indistinguishable from modern science.

¹¹ Hermant, Achille, "La Bibliothèque Sainte-Geneviève," *L'Artiste*, 5th series, vol 7, December 1, 1851 quoted in Neil Levine, "The Book and the Building: Hugo's Theory of Architecture and Labrouste's Biliothèque Ste-Geneviève," in *The Beaux-Arts and Nineteenth-Century French Architecture*, ed. Robin Middleton (Cambridge, MA: MIT Press, 1982), 155.

Eiffel asserted that the artists were attacking the tower out of what he saw as a jealousy of engineering that had been fermenting among architects over the course of the nineteenth century.¹² Yet, as Paul Planat pointed out, literary figures such as Huysmans and Dumas who objected to the aesthetics of the Eiffel tower could hardly have been jealous of engineers.¹³ While Planat supported the artists' statement, his primary criticism of Eiffel was not that he had created something "useless and monstrous," but rather, that Eiffel was concealing his aesthetic choices by claiming that the form of the tower was entirely derived not just from an equation, but from the only possible equation that would allow a tower to reach three hundred meters:

According to this thesis that a mathematical formula dictates and imposes its form on a structure, unique among all, we have already given our opinion, and have no need to return to it. We ask only that Monsieur Eiffel let us see this magical formula, which claims that the tower itself created its author, and not the other way around. In exchange we will offer fifty formulas, equally rational, for solids of equal resistance, whose forms will be resolutely different"¹⁴

Here, Planat points out the irony in Eiffel's equation of aesthetics with functionality, given that the tower's sole function was, in fact, to stand as an aesthetic object. Although there is no additional documentation to directly explain the artists' statement, despite the stature of the figures involved, twentieth-century histories shy away from further inquiry about reasons behind the protest, the aesthetic ideals held by the artists that caused antagonism toward the tower, or, from the perspective of architectural history, the seemingly unlikely affiliation of literary figures and architects in drafting the letter of protest.

¹² "Les Artistes contre la Tour Eiffel".

¹³ Planat, "La Tour Eiffel," 217.

¹⁴ Ibid., 210.

The nineteenth century's reign of science has been cast, historiographically, as a nascent framework that would expand to produce the outer expression of twentieth century Modernism. The alleged technological functionalism of this architecture, and of its aesthetics, has been understood as an enunciation of Modern architecture's social functionalism. Both of these formulations of Modernist functionalism were contingent on a rejection of what were seen as the caprices of aesthetics, which were considered the rudiments of the nineteenth century's inability to formulate a new kind of architecture. Hence the artists' protest, in addition to serving as an introductory anecdote, has also typically functioned as a means to corroborate the resistance of architects of the late nineteenth century to the first outward manifestations of architectural Modernism.

Chapter Two seeks to understand how it came to be that some of the most prominent literary and artistic figures of the time rejected Eiffel's notion of functional, or structural determinism, promoting instead an architecture of beauty. It examines a new interest in philosophical aesthetics in France in the late nineteenth century that responded to developments in the psychology of sentiment and feeling as well as philosophical questions regarding the utility of beauty. These aesthetic theories sought to demonstrate the social value of aesthetics in a moment when science was perceived to be relegating the arts to an increasingly marginal social role. The chapter then examines the emergence of urban aesthetics, a body of theory that asked how architecture and the built environment could, through its aesthetic capacity, ameliorate society. The chapter, in this sense, seeks to highlight a moment when architecture was framed as socially useful precisely through its aesthetic capacity.

State of the Arts

While late nineteenth century France can be referred to as the Belle Epoque, characterizing a time of political peace and a blossoming of the arts and consumer culture, it is also referred to as *fin-de-siècle*, a term whose eschatological connotations were understood as a reflection of the pessimism, gloom, and fear that beset French culture at the time, underlying, as some have argued, a veneer of conviviality. France's defeat in the Franco-Prussian War; a declining birth rate; the assassination of the president; political dissatisfaction from the left for the perceived impotence of the Republican government; political dissatisfaction from the right for the new policies of secularism and what was seen as excessive democracy; critiques from liberals for excessive authoritarianism; and a long period of economic stagnation from 1873 to 1913 all contributed to a general sense of cultural decline, particularly in comparison to England and Germany.¹⁵ Although still outwardly supported by the government, modernity, science, and the idea of progress all came under scrutiny through a variety of lenses. Social critics, interpreting the yields of the new sciences of statistics and sociology through the framework of evolutionary theories, suggested that the alleged gains of modernization, such as urbanization, some sense of greater equity between classes, the desire for wealth accumulation and individual improvement, and the rejection of religion had in fact reached a tipping point, and that the negative byproducts of those advances — alcoholism, consumerism, lowered birth rates, escalated suicide rates, the spread of pornography and venereal disease, and so forth --- were beginning to reverse the course of society's progress, sending it into decay.¹⁶

¹⁵ Numerous nineteenth century texts saw French decline as a part of a large decline of "latin" cultures, in which the weakness of France was lumped together with the policy and economic failures that beset Italy and Spain in the second half of the nineteenth century. See Koenraad Swart, *The Sense of Decadence in Nineteenth-Century France* (Leiden: Martinus Nijhoff, 1964), 20.

¹⁶ See Chapter 6 of Ibid.

Although there were specific events that caused turmoil in the French political system and quantifiable threats to physical health, in a time when the "masses" were coming further into view through a variety of developments such as urbanization, sociology, and republicanism, many critics attributed these unintended and unwanted social changes to an idea of widespread degeneracy among the French population. Spurred by the rise of psychology at the end of the century, this alleged degeneracy was increasingly perceived as a problem not of sickly or unfit bodies, but rather of sickly or unfit minds. Some critics argued that French emotions and sentiments had turned towards a sort of melancholia or depression at the end of the century that perpetuated the stagnation of the country. In his 1891 bestselling work, Degeneration, Max Nordau characterized the fin-de-siècle disposition as, "curiously confused, a compound of feverish restlessness and blunted discouragement, of fearful presage and hang-dog renunciation. The prevalent feeling is that of imminent perdition and extinction. Fin-de-siècle is at once a confession and a complaint."¹⁷ Many decried in particular a decline in the moral capacity of the French mind. Conservatives, particularly Catholic conservatives, were dismayed at the disappearance of religion from and diminution of the family in French life. The anti-clericalism of the Third Republic, its attempts to carry out the secularization promised by the Revolution through the creation of compulsory laïc education and the passage of the 1905 law separating church and state, as well as a rise in atheism all contributed to a sense that what had been the foundation of French morality since the inception of the French nation was crumbling. Observations of new social ills - from bourgeois greed to the rise of prostitution - confirmed this hypothesis. Republican advocates of secularism felt the need for the moral inculcation of the

¹⁷ Nordau, *Degeneration*, 2.

populace in order to create "self-governing" French citizens commensurate with the new Republican ideals.¹⁸

This sense of decline pervaded sentiment toward the arts, including architecture, as well. In 1876, Ernest Renan wrote about the possibility of art disappearing from existence in his Dialogues philosophiques: "The progress of humanity is in no way an aesthetic progress...There will come a time when the great artist will be outdated, almost useless. The savant, on the other hand, will grow more and more useful. Beauty will almost disappear with this advent of science...the time will come when art will be a thing of the past."¹⁹ Renan neither celebrated the possibility nor bemoaned it, but rather simply stated it as a matter of fact, questioning art's utility in an era in which the benchmarks of social progress were constituted by scientific and economic indices. Architecture too seemed under threat, with years of pessimistic assessments of its failure to develop a "modern style," in addition to a perception that the profession was being pushed aside by the building *entrepreneurs* responsible for the construction of much of the buildings of western Paris, designed without architects, during Haussmann's renovations. At the same time that Jules Simon praised the regime of French science, he had the following to say about architecture: "for the last half century, our schools have given us, in lieu of artists, scholars. Architects no longer invent, they copy. On top of that, they have neither the ability to chose their models very well, nor to copy them faithfully."²⁰ In 1895, the architect Franz Jourdain solicited the opinions of literary figures, painters, musicians, sculptures, and engravers on the state of contemporary architecture. Their responses ranged from laments that the art of architecture had been completely consumed by the bourgeois desire for profit to claims that architecture had

¹⁸ Surkis, Sexing the Citizen: Morality and Masculinity in France, 1870-1920, 28.

¹⁹ Ernest Renan, *Dialogues et fragments philosophiques* (Paris: Calmann Lévy, 1876), 82, 84.

²⁰ Simon, *Exposition universelle de 1878. Rapport du jury international. Introduction*, 218.

become invisible in society, and that the only people who cared about it anymore were architects. Others responding to Jourdain drew upon Hippolyte Taine's notion that art was purely a product of its milieu and claimed that architecture could take no other form than what it had become, as it was a mere reflection of the social conditions at the time.²¹ In a time when questions of how to remedy the social problems either created or made visible through modernization, and in particular through the growth in both size and visibility of working classes in cities — questions of sanitation, work, health, poverty, and political radicalism — were at the forefront of political and intellectual agendas, the question of art and architecture's purpose in society, particularly with its continued academicism in light of dramatic social changes around it, and whatever its answer might have been, seemed trivial.

The threat of the decline of the arts, unsurprisingly, caused a number of artists and intellectuals at the end of the century to ask how this fate could be averted, and how the arts could be reinvigorated. Although much criticism had been made of the middling quality of painting and sculpture on display at various salons and international exhibitions, for a number of these figures, the solution was not simply to refine the skills, or even the imagination, of artists themselves, but rather, to call on art to take seriously French culture's regime of utility. Rather than producing art that was *better*, they suggested that artists should direct their efforts at producing art that was *to allow art* to locate itself in objects belonging to French daily life, applying artistic talent to objects that were literally useful — in other words, to concentrate

²¹ Jourdain published the results of his inquiry in a series of sixteen articles appearing in the periodical *L'Architecture* in 1895 and 1896. The can be found in the following issues of the journal: 8th year: no. 40, October 5, 1895; no. 41, October 12, 1895; no. 42, October 19, 1895; no. 43, October 26, 1895; no. 46, November 16, 1895; no. 47, November 23, 1895; no. 48, November 30, 1895; no. 49, December 7, 1895; no. 50, December 14, 1895; no. 52, December 28, 1895. 9th year: no. 2, January 11, 1896; no. 3, January 18, 1896; no. 5, February 1, 1896; no. 6, February 8, 1896; no. 7, February 15, 1896; no. 10, March 7, 1896.

greater artistic effort on the decorative arts than the traditional fine arts. In contrast, a second response proposed that the suffusion of the arts through the French environment and through French society, regardless of how these arts were expressed, itself could be useful. The artists that put forth this notion claimed for art the capacity to provide the moral uplift of the French population that science had failed to deliver. Just as the deliverance of the French way of life to its colonies had been framed as a "civilizing mission" by Jules Ferry, so too, they contended, could art and beauty serve as a civilizing force on native French soil.²² The utility of art hence lay not in the mechanical functionality of objects, but rather in its affective capacity. This understanding of art is perhaps best summarized by the title of a book published in 1912 by the journal L'Art décoratif, at the apex of this movement: Économie esthétique: La question sociale sera résolue par l'Esthétique (Aesthetic Economy: The Social Question Will Be Resolved by Aesthetics). In contrast to the decorative arts model of restoring art's utility, which operated in the private environment, this notion of spiritual improvement through exposure to art entailed a realm of operation that was necessarily public and spatial, and yielded the new concepts of public art and urban aesthetics.

Problems in Contemporary Aesthetics

That art could have a social function, or that its production was an inherently social act, were in no way novel ideas by the turn of the century. Revolutionary leaders had recognized the potential for art to serve as propaganda, monarchs had used art to both represent and reinforce

²² On the formulation of colonization as a civilizing mission in the Third Republic, see chapter 1 of Alice L Conklin, *A Mission to Civilize: The Republican Idea of Empire in France and West Africa*, 1895-1930 (Stanford, CA: Stanford University Press, 1997).

their political power, and followers of both Saint-Simon and Fourier accorded artists a role in the creation of utopian societies.²³ In addition to these theories that framed specific types of art as a means of changing society, some of the most influential French intellectuals in the nineteenth century, such as Victor Cousin, Auguste Comte, and Hippolyte Taine, theorized the historical relationship between art's development and the evolution of civilizations, arguing that art was a necessarily social product. However, new theories emerged mid-century that would set the tone for attempts to resuscitate art at the end of the century, and accorded art, or more precisely, aesthetic feeling, regardless of the content of its source, social utility. These theories responded simultaneously to aesthetic philosophy, positivism, and evolutionary psychology, all of which, in the mid-nineteenth century, relegated art and aesthetic sentiment to a marginalized position within modern society.

For much of the century, French aesthetic thought, for the most part, took Immanuel Kant's *Critique of the Power of Judgment* as a foundation on which to build or comment.²⁴ While refinements of and challenges to Kant's theories were made, debating questions such as the idea of an ideal in beauty and the relationship of beauty to nature, two of Kant's primary principles continued to form the basis of French aesthetic philosophy: first, that aesthetic judgment is, by definition, disinterested, and entirely distinct from moral judgment; and second, that beauty is a psychological experience, rather than a metaphysical property which would exist in any object itself. Although theories that drew on Kant, such as those of Théodore Jouffroy,

²³ The primary theorization of art among Saint Simonians was Émile Barrault's 1830 Aux artistes. Du passé et de l'avenir des beaux-arts: doctrine de Saint-Simonian, which did not go unchallenged among his colleagues. In 1845, the Fourierist Désiré Laverdant published De la mission de l'art et du rôle des artistes. On the Saint-Simonians and art, see Ralph Locke, Music, Musicians, and the Saint-Simonians (Chicago: University of Chicago Press, 1986).

²⁴ For an overview of nineteenth century aesthetics in France, see Theodosios Mauroeids Mustoxidi, *Histoire de l'esthétique française: 1700-1900* (Paris: Édouard Champion, 1920).

Edouard Chaignet, and Charles Lévêque, were developed outside the École des Beaux-Arts and the French salon system and often were part of larger philosophical projects, their assertions of art's separation from society were certainly paralleled in the realm of art production.²⁵ As Jean Jaurès noted, the Kantian theory of "l'art-pour-l'art" formed not only the basis of art theory in France in the nineteenth century, but also, referring to the academic system, the basis of art's practice as well.²⁶ In this sense French philosophy's propagation of the idea of art's disinterestedness and the historical conditions in which it was written were mutually reinforcing.

Kant's proposition that beauty was a psychological experience rather than a property in an object itself persisted in nineteenth century French aesthetics. More significantly, this principle was corroborated through the new field of psychology. Satisfying the scientistic desires of the nineteenth century, psychology came to rival, if not overshadow, traditional philosophy as a means of explaining human thought and behavior. It gained additional traction among French intellectuals through its interest in "the social question," as well as through its relationship to medicine and sociology.²⁷ One of the first transpositions of Kantian aesthetic doctrine into psychology can be found in Herbert Spencer's 1855 *Principles of Psychology*, which not only pioneered psychological aesthetics, but also was one of the first theories of psychology of any sort to appear. Although Spencer was British, his work was immensely influential in France, having been translated by Théodule Ribot, considered the founder of French psychology, in

²⁵ The texts outlining these men's aesthetic theories were the following: Victor Cousin's *Du vrai, du beau, et du bien* (1818, originally published in *Archives philosophiques*), Théodore Jouffroy's *Course d'esthétique* (1843), Edouard Chaignet's *Les Principles de la science du beau* (1859), and Charles Lévêque's *La Science du beau, étudiée dans ses principes, dans ses applications et dans son histoire* (1861).

²⁶ Jean Jaurès, "36e leçon" in *Cours philosophique* professé à Albi en 1882-1883, text compiled in 1931-1932 by Louis Rascol, manuscript collection of Lycée Technique Louis Rascol à Albi, quoted in Gaston-Louis Marchal, *Jean Jaurès et les arts plastiques* (Castres: G.L. Marshal, 1984), 217.

²⁷ See Carroy, Ohayon, and Plas, *Histoire de la psychologie en France XIXe-XXe siècles*.
1870, before Ribot even completed his thesis on psychological heredity, itself highly influenced by Spencer's work.²⁸

Generally speaking, *Principles of Psychology* is a treatise on the entwined evolutions of the human mind and human civilization. Engaging with philosophical theories of the mind as well as theories of biological development, Spencer framed the mind as a product of the historical development of the human species from animal life. Counter to philosophies of mind which examined consciousness or the will as an immaterial entity, unique to each individual, Spencer understood the mind as a physical organism, composed of the brain and nervous system. The physical makeup of the mind, according to Spencer, developed over time in such as way that favored increasing accuracy in its understanding of the world, and hence better adaptation to and performance within its environment. Unlike earlier theories that had examined the development of the mind from childhood to adulthood, Spencer focused on the maturation of the human mind over multiple generations and vast expanses of time. This longterm progression of mental capacities explained the advancement of human civilizations.²⁹

In its chapter on aesthetics, *Principles of Psychology* thus sought to examine the evolutionary function and development of aesthetic sensations. Spencer's work challenged traditional philosophy through its physiological explanation of the mind, attributing various thoughts and experiences to physical entities such as "nerve-centers," as well as through its framing of the mind as a entity that develops without respect to the individual subject. Yet still,

²⁸ Nathalie Richard, "A 'Spencerian Moment' in French Cultural History? Spencer in France (1870-1890)," in *Global Spencerism*, ed. Bernard Lightman Forthcoming). See also part 2 of Daniel Becquemont, and Laurent Mucchielli, *Le Cas Spencer: religion, science et politique* (Rennes: Presses Universitaires de France, 1998). I thank Professor Richard and *Global Spencerism*'s editor, Bernard Lightman, for sharing this article with me in advance of publication.

²⁹ For overviews of Spencer's theories of psychological evolution, see Hector Macpherson, *Herbert Spencer: The Man and His Work* (London: Chapman and Hall, 1900) and Mark Francis, "The Problem With Star Dust: Spencer's Psychology and William James," in *Herbert Spencer: Legacies*, ed. Mark Francis, and Michael Taylor (London: Routledge, 2014).

this challenge was undertaken on philosophy's terrain. In this sense, Spencer's aesthetic theory, despite not stating it explicitly, still engaged with Kantian discourse, taking up in particular the utility of aesthetic sentiment in the advancement of society.

Aesthetic production and the experience of beauty, for Spencer, resulted from man's need to expend excess energy that in earlier stages of human evolution had been devoted to satisfying his basic needs. Initially, this accumulated energy in humans had been dispelled through play.³⁰ Spencer describes this through analogy with the behavior of animals once they have become domesticated. Having its life-sustaining needs met through daily feeding, the resulting excess energy is spent by mimicking the former predatory actions, but this time, as play. This can be seen, for example, in the cat who scratches a chair with its claws for amusement, rather than as a means to kill prey.³¹ Likewise, Spencer contends that the beauty of a ruined castle derives from its "metamorphosis of the useful into the beautiful," which occurs as society changes so as to render the protective capacity of the castle superfluous.³²

As man moved further and further away from the constant need to sustain his material existence, Spencer postulated that the expenditure of his excess energy became more and more refined, such that play began to produce beauty. Beauty, or "the highest aesthetic feeling," for Spencer is what results "from the full but not excessive exercise of the most complex emotional

³⁰ Friedrich Schiller is considered to have originally authored the play-theory of aesthetics, with his argument being laid out in Letter XIV of his *Aesthetic Letters*. See Friedrich Schiller, *The Aesthetic Letters, Essays, and Philisophical Letters of Schiller* trans. J Weiss. (Boston: Charles C. Little and James Brown, 1945), 64-67. In his *Principles of Psychology*, Spencer more or less denies familiarity with Schiller's aesthetic theory, though his denial somewhat undermines itself. He wrote that "many years ago I met with a quotation from a German author to the effect that the aesthetic sentiments originate from the play-impulse. I do not remember the name of the author; and if any reasons were given for this statement, or any inferences drawn from it, I cannot recall them." Herbert Spencer, *The Principles of Psychology* (New York and London: D. Appleton, 1920), 627.

³¹ Ibid., 628-32.

³² Herbert Spencer, *Essays: Scientific, Political, and Speculative* (Edinburgh: Williams and Norgate, 1868), 430.

faculty.³³ He argues that there is a hierarchy of aesthetic sensations, with those created by the senses, in which external stimuli themselves present pleasing sensations, capable of creating a lesser beauty than those produced by the mind, in which external stimuli prompt the imagination of sensations and emotions. Critical for Spencer is that the faculties of aesthetic feeling, which he defines as sensational, perceptional, and emotional, are no different from those called into action in all other, non-aesthetic experiences. "The only difference is in the attitude of consciousness towards its resulting states," writes Spencer.³⁴ That is, aesthetic experience is distinguished from all others in that, harkening back to Kant, it is completely indifferent to any ends. In this sense, claims Spencer, "the aesthetic character of a feeling is habitually associated with separateness from life-serving function."³⁵ Rather than advancing human society, art is instead the detritus of social evolution. With the continued advancement of society, beauty and aesthetic sensation will grow increasingly extraneous to the perfecting of civilization.

Although Spencer's work has fallen into the margins of contemporary historic, scientific, and philosophic discourse, in late nineteenth century France, Spencer's acclaim and positive reception extended beyond that of any of his British contemporaries, including John Stuart Mill and even Charles Darwin.³⁶ His all-encompassing theory of evolution served as a basis for further knowledge production in a number of fields in French academe, including philosophy, psychology, biology, and sociology. In the cases of psychology and sociology, Spencer's work was instrumental in their founding. It was mobilized by politicians on both sides of the political spectrum in debates about school reform and secularization, and Spencer was granted an

³³ Idem, *The Principles of Psychology*, 644.

³⁴ Ibid., 646.

³⁵ Ibid., 632.

³⁶ On both the academic and political reception and uses of Spencer in France, see Richard, "A 'Spencerian Moment' in French Cultural History? Spencer in France (1870-1890)".

honorary position in the French Académie.³⁷ Additionally, Spencer's attribution of social evolution to physiological change of the mind provided an alternate narrative to the idea of progress through the development of science and technology. In combination with the domination of early French psychology by research on pathologies, this decoupled the ideas of social change and that of the kind of irreversible "progress" that both Comtian positivism and Third Republic leaders such as Jules Ferry measured by the continued permeation of science into the foundations of French society. In this sense, Spencer's work underlay the fin-de-siècle fears of degeneration in the work of figures such Benedict Morel, Gabriel Tarde, and Max Nordau. If the individual mind could go askew and deviate from evolutionarily advantageous fitness, with Spencer's theory, it followed that the same could happen to an entire society, regardless of the amount of scientific progress made.

In the 1880s, Spencer's work, in nearly all of its dimensions, was taken up by the young French philosopher and poet, Jean-Marie Guyau. Guyau was stepson of Alfred Fouillée, a philosopher known both for his philosophic idea of "*idées-forces*" and for establishing the political doctrine of *solidarité*.³⁸ Both of these contributions addressed the relationship between the individual and society: while the *idée-force* examined how individual consciousness produced the idea of a "universal society of consciousnesses," *solidarité*, which laid the foundation for the solidarism movement that played a fundamental role in Third Republic politics, formulated the concept of society as a "contractual organism," in which individuals are

³⁷ "Herbert Spencer and the French Academy," *The Popular Science Monthly* 23, no. 8 (1883), 554.

³⁸ On Fouillée, see Augustin Guyau, *La Philosophie et la sociologie d'Alfred Fouillée* (Paris: Librarie Fléix Alcan, 1913) and Phyllis Stock-Morton, *Moral Education for a Secular Society: The Development of Moral Laïque in Nineteenth Century France* (Albany: SUNY Press, 1988), 112-14. On Fouillée's contribution to *solidarité*, see Maire-Claude Blais, "La Solidarité," *Le Télémaque*, 1, no. 33 (2008). On his influence on Republican politics, see John A. Scott, *Republican Ideas and the Liberal Tradition in France*, *1870-1914* (New York: Octagon Books, 1966). On solidarism's significance in Third Republic ideology, see Jack Ernest S Hayward, "The Official Social Philosophy of the French Third Republic: Léon Bourgeois and Solidarism," *International Review of Social History* 6, no. 01 (1961).

voluntarily unified through a shared formulation of a social organism. Guyau's mother was Augustine Tuillerie, who, under the pseudonym G. Bruno, authored *La Tour de France par deux enfants*, possibly the most successful French schoolbook of all time. The interest exhibited by both of his parents in the social realm would characterize Guyau's work as well.

Guyau was primarily a moral philosopher. Between his 1884 Esquisse d'une morale sans obligation ni sanction and L'Irreligion de l'avenir, étude sociologique, he examined how man could have moral knowledge in the absence of religion — a question which underlay his theory of aesthetics as well. Despite his early death at age thirty-three, Guyau's work was discussed widely at the end of the nineteenth century in journals such as the *Revue philosophique de* France et de l'étranger, then France's most prestigious philosophy journal at the time, La Revue socialiste, Revue universelle, Journal des économistes, and La Réforme sociale, and in Englishlanguage publications such as Mind, The Monist, Annals of the American Academy of Political and Social Science, International Journal of Ethics, American Journal of Sociology, The Philosophical Review, and The Journal of Philosophy. Although Guyau is little discussed today, his writings were a significant influence on the work of Nietschze, Kropotkin, Durkheim, and particularly Bergson in their time. Additionally, his writings on aesthetics served as the basis for, and lent credence to, the work the poets, art critics, artists, and architects, who at the turn of the century began collectively advocating for the suffusion of beauty throughout the city as a means to address "the social question." Drawing from Guyau, they asserted that the spread of art had the capacity to improve what at the time was a disconcerting morality of the French population.³⁹

³⁹ Nina Rosenblatt has also contended that Guyau's work on art influences the development of a French machine aesthetic after World War 1. Nina Rosenblatt, "Empathy and Anaesthesia: On the Origins of a French Machine Aesthetic," *Grey Room* (2001).

In his *Principia Ethica* of 1903, the British philosopher G. E. Smith called Guyau "almost a disciple of Spencer," reflecting the extent to which Guyau took Spencer's work as a starting point for his own.⁴⁰ Like Spencer, Guyau theorized the evolutionary development of the human mind and its faculties.⁴¹ He discussed the psychological and physiological mechanisms of the mind that are at work during the exercise of man's various mental capacities, including his experience of moral and aesthetic sentiments. However, counter to Spencer, for whom the excess energy accumulated through evolutionary advancement is deemed useless, Guyau proposed that excess energy would lead to an intensification of sentiment to the extent that it would exceed the sentimental capacity of the individual, and thus would be directed toward objects beyond one's self. Rejecting Spencer's notion that economization drives evolution, and understanding of the purpose of life as survival, Guyau, a vitalist, argues that this excess energy in the individual propels man into an intensification of relationships to other men, and to a profound sort of sociability. Fouillée, in posthumous assessment of Guyau's work, characterized it as such:

Guyau's dominant idea is that of life as the common principle of art, ethics, and religion. According to him, it is the generating conception of the entirety of his system. Life, as it should be understood, comprises, it all of its intensity, a principle of natural expansion, of fecundity, and of generosity. From this principle it follows that life naturally reconciles in man the individual and the social points of view....In his eyes, the most significant task of the nineteenth century, that which he hoped to address, would be precisely to 'demonstrate the social dimension of the human individual, and in general, the living

⁴⁰ George Edward Moore, *Principia Ethica* (Cambridge: Cambridge University Press, 1922), 46. For a detailed comparison of the theories of Spencer and Guyau, see chapter 6, "Guyau's Philosophy of Life," in Cornelis Willem Maris, ed. *Critique of the Empiricist Explanation of Morality*. (Dordrecht, Netherlands: Springer Science + Business, 1981). Chapter 5 of the same volume is a useful reference for Spencer's evolutionary theory.

⁴¹ For a detailed comparison of the theories of Spencer and Guyau, and both of their conceptions of moral evolution, see chapter 6, "Guyau's Philosophy of Life," in Ibid. Chapter 5 of the same volume is a useful reference for Spencer's evolutionary theory.

being,' a dimension which had been neglected by the ego-centric materialism of the previous century. 42

This moral philosophy, laid out most extensively in his 1855 *A Sketch of Morality Independent of Obligation or Sanction*, also served as the basis of Guyau's aesthetic theory. Guyau wrote two primary texts on aesthetics, *Les Problèmes de l'esthétique contemporaine*, published in 1884, and *L'Art au point de vue sociologique*, published posthumously in 1889. These texts collectively formulated a theory of the moral value of art for both the individual and society. In contrast to Spencer's theory that art was the excrement of evolutionary development, Guyau broke with Spencerian doctrine and argued that artistic production was an inextricable component of civilizational advancement.

In *Les Problèmes de l'esthétique contemporaine*, Guyau takes to task Spencer's, as well as Friedrich Schiller's, development of the Kantian proposition that aesthetic thought was disinterested.⁴³ He also qualified Kant's idea that aesthetic experience took place entirely in the mind. Guyau argued that both Schiller and Spencer had fundamentally misunderstood the purpose of art in the world. "In claiming that aesthetic pleasure is simply a matter of pure contemplation and play, in wanting to extricate art from truth, the real, the useful, and the good,

⁴² Alfred Fouillée, La Morale, l'art et la religion d'après Guyau (Paris: F. Alcan, 1901), 17.

⁴³ Jean-Marie Guyau, *Les Problèmes de l'esthétique contemporaine* (Paris: F. Alcan, 1884). Schiller's theory of aesthetics bridged Kant's and Spencer's. As it pertains to Guyau's critique, it can be summarized as follows. For Schiller, an inherent property in man is a "play impulse." Under conditions of excess energy, the play impulse is stimulated, and energy is expressed for the mere purpose of its expulsion. This play, according to Schiller, is an activity that could mediate man's "sensuous instinct," or the immediate needs and desires of his material existence alongside his sensory experience, and his "formal instinct," or his capacity to extricate himself from time through reason, using reason to deduce universal laws and relationships between things. Play both balances these two instincts and at the same time, excites them. For Schiller, play is their perfect combination, located between feeling and thought, and as such, the play instinct produces beauty. This beauty is not merely an end in itself, but rather, is the path to freedom. Schiller described this thusly: "in the midst of the formidable realm of forces, and of the sacred empire of laws, the aesthetic impulse of form creates by degrees a third and a joyous realm, that of play and of the appearance, where she emancipates man from fetters, in all his relations, an from all that is named constraint, whether physical or moral."

in thus promoting a sort of dilettantism, have we not misunderstood the serious, and otherwise put, vital character of art?" he asked. In contrast to a theory of art as play, Guyau defined beauty as "a perception or action that stimulates in us at once life in all of its three forms — sensitivity, intelligence, and will — and produces pleasure through the rapid awareness of this general stimulation."44 Aesthetic pleasure could not be produced by any one, or even two of these faculties in isolation, but only by the stimulation of all three in unison. A mild stimulation of these "forms of life" resulted, according to Guyau, in the perception of agreeableness; in greater intensity, they produced beauty. In addition to this conception of beauty as the culmination of life-functions rather than the result of an intellectual process cordoned off from those which dealt with desire or ethics, Guyau countered Spencer's notion that aesthetics became increasingly removed from utility as societies progress, arguing that rather, the opposite was true. Guyau maintained that in lower stages of evolutionary development, for example, in animals, pleasure is less refined and purely sensual. Sensations are either agreeable or not agreeable, and there is no distinction between beauty and agreeability. Evolutionary advancement of the species, according to Guyau, was characterized by a decline in the fitness of the body, alongside the development and expansion of the mind. He gives the example of the difference between the beautiful bodies of ancient Greek athletes and the minds of nineteenth century men of science as proof of this.⁴⁵ Hence with the development of higher mental capacity, pleasure becomes intellectual, though not necessarily aesthetic, as this intellectual pleasure can at times affect the brain only at the most superficial level. Yet for Guyau, the continued physical and social evolution of man would eventually bring about a third and final phase of development in which "all pleasure would contain, in addition to sensations, both an intellectual and moral element. It would thus be the

⁴⁴ Ibid., 77.

⁴⁵ Ibid., 97.

satisfaction of not only a determinant organ, but that of the entire moral individual." In this formulation of a society of fully vital souls, Guyau sought to counter both Spencer's utilitarian evolutionary teleology and well as the Comtian scientific positivism that had pervaded French intellectual culture by the late nineteenth century.

L'Art au point de vue sociologique bolstered this idea that evolution would lead to an era in which life and beauty had become indistinguishable. Whereas Problèmes explored aesthetic development within the individual, L'Art au point de vue sociologique put forth the idea that aesthetic feelings occurred between members, and objects, in society, as a "constant action of one [organism] on another."46 Drawing much more heavily on developments in experimental physiology and psychology, particularly those of Pierre Janet, than in his previous work on aesthetics, Guyau now formulated new conceptions of both emotions and the human body as an organism. Emotions, for Guyau, were understood as "nervous vibrations" within the body, and the individual, "who had previously been considered an isolated being, contained as a solitary mechanism, has come to be understood as penetrable by outside influences, interdependent with other consciences, determinable by impersonal ideas and sentiments."⁴⁷ Hence he postulated that, given the way that emotions and sensations were produced in humans by their surroundings, it was illogical to think that a living organism, what he now conceived of as a "complexus of movements and currents," would not likewise exert influence over similar life forms in his surroundings.⁴⁸ Guyau explained the idea of the transmission of emotions among bodies by likening them to other phenomena studied by science that were disseminated through space, yet were perceived only through their effect: "It is as difficult to contain in a living body a moral

⁴⁶ Jean-Marie Guyau, L'Art au point de vue sociologique (Paris: Félix Alcan, 1889), 2.

⁴⁷ Ibid., xxlii.

⁴⁸ Ibid., 2.

emotion, aesthetic or other, as it is to contain heat or electricity — intellectual phenomena are essentially expansive or contagious."⁴⁹

In L'Art au point de vue sociologique, Guyau elevated aesthetic feeling produced by art beyond mere pleasure. He contrasted the effects of art with those of other pleasurable, yet not artistic, experiences, such as that of smelling a perfume, or eating a salad. Emotions were not only contagious, but, stemming from exposure to art, the emotions invoked more precisely the experience of sympathy. According to Guyau, art thrust man into life beyond the work of art itself in three ways. First, it invoked an "egotistical" pleasure, in that its experience would inevitably trigger memories from earlier in our lives. Second, it caused man to sympathize with the author of the work of art, imagining how the work was executed, the author's intentions, and so forth. Finally, art would prompt sympathy with the object depicted in the work itself. Thus, Guyau concludes, artistic emotion is definitively a social emotion. "That which deserves to be called art," he wrote, "proceeds in an entirely different manner [that that which does not]: for art, a pure and simple sensation is not the goal. It is rather the means to put the sensing being in communication and in society with another life more or less the same as his. Art is thus essentially representative of life, and of collective life."⁵⁰ For Guyau, art was thus nearly as alive as the individual. "Movement is the exterior sign of life...and all of the arts produce or stimulate movement and action, and in doing so, provoke in us sympathetic movements, and germs of action." Although seemingly more static than dance, music, or poetry, architecture was an equal embodiment of movement, both through its construction and its function:

Architecture is the art of introducing movement into inert objects. To construct is to animate. Architecture, first, organizes materials and puts them in order. Second, it

⁴⁹ Ibid., xlii.

⁵⁰ Ibid., 17.

submits them to a sort of collective action which lifts up the building in a single movement, and, through the harmony of its lines and the continuousness of its moving upwards, renders light that which is heavy, lifts up and makes whole that which otherwise tends to subside and crash to the ground... With architecture being made to contain life, the movement and life within it penetrates its materials, and emerge through them: a building that is made for life is itself a sort of living body.⁵¹

In establishing the social role of art, Guyau also took up the question of the relationship between artistic and social development, repudiating Hippolyte Taine's influential thesis that art was merely a product of its milieu. Contrary to this theory, Guyau, borrowing from Gabriel Tarde, proposed that society was composed of many individuals — the public — whose engagement with art was to imitate it, and a few — artists — who were gifted, through what he called a Darwinian "happy accident," with ingenuity and the capacity to innovate.⁵² While Guyau accorded the milieu some influence in shaping art over the long history of human existence, he maintained that with increasing societal development, it was these innovators who not only created new art forms, but in doing so, produced a new milieu. The public, however, was not without a purpose in Guyau's conceit. In their propensity for imitation and, by extension, repetition, ordinary individuals would propagate the work of artists through recreating it in various forms, such that it would pervade society. With artists and the public working in tandem, Guyau concluded that "genius is thus an extraordinary power of sociability and of sympathy

⁵¹ Ibid., 20-21.

⁵² Ibid., 44-45 Tarde's theory of imitation and innovation is laid out in his 1890 text, *Les Lois d'imitation*. Given that Guyau died in March of 1888, he must have been familiar with Tarde's work — which is named explicitly in Guyau's text — through earlier, perhaps unpublished, work. Tarde formulated his own aesthetic theory in his 1895 work *La Logique sociale*. For more on this, see Jean-Phillip Antoine, "Tarde's Aesthetics: Art & Art, or the Invention of Social Memory," *Distinktion: Scandinavian Journal of Sociology* 5, no. 2 (2004).

which tends to the creation of new societies or the modification of preexisting societies. Coming from whichever milieu, it is a creator of the new and a changer of the old.³⁵³

Guyau was not the only philosopher in his time to draw attention to the social role of art. Pierre-Joseph Proudhon had preceded Guyau in this regard with his 1865 posthumous work *Du Principe de l'art et de la destination sociale*, which argued that art should critique contemporary society in order to bring about a more just society.⁵⁴ Guyau's contemporary Émile Hennequin claimed for art the capacity to change the ideas and mores of the populace for which it was produced.⁵⁵ However, Guyau's contribution to this discourse distinguished itself from others in several ways. His emphasis on the social *utility* of aesthetic feeling, as well as its capacity for moral uplift and social harmony, gave his work particular appeal in an era that both heavily

⁵³ Guyau, L'Art au point de vue sociologique, 45.

⁵⁴ Proudhon's theory of art's role in society stemmed from his political writings, and did not engage with any branch of philosophic tradition, such as ethics or aesthetics. However, without reference to Kant, Proudhon, seeking substantial change in society at large, did argue that art should play a moral role in society, rebuking the academic doctrine of art for art's sake. He reasoned that, given that the impulse to make art was "obviously a faculty of the human mind," that it was illogical that at man should have this capacity yet its products be of no use to human kind. According to Proudhon, the goal of art was to "represent human life — its sentiments, its passions, its virtues and vices, its work, its prejudices, its ridicules, its enthusiasm, its grandeurs and its shame, all morals both good and bad." At the same time as it was to offer a representation of contemporary society, art was to be motivated by an idea of the "physical, moral, and intellectual perfecting of humanity," such that the art work could offer a critique of the contemporary world that would inculcate in the minds of viewers a greater sense of morality, which would bring about a more just society. Proudhon imagined that all forms of art — painting, literature, architecture, music, and sculpture — could be of social utility, yet at the time, the only art of his age that fulfilled this social purpose, for Proudhon, was the realism of Gustave Courbet. Pierre-Joseph Proudhon, Du Principe de l'art et de sa destination sociale (Paris: Garnier Frères, 1865). See also chapter 1 of Max Raphael, Proudhon, Marx, Picasso Three Studies in the Sociology of Art trans. Inge Marcuse. (London: Lawrence & Wishart, 1980).

⁵⁵ Hennequin's theory was essentially an inversion of Taine's theory of art, though similarly connecting a work of art with its national context. Whereas Taine framed art as simply a product of its milieu, Hennequin reversed this notion. For Henenquin, artistic genius was a rare trait that allowed those who possessed function independently of their milieu. The could create their art without the "ambient influences of race, taste, and morals." Through admiration of and engagement with the artwork, the masses would then have their morals and ideas shaped by those of the artist. In this sense, art would still appear to represent the mores of the milieu, as it did for Taine, but the causality of this relationship was inverted. Émile Hennequin, *La Critique scientifique* (Paris: Perrin, 1888). See also Mustoxidi, *Histoire de l'esthétique française: 1700-1900*, 205-10.

valorized utility and sought an antidote to moral decline. By framing his theory of evolution as a revision of Spencer's, it gained additional caché through its affiliation with scientific discourse. Although primarily a moral philosophy, it was executed through the psychology of both aesthetics and morality. Furthermore, Guyau sought to demonstrate that science and art were not mutually exclusive, as both Renan and Spencer had it, with one needing to triumph over the other over the course of societal development.⁵⁶ Rather, he framed art and science as mutually reinforcing, particularly now that science, through psychology, gave man insight into his existence beyond that of a purely Cartesian machine, instead revealing the creative and emotional capacities of the mind.⁵⁷

While Guyau's work was decidedly intended as a work of philosophical inquiry, the above characteristics of Guyau's work made it relevant for both social questions and artistic practice in its time. Openly critical of "art-for-art's sake" and formalism, his theory shied away from stylistic prescriptions for art. Instead, he called for a realism that would critically reflect that reality of the world around it, created through the expression of the intense spontaneity, individual sentiment, and capacity to envision a multiplicity of ways of living that characterized the artistic genius.⁵⁸ Great art, for Guyau was that which could reach and stimulate the minds of vast groups of people. Art, he stated, should be democratic, able to effect all audiences regardless of position in society, yet its progress could be measured, at least in part, by the extent to which it could reach those most precarious in life, such as the sick, and disabled, and children.⁵⁹ These

⁵⁶ The compatibility of art and science was specifically affirmed in Guyau's deceptively-titled essay, "L'Antagonisme de l'art et de la science" from 1883, a text whose content was repeated, in modified form, in *Les problèmes de l'esthétique contemporaine*. Jean-Marie Guyau, "L'Antagonisme de l'art et de la science," *Revue des deux mondes*, 60 (1883).

⁵⁷ Ibid., 370.

⁵⁸ Ibid., xiii, xviii, xxii.

⁵⁹ Ibid., xi, xxiv, xxv.

qualities lent it a particular appeal for those trying to argue in a more materialist sense for the rejuvenation of the arts and their value to contemporary life.

Making Art Public

Around the turn of the century, a new term began to circulate in French art and architectural culture: art public. Sometimes used interchangeably with other newly appearing phrases such as "l'art de la rue," "l'art dans la rue," "l'esthétique de la rue," and "l'esthétique des villes," the idea of art public came about in relationship to new discourses of democracy, the public, and the physical restructuring of the city. Art public also drew from new discourses in aesthetic theory, which allowed its promoters to frame it as a reformative practice, both of the public, and of the public's perception of the role of art in society. Although this term may invoke associations with twentieth century public art, this more contemporary movement is best used as a foil with which to elucidate the specificities of turn of the century art public. First, art public reverses the expected figure-ground relationship of twentieth century public art. Rather than activating a "public space" through the insertion of a figural piece of art, the agent of early twentieth century art public in France was the enclosure of public space. That is to say, it was the limits of public space — the outward facing side of the threshold between public and private spaces — that was to serve as public art. In this way, architecture, and particularly the architectural façade, and any art that may have adorned it — became the operative agent in effecting the goals of this newly conceived public art. Second, unlike twentieth century public art whose political goals were to be realized through the shared act of rational contemplation, the

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political, or moralizing, goals of *art public* would be achieved through the transmission of aesthetic feeling.

The initial conception of *art public* in France coincided, not coincidentally, with the rise of urban reform movements that, in combination, would eventually spawn the practice of urbanism. The term *urbanism*, or in its original form, *urbanismo*, was coined in 1867 by the Catalan engineer Ildefonso Cerdá.⁶⁰ Cerdá's conception of urbanism corresponded to many of the types of planning that Haussmann had undertaken in his renovations of Paris: the planning of infrastructure, consideration of street widths, heights, and public spaces, and so forth. In France, by the time urbanism had congealed into a recognizable discipline at the end of the first decade of the twentieth century, the term was intimately connected to the interdisciplinary reform movements that attempted to address concerns pertaining to "la question sociale," a term that encompassed an array of challenges posed and brought to light by various forms of modernization that occurred over the course of the nineteenth century.⁶¹ Whereas Haussmannian renovations were framed as improvements to the physical city, what began to be called urbanism in the late nineteenth and early twentieth century shifted, in conjunction with new sociological and evolutionary theories that drew attention to the populace as an entity, to improving the residents of the city themselves. Whereas Haussmannian "urbanism" was undertaken as an administrative project whose historical antecedent lay in policing, the interrogations of urban questions in the late 1880s and 1890s in large part were driven by hygienists, doctors, politicians,

⁶⁰ Françoise Choay, *Pour une anthropologie de l'espace* (Paris: Seuil, 2006), 169.

⁶¹ For further elaboration of "la question sociale," see Donzelot, L'Invention du social: essai sur le déclin des passions politiques; Horne, A Social Laboratory for Modern France: The Musée Social and the Rise of the Welfare State, 15-53; and chapter 6 of Paul Rabinow, French Modern: Norms and Forms of the Social Environment (Chicago: University of Chicago Press, 1995).

philanthropists, and other intellectuals who studied the spatial dimensions of public health.⁶²

The 1889 Exposition universelle demonstrated the extent to which architecture, which continued to be pedagogically conceived as a fine art, and the urban reform movement were extricated from one another. Although architecture, particularly in its built form, played a large role in the exhibition, the official architecture section judged by the official jury was composed only of drawings, and exhibited, as was customary, as part of the "Œuvres d'art" section in the Palais des Arts, alongside works of painting, sculpture, engraving, and decorative arts.⁶³ These drawings, which were the official representations of architecture to the public, primarily depicted imagined projects, with particular emphasis on the reconstructions of both ancient and historical French architecture which still formed the emphasis of teaching at the École des Beaux-Arts.

Buildings designed in response to contemporary questions, or those seen to serve pragmatic functions were, in contrast, included in sections such as civil engineering, education, and the newly formed section, *"l'économie sociale."*⁶⁴ The last of these sections addressed questions pertaining to the spatial arrangement of cities in particular through subsections of both worker's housing and "social hygiene." In contrast to the scaled drawings of the architecture section, the social economy exhibition created full-scale buildings and pavilions to portray

⁶² On the hygienist movement, see Chevallier, Le Paris moderne: Histoire des politiques d'hygiène, 1855-1898; chapter 6 of Horne, A Social Laboratory for Modern France: The Musée Social and the Rise of the Welfare State; Gérard Jorland, Une Société à soigner: hygiène et salubrité publiques en France au XIXe siècle (Paris: Gallimard, 2010); and Viviane Claude, "Technique sanitaire et réform urbaine: l'Association générale des hygiénistes et des techniciens municipaux, 1905-1920," in Laboratoires du nouveau siècle: La nébuleuse réformatrice et ses réseaux en France, 1880-1914, ed. Christian Topalov (Paris: Écoles des Hautes Études en Sciences Sociales, 1999).

⁶³ France. Ministère du Commerce, de l'Industrie et des Colonies, *Exposition universalle international de 1889 à Paris. Rapports du jury international* (Paris: Imprimerie Nationale, 1890), 101-02.

⁶⁴ Ibid., 101.

idealized solutions for modern urban conditions.⁶⁵ These included a low-cost cafeteria, which was in fact heavily frequented at meal times by exhibition goers; a "worker's housing street," composed of four domiciles, furnished both with "appropriate" furniture and, mirroring the colonial exhibitions that stood directly across the Esplanade, actual families of workers; and a sixty meter long gallery partitioned into various rooms to present information, analyses, and proposals covering a vast array of topics relating to the changes brought about by industrialization. Émile Cheysson, president of the *économie sociale* section, suggested a competitive relationship between social economy and architecture as two different approaches to the same issue. Offering a cutting comparison of their presences at the exhibition, he wrote:

In exploring the [social economy] exhibit, one is shocked at the immense quantity of geometric drawings and tables of figures that line the walls. Have you ever gotten lost in the galleries that display watercolors of architecture, and restorations of buildings from the ancient world, while visiting the annual salons of fine arts? Certainly you have never encountered anyone there...and as such it is a perfect place to find some cool air and silence, to dream in peace far away from the noise and agitations of the crowd. We had in fact predicted the same fate [for our section]...but these grim predictions did not suppress our zeal, and they were happily refuted by the event itself.⁶⁶

Urban Aesthetics

Three years following the exhibition, the architect Frantz Jourdain wrote an essay in the *Revue des arts décoratifs* entitled "L'Art dans la rue" that prefigured an alliance between architects and figures concerned with public hygiene and housing from medical, sociological, and political points of view. While this article recapitulated much of the increasingly audible and predictable invective levied at French architecture at the time, in its advocacy for a new type of

⁶⁵ Émile Cheysson, "L'Économie sociale à l'Exposition universelle de 1889," *La Revue sociale*, 2nd series, no. 8 (1889), 3-4.

⁶⁶ Ibid., 4.

architecture, it also foreshadowed the development of *art public*. Jourdain assessed the contemporary situation by disparaging French architecture for its lack of formal innovation as well as for its lack of formal variation: "Seeming to have materialized from a single mold," the façades of Haussmannian Paris had been infected by a "greco-latin virus whose ravages we have suffered for too long a time."⁶⁷ "This fetishism for [architectural] formulas of yesteryear has imposed itself on our cities like a veil of vulgarity and boredom."⁶⁸ "Pretentious pastiches, without style and without personality, dishonor our cities which recede into an anemic banality."⁶⁹ This same criticism would be repeated again by Modernist critics in the interwar era as they sought to position modernism and its program of functionalism and functionalist aesthetics as the antidote for the insipid architecture that preceded it.

However, Jourdain's solution to the insipidness of contemporary French architecture was not an aesthetic prescription. Rather, he called for architects to cease designing as though the juries that had awarded various prizes for axially composed plans during their training at the École des Beaux-Arts would loom over their shoulders in perpetuity as the sole and ultimate judge of architectural value. He proposed instead that façades become enlivened through new forms of decoration. He drew attention to a trompe l'oeil mural painted by the artist Toché on the exterior of the Samaritaine department store as as example of "an interesting endeavor that could bring about a revolution in the ornamentation of façades."⁷⁰ [Figure 2.1] Jordan described it as:

a vast composition à la Tiepolo, a sort of decorative extravaganza with a lofty allure, in which reality blends with fantasy, and where common people intermingle...with

⁶⁷ Frantz Jourdain, "L'Art dans la rue," Revue des arts décoratifs, 12 (1892), 212.

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ No further information on the artist was given aside from his last name. Note also that in 1892, Jourdain had not yet become engaged himself with the design of the Samaritaine.

mythological figures and historic heroes. Gabrielle d'Estrées is grazed by an allegorical figure of Fortune moving at full speed on a bicycle.⁷¹ She watches, with a sort of passive curiosity, the shop boys of the department store, clad in the Samaritaine uniform, bearing emblazoned banners of the primary workers' guilds, which seem to affirm the triumph of workers: peasants, cart drawers, workers of all sorts who crowd around the base of the building. This diverse crowd wanders through the splendors of a palace whose skillfully arranged architectonic motifs give the impression of serving as vertical supports of the building, giving cohesion to the ensemble and connecting the lines of the composition to one another while maintaining their delicacy. However, the architecture remains fantastical, deliberately forgetful of any pretentious rationalism, as if out of the dream of an opium smoker, in order to underscore the intention of the artist, who wants to animate the façade and not simply paint a painting out of scale, or to create a moulded arch in trompe-l'œil to replace the absent overhangs.⁷²

Disciples of the academic tradition and, later, Modern architects would have found the mural abhorrent for its combination of realistic depictions, anachronistic combinations of both personages and architectural motifs, and complete lack of restraint almost to the point of grotesqueness. Yet Jourdain was perhaps France's leading advocate at the turn of the century for the creation of a new, modern architecture. A subscriber of Viollet-le-Duc's theory of structural rationalism, he was also a respected and prolific critic and theorist, and a vehement anti-academic.⁷³ Despite the visual whimsy of the façade, Jourdain's applause was given in all sincerity. Not only did the mural provide color and variety to the uniform architecture of Paris, but also, it proposed a new engagement with the Parisian public. The painting's figures and motifs, such as workers, scaffolding, and banners, overshadowed the classicized elements of the underlying, pre-existing architecture, whose meaning and formal references were legible only to those who were trained in architectural design. In drawing from contemporary life for its composition, the mural rendered the building engaging and accessible to the typical passerby and to the Parisian public.

⁷¹ Gabrielle d'Estrées was a mistress of Henri IV.

⁷² Ibid., 213.

⁷³ On Jourdain, see Meredith L Clausen, Frantz Jourdain and the Samaritaine (Leiden: E. J. Brill, 1987).

For Jourdain, this accessibility activated the underlying political, and democratizing, potential of architecture. "Generally speaking," he began the essay, stating that

art is aristocratic, as it only speaks to the noble faculties of being. Yet a worker who has the same comprehension of a work of art, who understands its qualities, its intimate subtleties, who understands its mysterious language, becomes, at that precise moment, the equal of the fine gentleman admiring the same artistic work. The differences in caste and education disappear, social prejudices collapse, and a fervor, whether conscious or unconscious, toward a shared ideal produces an absolute equality between the two minds.⁷⁴

If art could create equality, at the same time, Jourdain proposed, then it also was efficacious as a pedagogical tool. This was true particularly for the working classes who were not accustomed to learning through traditional school teaching:

Also, the education of the masses, which occurs through the instincts, can only be brought to perfection through stimulating the imagination. The masses aren't exposed to complicated teachings, they are resistant to dry reasoning, and remain closed to the vague sophistry of aesthetics; yet on the other hand, they submit easily to physical influences, and, as in infancy, they are aroused by material demonstrations. The people learn in the street as much as in the classroom.⁷⁵

Finally, Jourdain tied the enlivening of architecture to the social evolutionist theory, and discourse of decline, that was so prevalent at the end of the nineteenth century. Emphasizing in particular the role of vision and the visual field in determining the direction that man's fitness would take as time progressed, Jourdain claimed that "if the beautiful engenders the beautiful by the same law of intellectual heredity, the ugly begets the ugly. The eye habituates itself little by

⁷⁴ Jourdain, "L'Art dans la rue," 211.

⁷⁵ Ibid.

little to unattractive forms, and fatally, taste becomes distorted, vision becomes blurry, and the senses atrophy."⁷⁶

Although Guyau was not mentioned by name, Jourdain's essay was one of the first in the late nineteenth century to transpose the tenets of Guyau's theory into the architectural domain, suggesting that architectural forms could have agency in the public — and urban — realm. Of course, architecture had a long history of communicating with the public symbolically and iconographically, but with this reframing of architecture, the semiotic or didactic content of the work was irrelevant in terms of its social engagement. Rather, architecture would operate affectively, through the aesthetic sensation it would produce in its beholders, with the extent of its operational capacity being a function of the intensity of sensation it could produce.⁷⁷ The visual ingestion of architecture, provided it stimulated the senses, thus would have the ability to improve the minds and morals of the individuals who lived amongst it, and concomitantly, the minds and morals of France. Over the course of the next two decades, this understanding of architecture would become further developed and propagated. The result of this was to turn the attention of architects to the urban realm, and the integration of architects into the emerging practice of urbanism.

Concern for the design of the city as a whole was entirely absent from Beaux-Arts education, even at the end of the nineteenth century. While publications such as *La Revue générale d'architecture et des travaux publics*, until it ceased publication in 1888, and *L'Architecture*, the official publication of France's first professional society of architects, the Société centrale des architectes, published articles discussing innovations in and debates about

⁷⁶ Ibid., 212.

⁷⁷ For a discussion of Guyau's work as affective theory, see Robert Seyfert, "Beyond Personal Feelings and Collective Emotions: Toward a Theory of Social Affect," *Theory, Culture & Society* 29, no. 6 (2012).

issues of hygiene, these articles primarily reported rather than editorializing or making explicit connections to architectural practice and concerns.⁷⁸ Hence, for the most part, attention to the idea that urban spaces could be considered from an aesthetic point of view, or designed with aesthetics in mind, came primarily from figures outside of the profession itself.

In 1893, the mayor of Brussels, Charles Buls, published a forty-one page pamphlet titled L'Esthétique des villes. Initially interested in education reform, Buls had been active in public life since 1864, when he helped found the Ligue d'enseignement.⁷⁹ While Buls advocated heavily for the laïcization of education, he also concerned himself with, perhaps due to descending from a family of goldsmiths, the education of artisans in the industrial age. Primarily, he proposed new schools that would sustain an artisanal class in an industrial era. His hope was that the schools would renew traditional artisanal production through the introduction of machine technology, yielding not only new techniques but new forms as well. That Buls saw the need for craft and workmanship to evolve alongside other changes in society reflected his long term interest in the historical progression of styles, indexed by decoration and ornamentation, and the role of a building's historically-specific milieu in their generation. Although familiar with the evolutionary theories of Spencer and Darwin, Buls's primary point of reference in the development of this interest was Gottfried Semper's Der Stil. He also familiarized himself with a significant number of other aesthetic theories from Germany, having written French-language summaries of works by Moritz Carrière, Hermann Lotze, George Lasius, and Gottfried Semper, and a manuscript on the work of Kant, Fichte, Schopenhauer, and Vischer.⁸⁰ At the same time,

⁷⁸ See for example, the 1895 debate covered serially in *L'Architecture* regarding "tout à l'égout" — whether to merge all waste water into a single sewage line or to separate industrial, kitchen, and bathroom waste.

⁷⁹ Marcel Smets, *Charles Buls* (Paris: Editions Mardaga, 1995).

⁸⁰ For greater detail on Buls's knowledge and analysis of German aesthetics, see chapter 3 of Ibid.

he developed an interest in architecture, and would eventually be named honorary president of the Société centrale des architectes de la Belgique for his sustained interest in the field.

By the time that *L'Esthétique des villes* was first published, Buls had penned eighty-three articles and pamphlets on education, the arts, and matters in between, many published in the journals *Revue de Belgique* and *La Fédération artistique*. Additionally, he had designed a model school in collaboration with the architect Ernest Hendrickx; proposed a museum of industrial arts, giving a detailed plan of its organization; and, in 1877, had entered into the municipal government of Brussels as part of the Libéral party, becoming its mayor in 1881. Buls had addressed both the history and future of architecture in his writings prior to becoming mayor. However, when he was elected to office, he inherited a city in a state of an unfinished Haussmannian renovation project. Just as Haussmannian renovations caused grave financial woes for Paris, so too did they for Brussels. Debt incurred through the project's financing had increased eightfold between 1860 and 1880, cutting short the completion of the project. In this sense, the urban theory espoused in *L'Esthétique des villes* derived not only from a theoretical interest in architecture, but also from real decisions about Brussels's urban reconstruction that were Buls's responsibility as mayor.

For Buls, Haussmann-inspired planning marked an irreversible break with pre-Enlightenment forms of urban development, marking the transition from mere urban growth to planning, and transforming the city from a "living organism," with a "network of streets" which functioned as "arteries and veins" to a city that "had the character of an artificial crystal — dry and mathematical."⁸¹ Although those characterizations might suggest that Buls sought to return the city to a state in which it could grow organically, without planning, Buls in fact did advocate

⁸¹ Charles Buls, *Esthétique des villes* (Brussels: Bruyland-Christophe, 1894), 12-13.

for continued planning of the city. Despite his objections to the Haussmannian urban renovations that had already been undertaken in Brussels, he argued for a form of planning whose rationality derived from its response to existing conditions and requirements, rather than a superimposition of a system of perpendicular streets upon the city. While Haussmann's piercing avenues that punctured existing buildings had their critics in Paris, Brussels's contoured topography rendered straight line planning, which Buls contented was undertaken solely to maximize sale-able land parcels, not only disruptive but also irrational, from both functional and financial perspectives.⁸² In this regard, a substantial portion of Buls's essay formulated solutions to the specific planning problems in Brussels that he had inherited from his mayoral predecessor.

On a more conceptual level, *L'Esthétique des villes* suggested a different idea of the city, its inhabitation, and its planning than what was embedded in earlier modern planning techniques. While the work of figures such as Patte and Haussmann treated cities as discrete physical and functional entities, conceived as "machines, engines, and factories that functioned according to laws of economics or inertial…bodies, healthy or sick, with characteristic disease or fitness…sentient beings, however monstrous or deformed, with humors and psychologies that varied with the circumstances of their environment," that could be molded, rearranged, and, famously, incised,⁸³ Buls, on the contrary, saw the objects within the city, ranging from architecture to street layouts to the inhabitants themselves, each as its own functional entity. He understood the city as an agglomeration of inhabited quarters, whose design and redesign was to be carried out tactically, taking into account perspectival perceptions instead of formal clarity.

L'Esthétique des villes also distinguished itself from earlier works on urban planning in that its prescriptions for planning came through its development of a theory of aesthetics for

⁸² Ibid., 13.

⁸³ Vidler, "The Scenes of the Street: Transformations in Ideal and Reality, 1750-1871," 29.

urban and architectural forms. While Buls did not refute the benefits of infrastructural improvements that thus far characterized modern urban planning, he contended that these alone were insufficient to create a modern city. Without a body of precedents for theories of urban aesthetics, Buls transposed the aesthetic principles he established for the industrial and decorative arts onto the domain of the city. He maintained that, "in the industrial arts, the inventions that are the most beautiful and the most picturesque are those which embody the most perfect harmony between the forms of objects and their use."⁸⁴ Hence *L'Esthétique des villes* proposed that beauty in the urban context would be produced through the specificity of the form to the purpose it served. "This aesthetic principle is applicable," he claimed, "to city plans or public buildings or objects of industrial art all the same."⁸⁵ One can thus see Buls's work as a theoretical bridge between the urban principles of preservationists groups, such as the Société des amis des monuments parisiens and those of post-World War I groups of modern architects such as CIAM, embodying the aesthetic principles, and indulging the lingering Romanticist attitudes of the first, and the theoretical underpinnings of functionalist design of the latter.

On the one hand, Buls's doctrine participated in the same critiques of Haussmannian urbanism that characterized the campaigns of late nineteenth century preservation. Tabula rasa planning was to be avoided, with the existing specificities of a site determining to a great extent the function that a building would serve in an urban context. Buls asked:

How much more interesting and more alive will be the work of the architect who, taking the difficulties of his problem piece by piece, will complete the urban panorama with a monumental ensemble, adapted to the topography of its site, satisfying the demands of circulation, taking into account the particularities of the terrain, differences of level,

⁸⁴ Buls, Esthétique des villes, 13-14.

⁸⁵ Ibid., 14.

necessities of program, to produce a structure with an intimate relationship to its locale rather than the banal beauty that one finds in every capital of Europe and America?⁸⁶

In its descriptions of optimal solutions for Brussels's planning questions at hand, L'Esthétique des villes above all emphasized design based on perspectival vision and first person experience in the city rather than orthographic planning. He took architects, who at that time were much more likely to design single buildings that to participate in urban planning, to task for this: "It has always struck me that architects have never quite been careful enough about their tendency to look at their work only from a bird's-eye view. Hunched over their paper," he continued, "they strive to find symmetries that cannot even be perceived in walking through the constructed guarter...it is thus the horizontal view that architecture must above all consider in their designs."⁸⁷ Buls called for streets to be laid out to capture noteworthy views, both panoramic and of specific works of architecture or monuments. Street widths, he contended, should take into account the existing abutting buildings so as to maintain the originally intended affect. For example. Gothic cathedrals would cease to give a towering impression of if they were isolated from other buildings or placed at the end of a straight axis, while neoclassical buildings demanded a greater expanse of open space, such that their symmetry could be appreciated.⁸⁸ Additionally, reflecting both the rise in preservation as well as his budgetary limitations as mayor of Brussels, Buls advocated for the conservation of existing buildings as part of his aesthetic doctrine. He argued that municipalities that allowed their old buildings to be demolished, simply to make way for the new, like architects who considered their designs only as drawings on paper, failed to consider the role that the buildings, which individually might not

⁸⁶ Ibid., 20.

⁸⁷ Ibid., 17.

⁸⁸ Ibid., 21.

be of great importance, played collectively in developing an urban aesthetic. For Buls, historic buildings stood not only as "witnesses of the past...evoking past epochs and customs," and "the mile markers that our forbearers staked out in marking the steps to the city's prosperity," but also as objects "which at the same time embellish our streets with picturesque motifs."⁸⁹

On the other hand, Buls's work presaged the principles of Modernism in a number of ways, though under a somewhat different guise than what would emerge after the First World War. First, like Modern architecture, Buls eschewed aesthetic prescriptions. Certainly, the combination of urban planning and preservation completed under his tenure in Brussels yielded a particular aesthetic, as did the efforts of Modernist architects. However, rhetorically, both sought to transcend the succession of historic styles that characterized nineteenth century architecture through rejecting the idea of style, historic or not, altogether.⁹⁰

Second, Buls formulated a functionalist theory of design. He both transposed his theory on functionalist aesthetics from the scale of the decorative and industrial arts to that of urbanism, and also suggested engineering, broadly construed, as a model for the development of new forms that would correlate form with function. He contended "that if one researches the aesthetic rules applicable to old cities, in order to transform them in accordance with the demands of modern life, it is precisely in following the principles indicated by the engineer that the artist will find the solutions closest to the ideal."⁹¹ That Buls turned to external disciplines to find a theory of aesthetics for the urban realm attests to the dearth of interest in the matter among the majority of

⁸⁹ Ibid., 23. Note that Buls was in fact quite renown for his preservation efforts in Brussels. See chapter 8 of Smets, *Charles Buls*.

⁹⁰ This rejection of "style" is not incompatible with Buls's interest in Semper's idea of style. For Semper, style was a result of material properties, cultural, climactic, and geographic specificities, and human ingenuity and creativity. Yet Semper's notion of style was always a result of these factors, rather than something that could be consciously developed merely through the mind of an architect.

⁹¹ Buls, *Esthétique des villes*, 19.

architects at the time. The École des Beaux-Arts still taught formalist principles of design that emphasized visual symmetry, hierarchies, and geometries in the shapes of buildings and the distributions of program therein. Even Viollet-le-Duc's structural rationalism, which Buls praised highly but had yet to make its mark in built form, only considered the structural dimension of a building's function, overlooking programmatic, semiotic, and experiential function. However, Modernist theories of functionalism differed from those of Buls in a number of ways. While Modernism took the social realm as the site of impact of its functionalism, for Buls, functionalist design was to be employed to the goal of producing beauty, which in and of itself should be the goal in the design of cities. Yet both theories called for a break from design practices that prioritized formal arrangement over design driven by function.

Third, Buls called upon architects to take on responsibility for design at the scale of the city. While preservationists argued that questions of preservation or destruction should be evaluated considering the contribution that individual buildings could make to larger views in and of the city, they did not address how new constructions, and hence architects, could also contribute to formulating an aesthetic of the city. In the francophone world in the late nineteenth century, questions of design at the urban scale pertained primarily to those raised by doctors, hygienists, and other reformers around issues of public health, housing, and working conditions. Although Haussmann considered aesthetic aspects of planning — for example, views of particularly monumental buildings — in his renovations of Paris, design at the urban scale was not taught to architects, nor, as previously mentioned, was it discussed as the province of architects in publications of the time. In the 1890s, that which would eventually be called urbanism was still a technocratic practice. Buls's essay thus participated in architects' turn toward the scale of the city — a movement among architects that came into its own in the 1910s,

and whose development was further accelerated by the widespread destruction, and subsequent need for reconstruction, that followed World War I.

Finally, Buls subscribed to the same teleology of progress that would drive much of Modernism. Accepting the existing arguments of various reformers that the forms of the city needed to change technologically in order to tame the increasingly untenable issues associated with industrialization, Buls added to that the idea that a concomitant aesthetic modernization needed to occur. Despite the interest he displayed in the historical buildings of Brussels as mayor, resulting most famously in his restoration of the fourteenth century Grand Palais, Buls, drawing on his functionalist aesthetics, rejected the notion that a city could hold onto the forms of yesteryear and continue to flourish. He sought to distinguish his position from "the intransigent admirers of the past who, enthralled only by the picturesque, mourn the covering of the Senne [River] and the destruction of infected hovels which had allowed disease to ooze out into a squalid stream of water. A city that wants to prosper," he contended, "must transform itself."⁹²

"Quiconque a beaucoup vu / Peut avoir beaucoup retenu"93

Although *L'Esthétique des villes* was printed two additional times in French within a year of its first printing, translated into German in 1898, and in to Italian in 1903, there was no mention of the essay in Paris-based architectural publications such as *L'Architecture* and *La Construction moderne* until 1897. Yet its initial success in Belgium, undoubtedly due to Buls's

⁹² Ibid.

⁹³ In English: Whomever has seen much / has retained much. Originally from the poem L'Hirondelle et les petits oiseaux," by Jean de la Fontaine. Cited by Jules Sauvenière in L'Œuvre de l'Art public. Premier Congrès international (Liège: Aug. Bénard, 1898), 50.

status as a public figure, occurred in conjunction with the development of a movement to expose the public to art, led by the Belgian painter Eugène Broerman, which itself would, by the end of the nineteenth century have fully entrenched itself in French discourse. Like Buls, Broerman was concerned with the growing disconnect between the pace of change in society at large and the pace of change in the arts. He contended that art's development was stagnant due to the public's perception of art's inconsequential status in society. This then, in Broerman's mind, created a vicious circle of further hermeticization of art production and display, an increasing gap between the interests of artists and those of the public, and hence further dismissal of the value of the arts in public life. As a first step to rectify this growing rift, in 1894, Broerman organized an exhibition of contemporary painting in a commercial gallery in Brussels intended expressly to expose the Belgian public to art. The exhibition attracted over 25,000 visitors.⁹⁴ At the same time, he founded a group called "L'Œuvre national belge," which would later be renamed, "L'Œuvre national de l'art appliqué à la rue," and by 1898 would count some 2,000 members. The goals of the group were the following:

To create a competitive spirit among artists, in creating practical means for their work to inspire the general interest;

To suffuse all facets of contemporary public life with art;

To transform streets into "musées pittoresques" composed of a variety of elements designed to educate the people;

To return art to its previous social mission, in spreading modern ideas through all public domains.⁹⁵

The activities of the group included organizing yearly competitions for the design of "the most beautiful new constructions" and "various objects of public utility," such as fountains, electric lights, newspaper kiosks, and so forth for newly developed streets in Brussels. Other

⁹⁴ Charles Mumford Robinson, "Belgium's Art Crusade," Harper's Monthly Magazine 104 (1902).

⁹⁵ L'Œuvre de l'Art public. Premier Congrès international, 17-18.

competitions solicited designs of commercial signage integrated into architectural façades, which themselves were also to be designed for the competition. Submissions were made by both architects and artists, and were exhibited in venues such as the Museum of Brussels and the 1897 International Exposition, also in Brussels. Although the architectural press questioned the quality of the submitted designs, the competitions drew the attention of architects and artists to the possibility of designing objects traditionally outside of their purviews, in the urban realm. In 1896, the group began to publish an illustrated journal, appearing every two weeks, titled *L'Art public*.

This term, *art public*, would become the name of a proposition and a reform movement that brought together Buls's focus on the public realm as a site of aesthetic practice and Guyau's notion of art as socially ameliorative, contending that the creation of art for the public realm would improve both art and its beholders. In 1898, as a means to propagate the efforts of *L'Œuvre* beyond Belgium, Broerman and Buls, with the support of the Belgian government, organized a conference centered on this idea, the *Premier Congrès International de l'Art Public.*⁹⁶ Intended as a regularly recurring event, two subsequent congresses were held in 1900 and 1905, in Paris and Liège, respectively. The congress brought together an international group of over five hundred artists, architects, art critics, state officials, and other intellectuals, primarily from Belgium and France for four days of discussion, seeking to reform the relationship between arts policies and the artistic quality of public spaces across Europe.⁹⁷ Others from Germany, England, Portugal, Italy, Austria, Sweden, and the United States participated as well. According to Broerman, in his opening remarks in 1898, the goal of the congress was to "react against poor

⁹⁶ Note that Guyau was mentioned explicitly at this conference. Ibid., 41.

⁹⁷ For a list of participants, see Ibid., 4-15.

taste and propagate a doctrine of Beauty in all domains of public life.⁹⁸ This was pursued through asking the question of how *art public* could develop in both urbanistic and artistic realms from three different points of view: legislative and administrative, social, and technical. Taken as a whole, though particularly through the lectures delivered in the first two sections, the conference sought to establish a platform for the regeneration of the arts through reengaging the question of its social utility, and for the regeneration of the public such that it could appreciate art and benefit from its social utility.

Art public was a new yet nebulous term.⁹⁹ Broerman defined it as "*le sublime de l'utile dans la vie publique*," a goal that he opposed to his perception of the current condition as "*la vulgarité de l'utile dans la vie publique*."¹⁰⁰ While the conference publicized the term, exporting it across Europe as various delegates returned home, and spurred additional reporting on the topic in journals outside of Belgium, it stopped short of formulating a strategy for the development and specific implementation of a practice of *art public*. In fact, throughout the time in which the Broerman's conception of *art public* was gaining traction among intellectuals and urban reformers, which terminated roughly with the outbreak of World War I, connections to architectural and artistic production were amorphous at best.

In part, the difficulty in sparking practices of *art public* stemmed from the lack of aesthetic prescriptions given in the discourse of the movement. This characteristic reflected the work of Jourdain and Buls on the aesthetics of public spaces as well as Guyau's theory of social art, all of which disavowed the issue of particular forms and styles in favor of doctrines that

⁹⁸ Ibid., 99.

⁹⁹ Although Google ngram searches need to be interpreted with a critical eye and willingness to understand the statistics that are being presented, in addition to what has been excluded, one can rather incontrovertibly see that the use of the term *art public* in French language publications did indeed take off tremendously during the years between 1892 and 1900.

¹⁰⁰ Ibid., 18.

advocated for the production of aesthetic affect. Additionally, particularly for Jourdain, Buls, and Broerman, diverting attention away from formal properties of art and architecture allowed them to sidestep the bothersome question of style.

Yet however open-ended the term "art" was for the organizers of art public, the question of what is art and what is not was not a subject of debate among the conference's participants. For the most part, and rather conservatively, the "art" in *art public* was considered the physical instantiation of beauty, which, as a term, was not a subject of further examination. The term *public*, on the other hand, was entirely open to interpretation and redefinition, and constituted the stakes of the congress. On the one hand, the indeterminate nature of *public*, alongside the abnegation of formal style, added to the blurriness of any image that could represent art public. Yet on the other, it gave the architects, artists, administrators, and so forth who took interest in the movement an opportunity to formulate what it meant for art to be public at a moment when the boundaries of traditional uses of the term were decomposing in light of social and political change. "Les pouvoirs publiques," "l'intérêt public," and "la voie publique": these were three different senses of the adjective *public* that Broerman used in his opening remarks to the conference, referring accordingly to the state, the population or the masses, and an opposition to "private," which in this case, carried a spatial connotation.¹⁰¹ Each of these meanings of *public* would be raised and debated regarding the site of art public's intervention.

The first section of the congress asked to what extent the state should play a role in encouraging the development and dissemination of beauty throughout the built environment.¹⁰²

¹⁰¹ Ibid., 99-100. These phrases translate roughly as: governmental powers, public interest, and public space. The contexts for their usages are as follows: "L'Œuvre de l'Art Public a été créée [sic] dans la but de réagir contre le mauvais goût et de propager le culte du Beau dans tous les domaines de l'intérêt public," "Les moyens à préconsier doivent viser les causes et les effets, définir le rôle des pouvoirs publics…," and "Sur la voie publique et dans les monuments, où il y a tant à faire…"

¹⁰² Ibid., 26.

A number of members of the panel, particularly Broerman, exhibited distrust of the state's capacity to adjudicate artistic value, criticizing the lack of familiarity with art in administration outside of the Beaux-Arts, despite the fact that artistic issues extended into all domains of society. Broerman also criticized the Beaux-Arts administration — the one part of the state that ostensibly had the capacity to make judgments about artistic value — as a "deplorable regime of administrative centralization and artistic decline."¹⁰³ However, these shortcomings of the state were to be overcome not by wresting the state of all capacity to engage with artistic affairs, but rather through education of all bureaucrats such that they could better understand art.

Working on the premise that the state should indeed play a role in the development of beauty, the panel then assumed this would be undertaken through the protection of historic buildings and artworks, asking whether the existing laws were sufficient in this regard. Since the participants of the section insisted on unanimously agreeing on their final conclusion, the official result was an unassertive and bland declaration that in order to encourage the development of beauty, the state should indeed protect buildings and artworks of historic and artistic interest. An auxiliary recommendation was to impose a tax on commercial advertisements on the facades of buildings, proportional to their size in order to avert the multiplication of "ugliness." With the exception of the taxation proposition, this conclusion essentially affirmed the status quo, as by 1898, preservation laws were in place in nearly all of Western Europe.¹⁰⁴

Yet the allocutions of various participants suggested that *art public* imagined a different model of preservation regulation and efforts than what was currently in practice. One lecture, delivered by the lawyer Holbach, contended that a new category of property needed to be

¹⁰³ Ibid., 101.

¹⁰⁴ On the proliferation of preservation laws in Europe, see Astrid Swenson, *The Rise of Heritage: Preserving the Past in France, Germany and England, 1789* 1914 (Cambridge: Cambridge University Press, 2013).

created: "private property in the public interest," which would place all privately held objects and works of art, from buildings to sculpture to painting, under the protection of the state, subject to the same regulations as objects and buildings classified as protected monuments historiques.¹⁰⁵ Holbach argued, drawing on a Tainian understanding of artistic production, that art was a product of "the glory of an entire people or perhaps of human civilization," and thus only humanity itself should be able to destroy it.¹⁰⁶ "Humanity has the right to ask of those who possess the marvels of human activity to conserve them rather than to conceal them," he argued.¹⁰⁷ Although he noted that the most expedient solution would be simply to nationalize all art, he conceded that a more moderate solution was needed. Many rebuked this idea of "private property in the public interest" for infringing on private property rights. Yet in proposing to exceed the status quo of state protection of expropriated and state-owned historic monuments, and to some degree, theoretically bring privately held artworks out of their "concealment," Holbach suggested that an *art public* would be achieved through making all art, in theory, the property not of the state but of the public. Broerman, who was one of the defenders of private property rights, also argued for a shift from equating "public" with the state to one in which "public" denoted the masses. In contrast to the administrative workings of commissions of historic monuments, he contended that "it is public opinion that must safeguard artistic objects and monuments," and that an intensified program of preservation "must have a rational and truly social character, such that it can be employed to the benefit of society in its entirety and of public education, and not for the benefit of only a few."¹⁰⁸ This reflected the larger political trend

¹⁰⁵ L'Œuvre de l'Art public. Premier Congrès international, 38.

¹⁰⁶ Ibid., 37-38.

¹⁰⁷ Ibid., 102.

¹⁰⁸ Ibid., 102-03.

during the Third Republic and its creation of a welfare state in which the Revolutionary and also Romantic conception of the nation as a fusion of government and citizens became delaminated, such that the masses emerged as a new conception of public.¹⁰⁹

This interest in the public was reprised in Holbach's remarks on architectural design. Although he believed that the state should not regulate the aesthetics of new buildings, Holbach argued that the current trend of constructing all dwellings, whether working class or in the countryside, to resemble the architecture of the bourgeois would only desecrate the beauty of the environment, both through the extension of sameness, but also through its deceptive relationship to use. He declared that "art, as Guyau forcefully argued, is not only destined to produce agreeable sensations of color, form, of sound, but it can also become expressive of life. This, I believe is the essential goal that we must pursue. An architectural work must be born from a state of spirit in rapport with its use."¹¹⁰ Hence, Holbach stressed the need for new architectural forms that would best serve and represent the particularities of their inhabitants, focusing particularly on the newly emergent category of the urban worker.

The plea for art to become more engaged with the public was pursued further in the second section of the congress, which examined the following questions: How can socially interested art be pursued? What role should aesthetics play in education? What measures can be taken by the government in order to develop aesthetic sensibilities in populations? How can competitions better encourage art with a social interest? How should museums chose and display

¹⁰⁹ On the transition from a liberal state which encouraged philanthropy and mutualist associations to a welfare state during the Third Republic, see Ewald, *L'Etat providence*; chapter 5 of Horne, *A Social Laboratory for Modern France: The Musée Social and the Rise of the Welfare State*; chapter 6 of Rabinow, *French Modern: Norms and Forms of the Social Environment*; and Topalov, *Laboratoires du nouveau siècle: La nébuleuse réformatrice et ses réseaux en France, 1880-1914*.

¹¹⁰ L'Œuvre de l'Art public. Premier Congrès international, 41.
artworks to show to the public?¹¹¹ Primarily, this section asked how art could be socially useful, and more specifically, what could be done such that art could more effectively elevate the morals of the masses. This question was addressed from a number of angles, examining both how the masses could gain greater exposure to art, and how artists could be stimulated to produce better art to show to the masses.

The lengthiest and most theoretically robust lecture given in this section came from Pierre Tempels, a Belgian judge, one of the founders of the Ligue de l'Enseignement along with Charles Buls, and the author of the 1865 publication *L'Instruction du peuple*, which formulated a curriculum that synthesized the ideas of the Ligue in thirty six propositions and was employed in a new model school that opened in 1875. In his report at the Congrès de l'Art public, Tempels addressed the question of how to develop *art public* from the perspective of education. Reflecting his background in education, Tempels' primary concern lay in the education of the public; in the context of the Congrès international de l'Art public, he expounded on art's capacity for moral education, as well as education's capacity to produce a public more permeable to the effects of art.¹¹² Other lecturers in the section put forth supplemental recommendations to incorporate art historical images into the classroom and curricula, and repeated Tempels' propositions on art making as a means of moral education. Collectively, the lectures given in this section explored the relationship that art education fomented between space, vision, learning, and morality.

If the first section of the congress asked how public authorities could promote the flourishing of serious art, Tempels' report explored a different dimension of *art public*'s development and dissemination by examining the value of art both to the public and in public.

¹¹¹ Ibid., 111.

¹¹² Ibid., 45-49.

Using a concept of the role of art in the evolution of morality similar to Guyau's, Tempels repeated Guyau's thesis that art, and beauty, in and of themselves developed individuals' morality. He refuted the ideas commonplace at the end of the century that art corrupted morality, and that its proliferation would only retard the progress that science brought to society. Rather than being a decadent practice that distracted individuals from duty, reason, and honesty, according to Tempels, art played a part in creating an admirable ideal which individuals strove to achieve in their lives. "Every man," he contended, "has in his mind an ideal of happiness, a moral ideal, and an aesthetic or artistic ideal…these three types of ideal work in solidarity to decide his conduct. If one of these ideals is influenced, all are influenced. If the aesthetic ideal is raised, so too is the moral ideal."¹¹³ Corroborating his idea of art as a moralizing force, he observed that thus far, neither religion, nor economics, nor politics, and not even the nineteenth-century's beloved science had proved effective in averting moral decline, arguing that, in the absence of nature in the modern metropolis, only art had the capacity to reach the human spirit.

If works of art had the ability to affect the morality of the public, they would do so through their location in public. That is, art would acquire a social function for Tempels once it was put in view of society. The public, and particularly the working class masses, "needed to breathe an atmosphere saturated with art and to receive a constant education through [it]."¹¹⁴ Tempels identified two ways in which art could become a source of public instruction. First, Tempels identified the potential for urban space, and the art therein, to serve this function. "The primary school [for teaching the public through art] is located everywhere. It is in the picturesque street, the artistic monuments, the statues of illustrious men, the lively fountains, in the design of street lights, of signs, of façades, in store windows, in historic cavalcades and processions, in the

¹¹³ Ibid., 45.

¹¹⁴ Ibid., 46.

regimen passing through, in music and festivals, and in all that is representation."¹¹⁵ In this sense, the entire city, its art, and its architecture, became a potential source for moral education. Its capacity to carry out this function was tied to the extent that art could be suffused throughout.

Tempels' second recommended site for the diffusion of moral education through art was the school itself. Serving as a form of public space parallel to that of the city in Tempel's framing, it was in the classroom that art could influence youth such that a properly moral public could be regenerated generation after generation. This suggestion of suffusing school classrooms with art came nearly two decades after major school reforms had been undertaken in both France and Belgium. These reforms, known as the Ferry Laws after Jules Ferry, the then Minister of Public Education and subsequent prime minister of France, created schools that were both secular and available to all, but in doing so, raised the question of whether secularism could maintain a morally fit, and sufficiently compliant public.¹¹⁶ In order to assure that the disappearance of religious values from primary and secondary education did not stem a new radicalism among the newly educated and enfranchised public, Ferry, along with the philosopher Paul Janet, philosopher and educator Ferdinand Buisson, and the physiologist Paul Bert, formulated a new curriculum, and a new program of morality — a *morale laïque* — which

¹¹⁵ Ibid., 48.

¹¹⁶ Belgium's reform occurred in 1879, while France's occurred in 1882. The Ferry Lawswere particularly renown through the francophone world, as they played a critical role in the Third Republic's larger program of both *laïcization* and the establishment of cultural uniformity throughout France, in which the role of both the clergy and local traditions would be replaced by allegiance to the state and the nation of France. While France's reforms were for the most part straightforward, in that French schools have been laïc since Ferry Act of 1882, the Belgian case is more complicated. In 1879, a bill was passed requiring Belgian secular schools to be established for the education of Belgian children, and for Church schools to be entirely defunded by the state. This lasted until 1884 when a new Catholic government was elected, and religious education was added to the formerly secular curriculum. For an overviews of French school reforms, see Raymond Grew, and Patrick Harrigan, *School, State, and Society: The Growth of Elementary Schooling in Nineteenth-Century France: A Quantitative Analysis* (Ann Arbor, MI: University of Michigan Press, 1991) and Weber, *Peasants Into Frenchmen: The Modernization of Rural France, 1870-1914.* For Belgian school reforms, see Dominique Grootaers, *Histoire de l'enseignement en Belgique* (Brussels: Editions du Centre de recherche et d'information socio-politiques, 1998).

sought to substitute the nation and the values of patriotism for the Church and the values of Christianity.¹¹⁷ "Moral education" would form one of the three prongs of French education, alongside physical and intellectual education, yet save for the reading aloud of fables and excerpts of literature, the practice or exposure to any type of art was entirely absent in this section.¹¹⁸ While geometric drawing and construction were taught as means to improve students' vocational capacities, this teaching remained in the "physical education" and "intellectual education" sections, rather than being framed as an entity that could affect students' sense of morality. Hence Tempels, and the second section of the congress on "art from a social perspective," argued that the notion of *art public* should enter the schools as well, with a new kind of artistic education, oriented toward producing aesthetic sensation, replacing — or at the very least supplementing — the abstract and rigid teaching of geometrical drawing that had pervaded French education since 1882.

In many ways, the new type of art that he sought to suffuse both through the urban realm and through the school paralleled the theory of urban planning that Buls developed in

¹¹⁷ On the development of Ferry's morale laïque, see chapters 6, 7, and 8 of Stock-Morton, Moral Education for a Secular Society: The Development of Moral Laïque in Nineteenth Century France, chapter 1 of Surkis, Sexing the Citizen: Morality and Masculinity in France, 1870-1920; chapter 2 of Patricia Tilburg, Colette's Republic: Work, Culture, and Popular Culture in France, 1870-1914 (New York: Berghahn Books, 2009); Anne-Claire Husser, Bruno Barthelmé, and Nicolas Piqué, eds. Les Sources de la morale laïque. (Lyon: ENS Éditions, 2009); and Laurence Loeffel, "Instruction civique et éducation morale : entre discipline et "metadiscipline"," in L'École républicaine et la question des savoirs, ed. Daniel Denis, and Pierre Kahn (Paris: CNRS Éditions, 2003). For a historically contemporary analysis of the teaching of morale laïque, see "Morale et civique (instruction)." Nouveau dictionnaire de pédagogie et d'instruction primaire, (1911): accessed July 27, 2015, http://www.inrp.fr/editionelectronique/lodel/dictionnaire-ferdinand-buisson/document.php?id=3228. On the methods for its teaching, see France. Ministère de l'instruction publique, "Arrêté réglant l'organisation pédagogique et le plan d'études des écoles primaires publiques," Bulletin administratif, 504 (1882) and lessons 1 and 34 of Henri Marion, Leçons de morale (Paris: Armand Colin et cie, 1884). On the political use of moral education in the Third Republic, see Elwitt, The Making of the Third Republic: Class and Politics in France, 1868-1884, 173-85.

¹¹⁸ France. Ministère de l'instruction publique, "Arrêté réglant l'organisation pédagogique et le plan d'études des écoles primaires publiques," 242-45.

L'Esthétique des villes. While Buls proposed a new type of planning that was based not on orthographic drawings but rather through the lens of individual subjectivity and perspectival vision, and which rejected the strict uniformity of Haussmannian planning and its resultant architecture in favor of an aesthetic of functionalist variety, Tempels asserted that drawing, unlike the "brusque and narrow-minded" geometric drawing taught at the time of the Congrès, did not need to be taught methodically, as a specific science to apprehend.¹¹⁹ Rather, he contended that artistic education, "like that of morality, should not be material programmed through special lessons and fixed hours." Arguing that children were naturally both observers and artists, and that these traits could flourish given a proper milieu, he argued that, just as art *public* should flourish in the city, *art public* as developed through education should permeate all aspects of schooling: history could be studied through monuments, while geography could be studied through landscape paintings.¹²⁰ This emphasis on the visual apprehension of art, in addition to its creation, was invoked during the congress as well by the composer Jules Sauvenière. Sauvenière, who primarily focused on the introduction of historical artworks into primary education in his lecture, argued that art should saturate the physical environment of the school, with walls being covered in murals and reproductions of famous works of art, based upon his idea that "to see well is to understand well, and to understand is to know."¹²¹ Above all, the purpose of drawing in the school, for participants in the international congress, was not to assure any particular proficiency, but rather, to use intuitive teaching methodologies, to "cultivate general intelligence," to teach "personal judgment," and to evolve children's "natural proclivities for the beautiful and the good" such that their sensibilities for beauty and morality became

¹¹⁹ L'Œuvre de l'Art public. Premier Congrès international, 49.

¹²⁰ Ibid.

¹²¹ Ibid., 50.

entwined in a mutually reinforcing ascent. Though the first congress was held in Belgium, interest in art public spread at the same time through Parisian intellectual and artistic circles. L'Architecture, the journal of the Société centrale des architectes françaises, Construction moderne, and L'Ami des monuments, the journal of the Société des Amis des monuments français, all reported on the congress through articles appearing in serial over the course of a number of months.¹²² In 1900, the second Congrès international de l'art public was held in Paris, organized by the Société des amis des monuments français and the City of Paris, in conjunction with the 1900 Exposition universelle. Reflecting the aims of the Société des amis, whose focus on preservation leant itself primarily to an interest in urban aesthetics and beauty rather than the relationship between the city and "the social question" the second congress, although declaring the "necessity that every form realized in public space have a educative and moral form," emphasized the morally ameliorative aspect of *art public* less than the first.¹²³ However, it focused more specifically on the contribution of built architecture to art public, as well as on the physical formation of public space (voie public), and architecture's public accessibility, a characteristic that rendered it inherently egalitarian. Justin de Selves, the then préfet of the department of the Seine, who would later hold posts as the French foreign minister, the minster of the interior, and the president of the Sénat, framed the architecture of the city as objects of art for the masses to enjoy during his speech at the conference. "Not everyone can have their own painting gallery and collections of art," he wrote, "but everyone can satisfy their inner desire for beauty through the sight of public monuments, promenades, or the streets of the quarter in which

¹²² Articles on the first and second Congrès internationaux d'art public published in *L'Ami des monuments* are as follows. Note that the reports in *L'Ami* of the second congress in 1900 are the most comprehensive reports on the event. Volume XII: 180-182, 243-237, 292-304; Volume XIII: 26-30, 180-190, 224-227, 305-313; Volume IV: 74-76, 196-223, 323-328, 374-376; Volume XV: 164-180.

¹²³ Société des Amis des monuments parisiens, L'Ami des monuments (Paris: Vol. 14, 325.

they live."¹²⁴ Charles Normand echoed these sentiments about the public and the democratizing role of architectural beauty, stating that it was "in the school of the street where one finds not only truly inescapable education, but also one that is imposed on all most equally."¹²⁵

Theories of Art and Public

The attention that the 1900 congress brought to historic buildings as works of *art public*, and the sustained interest of the Société des amis in the question of public art, with their journal, *L'Ami des monuments* serving as the official mouthpiece of the Congrès international de l'Art public from 1900 onward, did not mean that the idea of *art public* developed in France exclusively through preservation or toward that end, or that the connection between beauty and morality disappeared. By the turn of the century, Guyau's theory of social art had emerged from the cloisters of philosophic discourse to become a common terrain that could mediate the various viewpoints from which individuals or groups engaged with the city. Having rejected the notion that art's new commitment to the public should or would yield any particular style or form, the idea of *art public* garnered the attention of not only preservationists, but architects, artists, and social reformers alike.

Curiously, much of the discourse that spoke to how architecture as an aesthetic practice, in distinction to utilitarian building, could solve the "social question" was initially generated by symbolist and post-symbolist poets rather than architects themselves. In particular three of these texts written at the turn of the century— Gustave Kahn's *L'Esthétique dans la rue* (1900), and

¹²⁴ Ibid., 200.

¹²⁵ Société des Amis des monuments parisiens, L'Ami des monuments (Paris: Vol. 15, 170.

Robert de Souza's *L'Action esthétique: l'Art public* (1901), and Jean Lahor's *L'Art nouveau* (1901), — worked in conjunction with one another to bring Guyau's theory of art's capacity to morally ameliorate as social utility into contact with contemporary issues facing the city. Additionally, their work began to constitute a body of theory that proposed that formal, aesthetic, and architectural contributions were essential components in the development of public space that was physically and morally salubrious, contending that architects should have a role alongside physicians, intellectuals, and politicians in the planning of the city.

Given that one dimension of Symbolism was its emphasis on art as a separate practice from modern life, existing as an *art pure*, Symbolist poetry and the emerging practice of urbanism via *art public* might initially seem like strange bedfellows. However, while Symbolism was understood as a form of poetry conceived by its authors as entirely autonomous, by the turn of the century, particularly with Symbolist poetry morphing into a post-symbolist *vers libre* movement, poetry, beginning with Mallarmé, was increasingly conceived as an exploration of rhythm and tone more than narrative content. As such, for those working in the lineage of Mallarmé, it became imperative that poems were read aloud. In this sense, the idea of not only a public for poetry, but poetry for the public developed. In his 1901 essay "Les Origines du Symbolisme," Gustave Kahn noted that while the primary goal of Symbolist production was "to satisfy myself," the second was "that art become social."¹²⁶ Ultimately for Kahn, the Academy's criticism of symbolist poetry, and the indifference of the bourgeoisie were of little import:

There is a Fourth Estate who will learn to listen and understand...I say submit to the people these things that everyone has judged to be hermetic. They will appear entirely accessible to the public. It has been proved, and our young friends of l'Art social know it. It has been proved in the attendance of the masses on Saturdays at the Odéon and the Sarah Bernhardt theater, where Symbolist and free verse poems are heartily received, and

¹²⁶ Gustave Kahn, "Les Origines du Symbolisme," Le Revue blanche 26 (1901), 332.

would be even better received if the crowd was composed even more of the masses...it is in front of these new publics that new works of art, listened to with sincerity, will be applauded.¹²⁷

Kahn was a prolific author, publishing fifty volumes of poetry, with over eighteen hundred articles, stories, and individual poems appearing in journals such as La Vogue, which he founded, La Symboliste, Mercure de France, Art et décoration, La Revue bleue, L'Art et les artistes, La Société nouvelle, where he published his anarchist views, and many others.¹²⁸ Kahn's conviction that his poetry have a social function extended beyond his own work, influenced his ideas about the contemporary condition, broadly construed, as well. Kahn felt that although the Third Republic government in many ways framed itself as finally enacting the goals of the Revolution, the problems of the late nineteenth century were fundamentally different, and therefore had fundamentally different solutions, than those of the eighteenth century. That is to say, while the eighteenth century was dominated by "the political question," the late nineteenth century was dominated by "the social question." This meant not only that social issues were the most pressing for Kahn, but also that these issues would be solved through social movements rather than political reorganization or governmental stability as they had been in the eighteenth century. He contended that "the social Revolution will come: all of the coalitions [of individuals] will inevitably bring it about...when all of enlightened beings come together and study the problems without prejudice, through the most rigorous methods of science and of the principle of universal solidarity."¹²⁹ While some of these coalitions might be drawn from the working

¹²⁷ Ibid., 347-48.

¹²⁸ Françoise Lucbert, and Richard Shryock, "'Le Rêve est indistinct de la vie': Engagements ésthetiques et sociaux de Gustave Kahn," in *Gustave Kahn: un écrivain engagé*, ed. Françoise Lucbert, and Richard Shryock (Rennes: Presses universitaires de Rennes, 2013), 17.

¹²⁹ Gustave Kahn, "Courrier social," La Vogue 1, no. 1 (1886), 27-28.

classes, in Kahn's mind, artists, acting independently of the state, were equally constitutive of groups who could bring about social change.

This emphasis on the actions of individuals to bring about social change, rather than structural or political reforms, crossed over into his tract on urbanism, *L'Esthétique de la rue*. Many of Kahn's thoughts on change in the city mirrored those of Charles Buls, with whom Kahn became familiar when he temporarily relocated to Brussels in 1895. Nearly repeating Buls, whose competitions for façades and street furnishing Kahn openly praised, he argued that cities need more visual variety, more polychromy, less gridded planning, better light, more beautiful street furniture, and so forth.¹³⁰ However, while Buls stopped at merely identifying the city itself as an object that could be beautiful, Kahn went further. After discussing the urban utopias and critiques from the second half of the nineteenth century put forth particularly by literary figures, from Tony Moilin's 1869 socialist utopia, *Paris en l'an 2000*, to Zola's critiques of Paris in the Rougon-Maquart novels, to Paul Verlaine's *Le Nocturne*, Kahn called on architects to finally comprehend the city as an object that they could design, and to enact the physical changes to the city needed to effect the social realm.¹³¹

On the one hand, Kahn chided architecture for having been the only art form that had neither revolutionized itself over the course of the nineteenth century, nor addressed the urban milieu in any way. On the other, he acknowledged that architects' hands had been bound particularly tightly by both the capitalists who were ultimately responsible for the realization of architects' designs, and by the state and its imposition of strict regulations on building heights and overhangs as part of Haussmannian planning. For Kahn, these conditions created an

¹³⁰ Idem, L'Esthétique de la rue, 169.

¹³¹ For Kahn's discussion of urban utopias, see chapter 9, "La Rue des utopies." Idem, "Courrier social," 139-50. For Kahn's communiqué to architects, see chapters 10-14, and 14 in particular. Ibid., 151-214.

architecture "inspired more by political considerations that social ones."¹³² As a result of this, he observed that, in the context of urbanism, "at the moment, hygiene is God, the doctor, his prophet, and the architect follows their orders."¹³³

However, Kahn took an optimistic position on architecture's future, believing that it would in fact persist as a profession and an art once aesthetics became universally recognized as a social *necessity* rather than a luxury.¹³⁴ He saw the beginning of a change in attitudes towards aesthetics in the work of Victor Horta and Paul Hankar, as well as that of French architects de Baudot, Plumet, Bonnier, Benouville, Guimard, and Schoellkopf, whose work he held up as exemplary initial forays in the development of a sufficiently aesthetic public space.¹³⁵ Additionally, Kahn foresaw a new form of public space, brought about by democracy and industrialization's capacity to reduce working hours, as the primary site for architects to intervene in the social realm. As the palace and the church faded in social importance, and in their physical presence in the city as well, these spaces could be replaced by *maisons du peuples*, theaters for the masses, and vast halls to serve all functions imaginable that might arise libraries, smoking lounges, a small museum, and so forth --- where the new public would recognize and hence create itself through congregation in a space of its own. Then, architects would have the opportunity to design not only new buildings which, through "instructing by image" would participate in the social realm, but also new architectural aesthetics: "And for all [of these functions], and for the appropriate facade, which can translate the the idea of the house

¹³² Kahn, L'Esthétique de la rue, 207.

¹³³ Ibid., 209.

¹³⁴ Ibid.

¹³⁵ Ibid., 178-86.

for all, into a home for all, and a home for mental life, it will be necessary to create new forms derived from neither churches nor palaces.¹³⁶

The relationship between the public, *art public*, and public space is further developed in Robert de Souza's *Action esthétique: Art public*, originally published in *La Grand revue* in 1901. De Souza, like Kahn, was a post-Symbolist poet who is known primarily for his theorizations and production of *vers libre* poetry. Yet de Souza was also invested in questions of urbanism for much of his life.¹³⁷ In the 1890s, he was an active member of the Société des amis des monuments parisiens. In 1901 he published in *L'Illustration* the article "Les Enlaidissements de Paris," a plea that echoed those of the Société des amis to stop the "vandalism" of Paris, reacting in particular against the posting of advertisements on buildings walls.¹³⁸ Later de Souza would deepen his commitment to urbanism, founding in 1908 the Section d'hygiene urbaine et rurale of the Musée social, along with Eugène Henard, Jules Sigfried, Georges Benoit-Lévy, and Georges Risler.¹³⁹ In 1913 he wrote the deceptively named *Nice, Capitale d'Hiver*, one of the first works offering a comprehensive urban plan for a real, rather than imagined, city.¹⁴⁰ In 1929 he

¹³⁶ Ibid., 212.

¹³⁷ De Souza's interest in both the city and poetry came together through poems exploring rhythm, and well as his explorations through the Collège de France's new experimental phonetics lab on how the sounds of the city could create new structures in verse. For de Souza's theories of poetry at the turn of the century, see de Souza, Robert, *La Poésie populaire et le lyrisme sentimental* (Paris: Société du Mercure de France, 1899). On his involvement with the experimental phonetics lab, see Robert Michael Brain, "Experimental Phonetics, Vers Libre, and Modernist Sound Art," *Grey Room* 43 (2011), 102-03.

¹³⁸ de Souza, Robert, "Les Enlaidissements De Paris," L'Illustration 117, no. 3031 (March 30, 1901).

¹³⁹ Rabinow, French Modern: Norms and Forms of the Social Environment, 254. On the Section d'hygiéne urbaine et rurale more generally, see Horne, A Social Laboratory for Modern France: The Musée Social and the Rise of the Welfare State, 250-68.

¹⁴⁰ de Souza, Robert, *Nice: capitale d'hiver: regard sur l'urbanisme niçois 1860-1914* (Nice: Serre, 2001).

formulated, through the Musée social, another urban doctrine in his "Dix commandements d'urbanisme."¹⁴¹

De Souza's essay functions primarily as a means of further specifying, in the wake of the international congresses on *art public* and as the term gained popularity, the nature of *art public* and its social role. He did so in part by clarifying common misconceptions of the term. For example, he contended that despite its inclusion of the term *public*, art public could not be defined in opposition to art privé, or privately owned art, given that art owned by individuals or private institutions was often accessible in public to the public. Additionally, he maintained that art public should not be confused with another term gaining popularity at the time, "art social." For de Souza, all art was, harkening back to Guyau, a "communication" between the object and its perceiver. Thus by virtue of its existence, all art was social. Finally, although some might say that art public was a mere contraction of "art applied to the street and to objects of utilité publique," he argued that in fact, art public was not an art applied to anything, and that the application of art to objects of utility should, in particular, be avoided. He maintained that when art was conceived as something to be applied to other objects, it only made them more ugly. Rather, "the aesthetic impression of an object is determined either by the object itself if it has a character, or, by our sentiment if the neutral nature of the object permits. The goal of art public in not to 'apply' art 'to the street' or elsewhere, but instead to stifle the tendency of utility to weaken, to deform, or to annihilate this expression of beauty that could otherwise pervade all things."¹⁴² This is not to say that de Souza condemned the idea of utility. Merely, he refuted the notion that only the useful was a necessity, and that beauty was, by definition, a luxury. It was this false division between the useful and the beautiful, a result, in his mind, of Jacques-Louis

¹⁴¹ Idem, "L'Urbanisme en dix comandements," Le Musée social, 36, no. 4 (1929).

¹⁴² Idem, L'Action esthétique: L'art public (Paris: H. Floury, 1901), 10.

David's "spurious theories of imperial classicism...which no longer renewed the links which, in all other eras, joined the most humble trade to the most magnificent art," that de Souza blamed for the social problems that characterized nineteenth century France. As a result of art's separation from utility, and its association with luxury rather than being seen merely as a "simple manifestation of our sensibility," with no relationship to the economic value of an object, art had become confused with opulent indulgence. As a result, objects that were intended to be useful, which in previous times would have also been artistic, became merely, and solely, useful, and beauty became absent from everyday life.

What then was *art public* for de Souza? Simply, it was "art which is not indoors, but rather outdoors."¹⁴³ Although this definition may seem facile, embedded within it was a theory regarding the relationships between private space and public space, and between the individual and the public. As inspiration for an art for the exterior, de Souza drew attention to the recent advances in the art and design of the interior and its objects, which were due in large part, he noted, to the initiatives of John Ruskin.¹⁴⁴ In this new realm of the interior, not only were art and utility fused in single objects, but the ability to choose among a number of these objects with which to furnish one's home furthered a new subjectivity in which people conceived of the interior, both useful and beautiful, into the space of the street, colonizing not only objects within the street, such as kiosks, lampposts, statues, and so forth, but the building façades as the bounding walls of the space as well. However, rather than imparting a sense of individuality, de Souza's essay suggested that this art that was in public, and equally accessible to all of the

¹⁴³ Ibid., 7.

¹⁴⁴ Ibid., 27-28.

¹⁴⁵ On the relationship between the interior, design, and psychology in fin-de-siècle France, see Silverman, *Art Nouveau in Fin-de-Siècle France: Politics, Psychology, and Style.*

public, would, through shared exposure to a "concordant and unanimous" aesthetic, produce the subjectivity of a unified public.¹⁴⁶

De Souza noted that in Britain, where the concept of art public had yet to develop, "the British concerned themselves so thoroughly with interior decoration as if nothing mattered except the idea of home ("le foyer du home"), a concentration of their intimate life that they carry with them wherever they go."¹⁴⁷ British houses, according to de Souza, reflected the individualism of their inhabitants, such that cities were mere agglomerations of individual houses and individual people, without any sense of commonality. People stepped out of their homes, only "for a practical reason or a cause, an official procession, or a preacher standing on a chair, or an agreement of interest long in the making for a collective defense through a meeting."¹⁴⁸ Absent from British life were the everyday activities one would find in Paris: people meeting in the street for pleasure or "flows of strolling crowds who make their own streets, and who themselves are the cherished spectacles." Conversely, the development of art public --- the spread of art into "the outdoors" conceived as an artistic interior turned inside-out - would itself create both a public and a public space. Hence for de Souza, art public — an art that would be executed for the populace by independent architects and artists --- redefined the idea of public. In the eyes of the state, public art had been that which was either commissioned by the state, or which was installed in state buildings.¹⁴⁹ More broadly and in keeping with the Revolutionary notion that the state was isomorphic with its citizens, for much of the nineteenth century, the

¹⁴⁶ de Souza, Robert, L'Action esthétique: L'art public, 27.

¹⁴⁷ Ibid., 29.

¹⁴⁸ Ibid., 30.

¹⁴⁹ For an example of a state conception of public art, see Marie Jeannine Aquilino's article on "public art" projects in the Third Republic, in which public art is construed as painting — either framed or murals — which would adorn the interiors of state buildings. Marie Jeannine Aquilino, "Painted Promises: The Politics of Public Art in Late Nineteenth-Century France," *The Art Bulletin* 75, no. 4 (1993).

state had held a monopoly on the term *public*. For example, the term *public* in *monuments publics, travaux publics,* and even *utilité publique*, all referred to the state rather than the populace. However, *art public* allowed artists and architects the ability to circumvent the state, and in some ways to replace the state, in their relationship to the populace. In doing so, art, the public, and, by extension, public space would have the capacity to establish their own legitimacy.

If Kahn's L'Esthétique de la rue alerted architects to the social need for the beautification of the city, and de Souza's Art public examined the spatial dimensions of art public, arguing that art could create a new kind of communal space for the public in the metropolis, Jean Lahor's L'Art nouveau underscored most directly of these three texts art's social role, delineating a relationship between the permeation of everyday life with art and the moral refinement of the public. Lahor, who used his given name of Henri Cazalis while acting in his capacity as a medical doctor or judge and Lahor for his artistic and cultural endeavors, which included the founding of both the Société pour la protection des paysages français in 1901 and the Société de l'art populaire et d'hygiène, wrote his L'Art nouveau as a response to the decorative arts and architecture that were on display at the 1900 Exposition universelle. Of these three texts, Lahor's devoted the most space to describing the various designs and wares, from both France and other European countries, that are now traditionally associated with the Art Nouveau movement, such as those of Tiffany, Lalique, Gallé, Horta, Hankar, as well as Sigfried Bing's pavilion. However, after his reporting, the essay concluded with an elaboration of Lahor's views on the political function of art in the age of democracy. These thoughts on art's social role were expanded in his subsequent publications, Les Habitations a bon marché et un art nouveau pour le peuple (1903) and L'Art pour le peuple à default de l'art par le peuple (1904).

For Lahor, the dissemination of art throughout both life and space not only had a social role, but a specific social role at that: to reduce growing class inequality, thereby at least in part solving "the social question." Curiously, given his interest in art as an equalizing force, Lahor dated the decline of art and the transformation of laboring classes into "crowds without taste, without education, unconscious and heedless of all ideals" to 1789 and the rise of democracy.¹⁵⁰ For Lahor, this was the moment when art disappeared from everyday life. Although not explicitly stated, one can infer that this was in large part due to the dissolution of the guild system, as well as the breaking apart of traditional social structures. Lahor's attack on democracy, particularly as elaborated in his 1902 extension of his L'Art nouveau essay, L'Art pour le peuple à defaut de l'art par le peuple, was not a criticism of democracy's ideals, but rather, of its ineptitude in realizing those ideals. He questioned why democracy should be promoted when it had failed to achieve true equality by making "everyone a part of the aristocracy, and to distribute to all, to the greatest extent possible, and even if one wants, the impossible, the forces, the virtues, the pleasures, and the joys, of the highest degree, which in the past had been selfishly reserved for only some."¹⁵¹ Additionally, Lahor observes that the art of countries more democratic than France is proportionally more debased and less refined, and that the best art from history, such as that from Athens, Florence, and Venice, had been produced under non-democratic governance. All that French democracy had produced in the realm of art, according to Lahor, was, first, an art that was "truly pitiable," and second, an increasing seclusion of art in the private spaces of the rich, from the collections the Rothschild's and American millionaires in state institutions such as the Louvre or the Bibliothèque nationale,

¹⁵⁰ Jean Lahor, *L'Art pour le peuple à default de l'art par le peuple* (Paris: Larousse, 1902), 89-90, 92.
¹⁵¹ Ibid., 6.

which existed in a parallel world to that of the laboring classes.¹⁵² Consequently, those who were not a part of the aristocracy or the bourgeois class were submitted to the reign of utility, under which art had entirely disappeared. With this, "once people reach adulthood [now], they have lost, along with their insoluciance and primitive instincts…above all their creative faculties," creating a cycle in which art was removed further and further from the lives of the French public.¹⁵³

Class inequality for Lahor was characterized by both the dry, dull, and exclusively "useful" spaces of the working class, as well as the social problems they accompanied. Lahor's antidote to this condition, given his complete lack of faith in the political system to ameliorate social conditions, was to paternalistically create an art for the people to serve as an "aesthetic hygiene" which, "as much as light and air and daily bread, and as much as science and justice, is as indispensable to the people as it is to us."¹⁵⁴ His envisioned a society in which "everywhere that one entered, from the school to the train station to the library to economical restaurants, one would find an understated and apt decoration, displaying excellent yet simple taste, which would, little by little, educate one's eyes and one's mind."¹⁵⁵

Kahn, de Souza, and Lahor all insisted on the capacity of art to better the morals of the French people. Yet unlike Kahn with his anarchist leanings, or de Souza who sought to give, to some degree, legitimacy to the public, Lahor's intention with imbuing the lives of the working classes with a form of simple art, was to improve the physical and moral conditions of the working classes so as to pacify them, pre-empting any political movement that could truly

¹⁵² Ibid.

¹⁵³ Ibid., 91.

¹⁵⁴ Ibid., 6

¹⁵⁵ Ibid., 102.

disrupt French society.¹⁵⁶ This was evident in his disagreement with William Morris over the relationship between art and the public. While both agreed that society needed an art *for* the people, Lahor vocally disagreed with Morris's contention that art should also be made *by* the people.¹⁵⁷ Art, for Lahor, was to be democratic, in the sense of being paternalistically distributed to all, such that society would not be. In Lahor's vision, the function of art for the people "would be to resolve, without noise, and without violence, through a peaceful evolution, if not the 'social question' (as there will always be one or two social questions), then at least of that which is the most necessary and the most urgent to reform in the state of our societies, the most grand and most unjust inequality which subsists between the fate of the largest numbers and that of others, to diminish in one word the distance that still separates the class who thinks of itself, and with one calls superior, from that which thinks of itself and is called inferior."¹⁵⁸

Bringing Art to Urbanism

In 1901, Paul Planat, editor of *Construction moderne*, reported on the movement that he called "haute esthétique — art public." His article payed attention specifically to the work of Lahor and de Souza, but also neatly summarized the implications for the profession of architecture of this new movement to develop art for the public, in public. Planat, able to assess the relevance of *art public* from a more distant perspective and to understand it in relationship to other existing practices, presciently suggested a marriage of architecture, with its capacity for

¹⁵⁶ Note that in 1901, tensions between socialists and anarchists and conventional Third Republic liberals ran high. See Christopher Ansell, *Schism and Solidarity in Social Movements: The Politics of Labor in the French Third Republic* (Cambridge: Cambridge University Press, 2001).

¹⁵⁷ Lahor, L'Art pour le peuple à default de l'art par le peuple, 9.

¹⁵⁸ Ibid., 94.

moral improvement, with the hygiene movement, which, since the 1870s, had been working towards a physical improvement of the populace:

Beauty has a moral action; artists must become collaborators with hygienists and philanthropists to better the lives of the people; public taste must be cultivated by all means available. At first glance, one might be a bit surprised in comprehending this close relationship between hygienists and artists...why would hygienists be involved with this matter? Because hygienists are concerned with the material well-being of people, just as philanthropists are; and it is no exaggeration to say that it is a good idea to improve their moral well-being at the same time. One goes readily in the company of the other.¹⁵⁹

Planat's attempt to mobilize architects to work alongside hygienists is notable not only for his suggestion of this combination, but additionally, and by extension, for its foreshadowing the birth of the practice of urbanism. Planat's formulation of this new hybrid practice omits any explicit mention of the scale or territory at which *art public* and hygienism could collaborate. While one can imagine how these two practices could be deployed on a single building, both in fact were practices that operated spatially, and were theoretically most effective at the scale of the city. The work of hygienists, which addressed issues that today would be considered matters of epidemiology and public health, was inherently spatial. Even the arguments hygienists had been putting forth since the 1870s for cleaner, affordable habitations with greater access to air and light could not operate in only a handful of homes in order to be successful. Rather, in order to stem contagions, which were always in a state of movement through space, these changes needed to occur across the entirety of the city if they were to improve the health of the population.¹⁶⁰ At the same time, *art public* too had a spatial orientation, with its efficacy contingent on its distribution across and throughout a population. As previously discussed,

¹⁵⁹ Paul Planat, "Haute esthétique -- l'art public," La Construction moderne, no. 44 (1901), 49.

¹⁶⁰ See Aisenberg, Contagion: Disease, Government, and the "social Question" in Nineteenth-Century France.

architecture at the time, as taught at the École des Beaux-Arts, had yet to explore its relationship to its surroundings, continuing to focus on the composition of individual buildings.¹⁶¹ However, that the art of architecture could operate on a population, in that same way that hygienists could, gave rise to the idea of an architect who would design at the scale of the city.

Contemporary scholarship has to a great extent focused on the "scientific" aspects of the development of urbanism as a practice at the beginning of the twentieth century, and to a lesser extent, the technocratic. The discourse of art public and its idea of the social engagement of architecture through aesthetics has been, in a number of ways, written out of the history of urbanism, with early urbanism framed exclusively as a precursor to the scientistic and "functionalist" urban planning schemes produced by Modern architects in the wake of World War I. For the contemporary architect, this omission interestingly reverses the surprise Planat assumed architects of 1901 might have experienced in reading his prescription. At the turn of the century, Planat and his contemporaries still considered architects to be artists --- the same type of "artists" who launched the artists' protest of the Eiffel Tower, affiliated more closely with painters and sculptors than with any technicians. Hence collaboration with figures who pursued their agendas with the claim of scientificity would have perhaps seemed curious. Yet given the observation, commonplace at the time, of French architecture's impotence, coming as a result of its preoccupation with formal composition, and this observation's repetition throughout many twentieth century Modernist histories, twenty-first century architects "might [also] be a bit surprised at comprehending this close relationship between hygienists and artists." That is to say,

¹⁶¹ The design principles taught at the École des Beaux-Arts at the turn of the century are best represented by then *professeur du théorie d'architecture* Julian Guadet's *Éléments et théorie de l'architecture*, published in four volumes between 1901 and 1915. Guadet's text instructed students in the typological design of particular programmatic functions, in many ways returning to the theories of Jean-Nicholas Louis Durand. On Guadet, see chapter 1 of Reyner Banham, *Theory and Design in the First Machine Age* (Cambridge, MA: MIT Press, 1980). Note that Tony Ganier's scandalous *Cité industriel* was submitted after his Prix de Rome sojourn in Rome in 1904.

a contemporary reader might have expected Planat to have asked: "why would [nineteenthcentury French] *architects* be involved with this matter [of bettering the lives of the people]?" The answer to this lies in the late nineteenth-century idea of art and aesthetic sensation improving morality.

Around the time that Planat's article appeared and soon thereafter, individuals trained as architects at the École des Beaux-Arts did in fact begin to turn to the city as a site of intervention. In one regard, architects continued to develop *art public*'s idea of suffusing the city with aesthetics. The idea of the moral utility of aesthetics as developed in the 1880s through philosophy had become naturalized to the extent that architects could simply assert that their art was a social good, without explanation or contention. This new fact was used by architects as a means to justify greater freedom to design in the face of the strictures of both Haussmannian regularisation and the Beaux-Arts system, and was in some cases deployed as much to morally ameliorate the architectural profession as to do so for the public.¹⁶² For example, in 1902, the architect-voyer en chef of Paris, Louis Bonnier, successfully proposed to relax the Haussmannian building regulations that had ensured both the dictatorship of architectural uniformity in much of recently constructed Paris and in many ways, the social irrelevance of architects. He argued in his report that "aesthetics (*l'esthétique*) are for the people, not a luxury, but a need and a right just the same as hygiene."¹⁶³ Yet from this, it was unclear if Bonnier felt that it was the public that needed architecture, or architecture that needed a public.

¹⁶² On the significance of the word *regularisation* as a means to describe the overarching desire to create a uniform, standardized, and regulated city through Haussmann's renovations of Paris, see Françoise Choay, *The Modem City: Planning in the Nineteenth Century* (New York: Braziller, 1969), 15.

¹⁶³ Louis Bonnier, Conférences faites dans l'hémicycle de l'École nationale des Beaux-Arts sur les réglements de voirie (Paris: Librarie Générale de l'Architecture et des Arts Décoratifs, 1903), 12.

This relationship was somewhat clearer in Franz Jourdain's 1910 article, "Paris! Beau Paris!," which advocated for the spread of architecture into public life, echoing the original principles of the *art public* moment and adapting them to a time in which modernization was changing the physical environment of the city even more intensely. Jourdain began by admonishing the "absurd education" of the École des Beaux-Arts which, "under the pretext that that he who holds a brush, a pen, a chisel, or a compass is cut from a different cloth than the rest of humanity, has erected an impenetrable wall between itself and the public — a public which it thinks should be ignored, and to some degree, despised."¹⁶⁴ As an alternative, he contended that architects, rather than "decrying the contemporary utilitarianism, which was allegedly making the capital uglier and uglier," should instead take on the design of these new technologies and industrial objects of the modern city:

The savant, the industrialist, and the inventor don't have to be concerned with aesthetics, unfortunately. It is thus up to the man of taste...to adorn, to transform, and to correct the crude monster that is presented to him. If the trolley system leaves a disagreeable impression and wounds our instincts of harmony, it is the fault of the artist who did not deign to create an interesting form for its posts, which, treated by a man of genius or even just of talent, could have been part of our urban aesthetics...the abominable and egotistical doctrine that says that the useful destroys the beautiful does not even merit discussion.¹⁶⁵

In another regard, architects began to seek out ways that they could design not only the objects and surfaces of the city, but additionally, the city itself, framing themselves not only as architects, but as *architectes urbanistes*. In 1911, this title was confirmed with the founding of the first professional society of urbanists, the Société français des architectes urbanistes by seven architects — Donat Alfred Agache, Jacques-Marcel Auburtin, André Bérard, Ernest Hébrard,

¹⁶⁴ Frantz Jourdain, "Paris! Beau Paris!," Touch à tout, no. 3 (1910), 331.

¹⁶⁵ Ibid., 332-33.

Léon Jaussely, Albert Parenty, and Henri Prost — a forestry engineer and conservator of Promenades and Plantations for the city of Paris, Jean-Claude-Nicholas Forestier, and a landscape architect, Edouard Redont.¹⁶⁶ Urbanism, as it was developed in the early twentieth century, developed as architects began to associate themselves with the doctors, statesmen, and philanthropists who advocated for affordable and clean workers housing and urban hygiene through he Musée social as well as social scientists who studied contemporary problems besetting the city.

Particularly, architects became involved in the Collège libre des sciences sociales (CLSS), an independent institution of tertiary education founded in 1895 where studies focused on contemporary social, economic, and political questions, through instruction in subjects such as statistics, geography, history, and social research methodologies.¹⁶⁷ Initially, architects such as Agache sought out contact with the collection of social scientists that formed the school as a supplement to their education at the École des Beaux-Arts. However, this involvement did not involve the submission of architecture and aesthetics to the social sciences. As part of the school's orientation toward contemporary social issues, in 1897, the school solicited Eugène Müntz, an art historian, head archivist at the École des Beaux-Arts, founding member of the Société des amis des monuments, and member of the Académie des inscriptions des belles-lettres, to teach a course on "The Social Action of Art."¹⁶⁸ In 1899, the philosopher and political

¹⁶⁶ Catherine Bruant, "Donat Alfred Agache (1875-1959): L'Urbanisme, une sociologie appliquée," in *Aux Débuts de l'urbanisme français*, ed. Vincent Berdoulay, and Paul Claval (Paris: L'Harmattan, 2001), 133n3. In 1921 the name of this organization was changed to the Société française des urbanistes.

¹⁶⁷ Idem, "L'École d'art public du Collège libre des sciences sociales: une formation à l'urbanisme comme «sociologie appliquée»," *Le Télémaque* 33, no. 1 (2008). Similar schools run independently of the state at the time were the École libre des sciences politiques, which would later become Sciences Po, and the École speciale d'architecture, founded in reaction to the 1873 reorganization of the École des Beaux-Arts, which still operates under that name today.

¹⁶⁸ Ibid., 87 and Bruant, "Donat Alfred Agache (1875-1959): L'Urbanisme, une sociologie appliquée," 134-35.

theorist Georges Sorel developed work on the social value of art and architecture in the context of the school.¹⁶⁹ In 1901, Müntz was made head of a short-lived aesthetics section of the school, and in 1905 Agache began to teach a social history of the Beaux-Arts, titled, "Art Explained by Social Science. Intervention of an Analytic Method Based on Observation, Considering the Ensemble of Social Facts and the Relationship to the Artistic Phenomenon."

It was this incursion of architecture, art history, and aesthetics into the social sciences that eventually yielded the pedagogical institutionalization of urbanism itself, through the formation of the École supérieure d'art public and later, the Institut d'urbanisme. The first course to explicitly address urbanism, titled "Urbanism — Applied Sociology" was taught by Agache in 1915 at the CLSS. Soon thereafter, particularly in reaction to the destruction caused by the world war, the Belgian architect Charles Patris organized the new École supérieure d'art public, a collaboration between the Belgian and French governments which would teach a general practice of architecture alongside a course in the "social art of urbanism."¹⁷⁰ Although the need for practitioners of urbanism escalated due to the need to reconstruct French cities after their destruction, as the war intensified, the scope of the school was reduced to lectures only, for economic reasons. Upon its opening in 1916, the school's primary goal was "the reconstitution of devastated regions." However, "its ambition," according to its first bulletin reporting on the activities of the school, was, "more importantly, to collaborate towards the amelioration of our country in its entirety. We seek to develop in all realms the reign of rational ideas of hygiene, of the well-being, and of beauty in the planning of city, towns, and villages."¹⁷¹ Georges Risler, a

¹⁶⁹ On Sorel's views on the social value of art, see Georges Sorel, "La Valeur sociale de l'art," *Revue de métaphysique et de morale*, 9, no. 3 (1901).

¹⁷⁰ Bruant, "L'École d'art public du Collège libre des sciences sociales: une formation à l'urbanisme comme «sociologie appliquée»," 96.

¹⁷¹ L'École supérieure d'art public, L'Art public (Paris: L'École Supérieure d'Art Public, 1917), Vol. 1, 4.

social reformer from a bourgeois industrialist family was the president of the Committee of Directors, while Louis Bonnier, who now occupied the position of *inspecteur générale des Services techniques d'architecture et d'esthétique et de l'extension de Paris* and was involved in many associations pertaining to architecture and urbanism, presided over the Council of Professors.¹⁷² The faculty of the school included, among others, the architects Agache, Léon Jaussely, Julien Polti, and Adolphe Dervaux, the art historians Léon Rosenthal and Camille Enlart, the engineer Jean-Claude-Nicholas Forestier, and the writer and regionalist activist, Jean Charles-Brun. The lectures given combined material from art history, architecture, aesthetic theory, and economics, but above all introduced many topics whose themes focused on the planning of the city, which could only be described as urbanism.¹⁷³

¹⁷² Georges Risler was active in a number of social reform associations. He founded the Association française des cités-jardins, was a member of the Alliance d'hygiène sociale, president of the Comité des expositions française d'économie sociale, vice-president of the Section on Urban and Rural Hygiene at the Musée social, vice-president of the Société française des espaces libres et des terrains de jeux, honorary president of the Société française des architectes urbanistes, member of the Société française des habitations à bon marché, and president of the Commission supérieure de l'amenagement des villes au sortir de la guerre, as well as of the Union des fédérations d'organismes HBM. Bruant, "L'École d'art public du Collège libre des sciences sociales: une formation à l'urbanisme comme «sociologie appliquée»," 95n68. Louis Bonnier, in addition to the École supérieure d'art public, was also involved with the Musée social Section on Urban and Rural Hygiene, the Société des architectes urbanistes, the Association des techniciens et hygiénistes municipaux, la Renaissance des cités, and la Société des architectes diplômés par le gouvernement. See Bernard Marrey, *Louis Bonnier: 1856-1946* (Paris: Editions Mardaga, 1988), 84-86.

¹⁷³ The lectures planned for the first year of the school's existence were as follows: 1. Léon Jaussely, Theory of Urbanism; 2. Léon Rosenthal, General Aesthetics; 3. Paul Juillerat, Urban Hygiene; 4. Jean Charles-Brun, The Character of Towns and Regionalism; 5. Marcel Auburtin, Rural Towns; 6. Oscar de Waele, General Economy of Reconstruction; 7. Hubert Marcq, Hygiene and Aesthetics; 8. Jean-Claude-Nicholas Forestier, Gardens, Trees, Open Spaces; 9. Raoul de Clermont, Urbanism and Legislation; 10. Paul Vorin, Rationalism and Art; 11. Raphaël Verwilghen, Cities and Garden-Cities; 12. Adolphe Dervaux, Regionalist Architecture; 13. Charles Patris, The Essential Factors for a Renaissance of *Art Public*; 14. Charles Plumet, Materials in Architecture; 15. Alfred-Donat Agache, The City Through the Ages; 16. Julien Polti, The Causes and Effects of Regionalism in Architecture; 17. Henri Blanchard, How to Organize the Reconstitution of Cities; 18. Louis Gauthier, Sanitation of the City; 19. E. Van Volsom, Construction of Streets; 20. Camille Enlart, Monumental Sculpture of the Middle Ages; 21. Oscar de Waele, Labor and New Forms of Wages; 22. M. Sabine, Acoustic Influence of Materials. L'École supérieure d'art public, *L'Art public*, 6.

At the same that the École d'art public opened its doors, so too did the new Institute d'histoire, de géographie, et d'économie urbaines, a new incarnation of the library of public works of the City of Paris. The Institute was placed under the direction of Marcel Poëte, archivist of the library since 1903, as well as the chair of the history of Paris at the École practique des hautes études.¹⁷⁴ In contrast to the École supérieure d'art public, the Institute, and more specifically, the École des hautes études urbaines (EHEU), founded within the Institute in 1919, focused not on the formation of a profession of urbanists, but on the study of the city and its various issues. In 1924, it was integrated into the faculty of law at the Sorbonne, where it became known as the Institut d'urbanisme. As for the École supérieure d'art public, initially it seemed that the teaching of urbanism would disappear, as the school was dissolved one year after it was opened. However, in 1921, in the wake of the 1919 loi Cornudet which mandated urban planning of both urban reconstructions and new urban developments throughout France, Agache and Rosenthal revived the school, now simply called the École d'art public, under the umbrella of CLSS. In 1922, the name of the school disappeared once again, with the École d'art public fulling merging with CLSS. Echoing Planat's prescription nearly two decades earlier, the curriculum of urbanism that had been taught through the École d'art public was now taught under the name "Technologie et Esthétique."¹⁷⁵

¹⁷⁴ Gérard Chevalier, "L'Entrée de l'urbanisme à l'université: la création de l'Institut d'urbanisme (1921-1924)," (2000), 99-100. On Poëte and the various institutions of urbanism that he presided over, see Donatella Calabi, *Marcel Poëte et le Paris des années vingt: aux origines de l'histoire des villes* (Paris: Editions L'Harmattan, 1997).

¹⁷⁵ Bruant, "L'École d'art public du Collège libre des sciences sociales: une formation à l'urbanisme comme «sociologie appliquée»," 95n68.

In 1910, Le Corbusier, still in his hometown of Chaux-de-Fonds, began a manuscript titled *La Construction des villes.*¹⁷⁶ Fourteen years later, he would publish his first book to explicitly address the city: *Urbanisme* — translated in English as *The City of To-morrow*.¹⁷⁷ In the years between, the *Construction des villes* manuscript underwent five major revisions. The first three of these were undertaken in close dialogue with his teacher Charles l'Eplattenier. The second two came after his Corbusier's "voyage to the East," as well as his rupture with l'Eplattenier. The final 1915 version was significantly pared down, having both eliminated a lengthy case study of Chaux-de-Fonds, a section on cemeteries, and another on garden-cities, and generally reduced the amount of verbiage even when the structure remained in tact. It was this 1915 revision that would serve as a foundation for *Urbanisme*.¹⁷⁸

Examining the manuscripts of *La Construction des villes*, along with an editorial that Corbusier published in 1910 in the midst of preparing the manuscript, titled "Art et utilité publique," allows us not only to trace Corbusier's thoughts on the city over this period of time, but additionally, provides context for the connections between art, aesthetics, and the city that have been explored in this chapter and the post-World War 1 architectural avant-garde. *Urbanism*, which presented both his utopian "ville contemporaine" and his Plan voisin which famously was to raze the center of Paris in order to build tall towers connected by a new circulation raised ground plane, not only shocked the public with its radical proposals, but also explicitly argued against the relatively picturesque planning principles put forth by figures such

¹⁷⁶ Le Corbusier, La Construction des villes (Lausanne: L'Age d'homme, 1992).

¹⁷⁷ Le Corbusier, The City of To-morrow and its Planning (London: The Architectural Press, 1971).

¹⁷⁸ On the relationship between *La Construction des villes* and *Urbanisme*, see H. Allen Brooks, "Jeanneret and Sitte: Le Corbusier's Earliest Ideas on Urban Design," in *In Search of Modern Architecture*, ed. Helen Searing (Cambridge, MA: MIT Press, 1982).

as Charles Buls in the 1890s, which called for perspectival rather than planometric planning and the use of a variety of street forms, including curves, based on the terrain.

However, in laying out his "*Principes généraux*" at the beginning of the 1910 manuscript, Corbusier, perhaps surprisingly, evoked the principles put forth by Kahn, de Souza, Lahor, and Jourdain, and perhaps above all Guyau, with his focus on the sensations produced by beauty. The section bears repeating at length:

Experiencing pleasurable emotions, that is the joy of life. The power, the task of Art, is to awaken the sentiments...the city is the field of action where society lives and dies. The issue of its decoration is thus the search for evocative paths of sentiment.

Forms and colors awaken the sensations and provoke emotions...the extent of the beauty of a city will depend on the degree of imagination that will preside over the grouping of its various elements. This matter of plasticity in this endeavor is equally delicate as that of a sculptor. The same way that an immortal marble statue is made from a similar material to marble in a commercial use, a glorious city is built of stone, of mortise, and of iron, just as is a city where ugliness reigns...

The plan of a city is above all a work of art. In realizing this, the artist will be inspired by the same laws that govern the other arts: laws of appropriateness, balance and variety. One will thus keep in mind that that which adds to the emotion of the heart, and the rapture of the spirit, *does much with little*. The opposite would be insanity — the insanity of our era, which mistakenly sees beauty as a surplus, and measures emotion by the size of the budget...

One's aesthetic taste impels one to choose, between two solutions equally practical, the one with the capacity for *more* beauty.

Architect, engineer, painter, sculptor, and poet, he who creates the plan of cities has before him one of the noble tasks: that of bringing to his fellow citizens the joy of living in a city that he has made great.¹⁷⁹

His 1910 editorial, "Art et utilité publique," published in the Swiss journal L'Abeille, confirmed

Corbusier's belief in the social importance of aesthetics. He began his letter:

¹⁷⁹ Corbusier, La Construction des villes, 71-72.

The aesthetic problem is the agenda of our era. One not need be a dreamer, hypnotized by utopias, to be aware of the significant push, which in all countries, compels us to search for more harmony, more beauty, in the hope of a happier life — a life better lived.

The social questions are reverberating loudly. By nature, they sweep along the masses; they put into play many interests, they create so much distress; until now, in regards to the passions that they unleash, we had willfully spoken of the aesthetic crisis as if it were the squabble of some pleasant people outside of the real city, seeking to amuse themselves. Art must become social, and only then will it live.¹⁸⁰

By 1924, Corbusier had disavowed these beliefs. While he had argued in 1915, following the urban aesthetics of Buls, that "the goal of streets [was to create] a capillary system in order to bring about organic life, [through] a variety of types of streets," in *Urbanisme*, he criticizes the old cities of Europe, noting that they "have no arteries, they only have capillaries; further growth, therefore implies sickness or death."¹⁸¹ He goes on to reduce beauty to "mere aesthetics," rebuking German cities for being designed "purely [through] a question of aesthetics."¹⁸²

The question of why attitudes towards beauty as an ameliorative entity changed so dramatically by the end of World War I, answered with any depth and sophistication, would be the subject of another dissertation. Yet Corbusier's affirmation of the public utility of art in 1910 can be seen as an early instance of his continued commitment to the capacity of architecture to change society — a commitment that came to characterize the Modern movement in architecture. Thus although the forms and aesthetic agendas associated with urban aesthetics and *art public* came under sharp criticism by Modernism, which of course concealed its own aesthetic agenda under the guise of scientific and technological determinism, it was in fact these movements which ended the tenure of the architecture of what was felt to be vacuous historical pastiche, and introduced the idea of the social efficacy of architecture. One can see in Jean Lahor's hope that

¹⁸⁰ Ibid., 14.

¹⁸¹ Le Corbusier, *The City of To-morrow and its Planning*, 7.
¹⁸² Ibid., 8.

the distribution of art throughout society would "resolve the social question...without noise, and without violence, through a peaceful evolution" a prefiguration of Corbusier's famous dictum "architecture or revolution."

CHAPTER THREE Drawing Nature, Planning Nature

Between 1898 and 1902, the painter-turned-printmaker Henri Rivière produced a series of color woodcut prints collectively titled *Thirty-Six Views of the Eiffel Tower*. As an ensemble, the prints offer a perspective on the relationship between the natural and constructed worlds at the time of the prints' creation, different from the more expected picture of man dominating nature through modernization. Inspired by the Japanese artist Katsushika Hokusai's *Thirty-Six Views of Mount Fuji*, published in the 1830s and famous for its *Great Wave Off Kanagawa* print, each of Rivière's prints depicts the Eiffel Tower from a different point of view. [Figure 3.1] Like Hokusai's work, the object named in the title of the series unifies the prints, yet is rarely the focus of the image. Many of Rivière's prints depict the outskirts of Paris, where trees, grasses, tilled fields, the Seine, simply built houses, and other small structures foreground a faint image of the tower appearing above the horizon. [Figure 3.2] Even in prints of scenes within the city, the natural world of earth, trees, and water predominate. [Figure 3.3]

Rivière's attention to the natural world and man's presence in it mirror Hokusai's work. Yet it is the differences that Rivière created between his prints and Hokusai's which speak to questions regarding man's relationship to nature, and nature's relationship to modernity in turn of the century France. Rivière explores these questions through his replacement of Mount Fuji with the Eiffel Tower as the central theme of the project. Mount Fuji had long been revered as a timeless and spiritual place, conceived through Shinto ideas of nature worship as a sort of deity. In some ways, the Eiffel Tower functioned similarly in French culture, in which it represented so much more than the sum of its materiality. Yet what it represented could not have been more different than that of Mount Fuji. The Eiffel Tower was new, not timeless, and rational, not spiritual, standing as a monument to the modernity of France at large. For the Third Republic, it was a symbol of the triumph of technology — the human achievement of rebirthing nature into an entity no longer created by nature, but rather by man himself.

However, Rivière hardly repeats this official and celebratory narrative of the tower. In fact, he shifts attention away from this monument to technology to instead bring nature to the foreground, suggesting a different point of view from which to see modernity. This is best demonstrated by the frontispiece of the publication, in which leaves on tree branches occupy a very close foreground and the top of the Eiffel Tower is visible in a distant middle ground, surrounded by clouds. **[Figure 3.4]** The thick outlines used to define both the leaves and the clouds flatten and simplify the image. The arrangement of leaves within the shape of the print's borders encircle the Eiffel Tower in much the same way as Hokusai's wave frames Mount Fuji. The disparity in detail between them and the tower draws attention away from the ostensible subject of the series. Printed in two shades of brown, each leaf has a unique shape with features such as veins and holes. Collectively, they visually dominate the image. In contrast to the print's depiction of nature, Rivière's idealized image of the top of the tower is more abstract, with criss-crossed lines whose specificities are of no import standing in for the iron structure. Rivière further diminishes the tower's visual presence by partially covering it with a grey cloud.

Many histories of late nineteenth century France, much official discourse of the time, and the volume of photographs and paintings of the tower underscore its centrality. This centrality operated both visually, during the 1889 Exposition universelle and in the city at large afterward,

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and in the French imagination, as a symbol of French modernity, science, and progress.¹ Hence Rivière's choice to use it as a backdrop to nature offers a surprising alternate perspective to the expected turn of the century relationship between nature and man's constructions established by the aforementioned histories and state discourse. Portraying the tower from a marginalized position outside of the city, the image challenges the city's privileged location as the domain of man, his reason, and his knowledge production. In the nineteenth century, even man's knowledge of nature had been formulated in the center of the city, with figures such as Claude Bernard and Louis Pasteur understanding the natural world while towering over it, cutting it apart, and examining it under microscopes, presenting their findings at the Académie de France, the center of French knowledge located in the center of Paris. In contrast, Rivière's frontispiece reversed this relationship, suggesting a diffusion of attention from the city itself to the environment at large.. While still within arm's reach of nature, man and the artist, now stand fully *within* the natural world, with their own creations now seen *through* nature.

Chapter Three examines a moment at the beginning of the twentieth century when aesthetic reformers identified a particular source of beauty which they felt was particularly suited to the aesthetic redress of "the social question." This source was nature. It looks at two movements united by commonalities among the figures involved in each, as well as by their conviction that nature was the source of beauty best able to reform French morals. In the first movement, aesthetic reformers proposed that art can best ameliorate the public by setting it on a proper moral path to begin with, introducing art in many forms into children's education.

¹ On the symbolisms attached to the Eiffel Tower in the twentieth century, see Roland Barthes, "The Eiffel Tower," in *The Eiffel Tower and Other Mythologies* (New York: Farrar, Strauss, and Giroux, 1979).

Through interactions with pedagogical theories, aesthetic reformers came to understand nature as the form of art best suited for the moral education of children. In the second, nature, through its equation with art, became incorporated into the built environment as the built environment expanded outward into nature, with aesthetic reformers seeking to both conserve and plan a "natural" environment. Both of these examples examine the ways that aesthetic reformers sought to bring nature into public space, and to bring the public into nature.

Nature c. 1900

Aesthetic reformers' use of the word "nature" was multivalent. In their work, what was meant by "nature" could be both material and immaterial, domesticated and wild, ordered and chaotic. This ambiguity of meaning reflects the term's general slipperiness and evasion of bounded definitions, which have made nature one of the most persistent and pervasive ideas of Western thought.² Yet it also reflects the relative paucity of intellectual work which employed the term in the decades leading up to its turn of the century resurrection, particularly in comparison to the eighteenth and early nineteenth centuries. This disappearance of nature from discourse in the mid-nineteenth century corresponds to a number of changes in society and knowledge production.

In part, nature's gradual fading from view came about as increasing urbanization made visible the relationships between men, prompting French intellectual attention refocus on the idea of society. Labor, class, public health, real estate, banking, poverty, politics, industrial

² See John Stuart Mill, "Nature," in *Nature, the Utility of Religion, and Theism* (London: Longmans, Green, Reader, and Dyer, 1874). See also A.O. Lovejoy's nearly comical analysis of the ways in which the term has and can be used in aesthetic discourse. Arthur O Lovejoy, "'Nature' as Aesthetic Norm," *Modern Language Notes* 42 (1927).

production, and religion all dominated any consideration of a "nature" that would exist outside of these things. Even the territory outside of cities was for the most part considered "countryside" rather than "nature."³ The countryside was populated by villagers and farmers, and increasingly, by attractions designed for tourists, such as casinos, theaters, and infrastructures for beach goers. For those in the city, the distinction between the city and the countryside revolved primarily around work versus leisure, rather than built versus unbuilt, tame versus wild, or human versus non-human.

This relative lack of interest in, and lack of thought about what might exist beyond populated territory paralleled the relative lack of interest in the idea of "nature" in science at the time.⁴ While sciences studying animals, plants, and the earth abounded in French intellectual culture, the division of the study of a single "nature" into fields such as biology, botany, geology, physics, and so forth in fact pushed the idea of a unified nature, as it was conceived in the eighteenth century, out of the minds of scientists. Given the dominance of scientific thought midcentury, in combination with the emphasis on sociality, one can get the sense of what "nature" might have meant in the mid-nineteenth century: that in the world which operates independently of the social realm — that is, the non-human world. In 1864, the geographer Elisée Réclus confirmed this idea of nature, describing contemporary attitudes toward it in his essay *Du Sentiment de la Nature dans les sociétés modernes*:

³ On conceptions of nature in the mid-nineteenth century, see part 3 of Nicholas Green, *The Spectacle of Nature: Landscape and Bourgeois Culture in Nineteenth-Century France* (Manchester: Manchester University Press, 1993) and chapter 1 of Luisa Limido, *L'Art des jardins sous le Second Empire: Jean-Pierre Barillet-Deschamps*, 1824-1873 (Paris: Editions Champ Vallon, 2002).

⁴ On the disappearance of nature as a topic of philosophical inquiry in the first two-thirds of the nineteenth century, see chapter 6 of John Theodore Merz, *A History of European Thought in the Nineteenth Century: Scientific Thought* (London: W. Blackwood and Sons, 1930), Vol. 3.
It has to be said that the French, on the whole, do not always appreciate...great Nature's splendors. More sociable than the Germans and the English they are less able to endure loneliness and even the temporary interruption of their usual relationships. They need, at work and in pleasure, their daily routine, the same comrades, and the same friends. They dread wild nature where man has no other companions than trees, rocks and torrents. The aspect of nature which the French appreciate more and which they prefer to look at consists of gently undulating land in which varied types of cultivation alternate gracefully right up to the distant horizon of the plains. Here a row of green hills mark out the landscape, there a small river winds beneath alder and aspen branches and here and there, clusters of trees appear amongst the meadows and wheat fields and over there, white houses whose red tiles shine in the middle of the greenery. The beauty of the site appears complete when a ruin covered in wild vines and a mill, constructed on uneven arches across the river, add their picturesque profile to the whole scene. Everywhere, the person who contemplates such scenery sees signs of the industry of his fellow beings. Nature altered by work is, so to speak, humanized and the spectator loves to identify himself with this common pursuit.⁵

For Rélcus, nature was popularly understood as wild and undomesticated, lying outside of human civilization. In the mid-nineteenth century, even when spaces were carved out within the city to bring in the non-human world, that which was imported — fauna through inventions such as zoos and aquariums, and flora through carefully designed parks — was, in Réclus' words, "humanized." These designs upon "nature" allowed man to see eye-to-eye with that which appeared untamed, but which was in reality tucked safely behind panes of glass or iron bars. What appeared as rugged terrain was constructed through carefully excavating and importing rock and soil, and then ordering this material in plan through gently curving, geometrically perfect paths.⁶ This desire to control the non-human world through human construction reflected

⁵ On the interest in aquaria in France in the nineteenth century, see Camille Lorenzi, "L'Engouement pour l'aquarium en France (1855-1870)," (2009). See also Stephen Jay Gould, *Leonardo's Mountain of Clams and the Diet of Worms* (Cambridge, MA: Harvard University Press, 2011).

⁶ On the construction of the Parc des Buttes Chaumont, see Ann Komara, "Concrete and the Engineered Picturesque: The Parc Des Buttes Chaumont (Paris, 1867)," *Journal of Architectural Education* 58, no. 1 (2004) and Idem, "Measure and Map: Alphand' 's Contours of Construction At the Parc Des Buttes Chaumont, Paris 1867," *Landscape Journal* 28, no. 1 (2009).

the widespread valorization of science and technology as both signs and means of social progress, particularly during the Second Empire and the beginning of the Third Republic.

In art theory, nature was far from the foreground of discussion. When nature was brought out of the shadows, it was typically to emphasize either art's superiority to nature, or its fundamental difference from nature. While Hippolyte Taine argued that art must be understood as a product of its milieu, he specified that this milieu was "intellectual and social," a product of a human civilization defined in opposition to nature.⁷ Charles Blanc, in his *Grammaire des arts du dessin*, contended that art was a product of genius rather than nature. "Whatever means the artist may have preferred," Blanc wrote, "he must, if he wishes to become great, build upon real truth in order to elevate himself to a higher truth, so that that which in Nature was only language, in Art may become eloquence."⁸

In architecture, nature began to be seen as a generator of form in the 1860s for figures such as Viollet-le-Duc and Victor Ruprich-Robert.⁹ However, at the turn of the century, nature gained a new prominence in artistic practices, aesthetic theories, and the work of aesthetic reformers. As with mid-nineteenth century ideas, there was no authoritative theorization or precise definition of what this nature was. Despite its general resurgence, the term was interpreted and used in different ways in different disciplines. In the visual arts, natural forms and motifs could be found throughout the decorative arts and to some extent architecture as well.

⁷ Taine in fact does analogize art with "nature" in describing the evolutionary importance of milieu, yet this analogy underscores how separate the human realm of art and the realm of nature were. "The productions of the human mind, like those of animated nature, can only be explained by their milieu." Hippolyte Taine, *The Philosophy of Art* (London: Williams and Norgate, 1867), 16.

⁸ Charles Blanc, The Grammar of Painting and Engraving (Chicago: S.C. Griggs, 1879), 96.

⁹ See lecture 1 in Eugène-Emmanuel Viollet-le-Duc, *Lectures on Architecture* (Boston: James R. Osgood and Company, 1875), Vol. 1 and Martin Bressani, "Notes on Viollet-le-Duc's Philosophy of History: Dialectics and Technology," *The Journal of the Society of Architectural Historians* (1989). See also Victor Ruprich-Robert, "Flore ornementale: Essai sur la composition de l'ornement, éléments tirés de la nature, et principes de leur application," (1876).

Nature pervaded the arts so thoroughly at this point that declarations such as: "Nature...is that which inspires all of the arts, and without which one can create nothing," and, "nature is not only the source of all inspiration, the eternal model offered to inventions of our industry...[it is] the essential factor of progress," could be uttered and accepted without explantion.¹⁰ This use of nature, characteristic of Art Nouveau figures such as Victor Horta, Émile Gallé, and Hector Guimard, has been explained by both historians and these figures themselves as a means to sever ties to composing "servile copies of works from the past," finding in nature an infinite variety of new forms with no relationship to the historical forms which had been repeated for the last half century.¹¹ Additionally the use of natural forms and motifs in Art Nouveau, particularly in the interior of the bourgeois home as wallpaper patterns, vases, lamps, jewelry, furniture, and wood or iron ornament, is often framed as a means to create a new environment distinct from the overwhelming atmosphere of the city and modernization outside.¹²

At the same time, nature was resurrected in French intellectual thought in the last third of the nineteenth century. Prompted by the same belief that made possible the idea that aesthetics had social agency, this new interest in nature was predicated on the notion that the science and technology so heralded in the mid-nineteenth century had failed to live up to its claims of perfecting and fully explaining the world. In contrast to the sciences of the nineteenth century, such as biology, botany, geology, chemistry, and so forth, each of which studied a fragmented

¹⁰ L'Art à l'école. Bulletin de la Société national (Paris: Scheniderfrères et Mary Levallois, 1908), 1; and Roger Marx, L'Art social (Paris: Bibliothèque Charpentier, 1913), 5. An excellent example of the way that nature - in particular, insects — could serve as a source of design inspiration in a variety of media is Maurice Pillard Verneuil, "L'Insecte," Art et décoration 40 (1904), 1.

¹¹ Émile Gallé, Écrits pour l'art (Paris: Lafitte, 1908), 239.

¹² The overwhelming psychological effect produced by modernization was diagnosed at the time as "neurasthenia." On this phenomenon, see Debora Silverman, *Art Nouveau in Fin-de-Siècle France: Politics, Psychology, and Style* (Berkeley, CA: University of California Press, 1992) and Wolfgang Schivelbusch, *The Railway Journey: The Industrialization of Space and Time* (Berkeley, CA: University of California Press, 1986).

form of "nature," examining only those parts of it that pertained to its own inquiry, this new Spiritualist idealism, developed by figures such as Félix Ravaisson, Jules Lachelier, Charles Renouvier, Alfred Fouillée, Jean-Marie Guyau, Émile Boutroux and Henri Bergson reassembled nature as an object of study into a whole, though, without ignoring knowledge of a material world with discrete constituent parts.¹³ Though secular in its orientation, this movement in philosophy proposed that the world could not be explained through materialist theories alone that "nature" was as creative, giving rise to new kinds of things and change in the world, as its "laws" were deterministic.¹⁴

A large part of this interest in nature came in fact from philosophy's investment in its own scientificity, and particularly, its relationship to evolutionary theory.¹⁵ For these Spiritualist and idealist thinkers, grounding a new philosophy in the evolutionary theories of Darwin and

¹³ Though all of these figures have different conceits of nature, Jules Lachelier's essay, "The Basis of Induction," gives a number of examples of how nature could be seen as both a whole and parts at the same time. For example, he claimed that, "The first unity of nature was the unity purely extrinsic, of a radical diversity. The second is, on the contrary, the intrinsic and organic unity of a variety, of which each element expresses and contains in its own manner all the others. But the reciprocal accord of all the parts of nature can only result from their respective dependence in respect to all; it is necessary, then, that in nature the idea of all should precede and determine the existence of the parts." Jules Lachelier, "The Basis of Induction," The Journal of Speculative Philosophy 11, no. 1 (1877), 6. Another instance in which Lachelier recognizes both the infinite and the finite in nature, is in the following passage: "We cannot say, therefore, that nature may be absolutely external to our thought, since in that case she would be for as if she did not exist; and on the other hand, as the word thought designates above all the logical function of our minds, we conceive very well that thought, thus extended, distinguishes itself from nature considered as an object of perception and in its real existence. But this is not all; whilst the mechanism of nature fills, by a continuous evolution, the infinite of time and space, the finality of this nature concentrates itself, on the contrary, in a multitude of distinct systems, although they are analogous one to another; and we are, inasmuch as we are individual, but one of these systems which owes to its particular organization the reflected consciousness of itself and of those which surround it." Ibid., 8.

¹⁴ On this movement, see the chapter "French Spiritualism and Idealism" in John Hermann Randall Jr, *Philosophy After Darwin: Chapters for the Career of Philosophy.* (New York: Columbia University Press, 1977), Vol. III and part II of Frederick Charles Copleston, *A History of Philosophy. Modern Philosophy: From the French Revolution to Sartre, Camus, and Lévi-Strauss* (New York: Doubleday, 1974).

¹⁵ On the proximity of French Spiritualist philosophy and science, see Randall Jr, *Philosophy After Darwin: Chapters for the Career of Philosophy*, 333.

particularly Spencer allowed for a new discourse on morality — which had been entirely unaddressed by positivist theories — whose secularism and conception of man as a natural being allowed it to compete with, and eventually displace positivism.¹⁶ In his 1881 discussion of the works of major French philosophers of the time — Félix Ravaisson, Jules Lachelier, Émile Boutroux, and Paul Janet - Alfred Fouillée summarized the contemporary understanding of the relationship between man and nature as such: "To know is: to think how nature thinks, to draw how nature draws, to paint as nature paints; and the good consists of wanting what nature wants."¹⁷ In this sense, nature was conceived of not as a mechanical force, but rather, as the embodiment of all knowledge. It was thought of as an entity into which man was incorporated and to which he was subordinate, though without being completely determined by it. Man's "scientific laws" could only approximate the ways in which nature unfolded. In much French spiritualist thought, that which made a materialist understanding of nature untenable was spiritualists' idea that nature, as a whole, moved toward a final cause. For this strain of thought, including that of Guyau as we have seen, this final cause was, in the realm of morality, the good, and in the realm of aesthetics, beauty.¹⁸ Lachelier explained this equation of nature, here called "veritable existence," with beauty as such:

But, whatever terms we may employ, it is certain that science, properly so-called, bears only upon the material conditions of veritable existence, which is itself finality and harmony; and, since all harmony is a degree, however feeble it may be, of beauty, we

¹⁶ See chapter 11 of André J Bélanger, *Ethics of Catholicism and the Consecration of the Intellectual* (Montreal: McGill-Queen's Press, 1997).

¹⁷ Alfred Fouillée, "L'Art de la nature et la finalité esthétique son le spiritualisme contemporain," *Revue des deux mondes*, 41 (1881), 379. For background on these figures, see chapter 1 of Gary Gutting, *French Philosophy in the Twentieth Century* (Cambridge: Cambridge University Press, 2001).

¹⁸ Copleston, A History of Philosophy. Modern Philosophy: From the French Revolution to Sartre, Camus, and Lévi-Strauss, 159,

need not fear to say that a verity which is not beautiful can be only a logical play of our minds, and the only verity, solid and worthy of the name of truth, is beauty.¹⁹

The turn to nature among aesthetic reformers, although done in close proximity to the trend in the decorative arts, was not undertaken in discursive relationship to the history of architecture and the decorative arts with the goal of producing new forms. Nor was it an attempt to elevate the production of French craft and luxury goods. Rather, they took on this new, complex understanding of nature in seeking to improve the public through beauty, which was now understood as something that already existed as part of nature before any of man's attempts to produce it. With the public existing, in the imagination of these aesthetic reformers, primarily as a phenomenon of the city — the ultimate human construction — this chapter looks at how aesthetic reformers negotiated this new understanding of nature with their interest in an urban public, and the resultant effects on the aesthetics, conceptually and physically, of public space.

From the Street to the School

As the first decade of the twentieth century progressed, aesthetic reformers' desire to create a renaissance of art operating at the urban scale was failing to come to fruition. The designs submitted to competitions staged by groups such as L'Œuvre national de l'art appliqué à la rue were often uninspiring, and at times mocked. But more so, reformers felt their movement had been stymied by the reluctance of the state to intervene and further their goals. This incapacity to transition the movement from the pages of journals and voices in conferences into the street did not, however, diminish the drive of these reformers to advocate for art in public

¹⁹ Lachelier, "The Basis of Induction," 8-9.

space. Rather, it caused them to formulate a more specific agenda, identifying a more specific site of action and a more specific tool with which to achieve this agenda. This site was the school and the tool was "nature."

In 1905, the third Congrès international d'art public, held at the Exposition universelle in Liège, reaffirmed the group's original goal, formulated in its first meeting in 1898. The group's members still sought to "return art to its social mission in applying it to modern ideas in all public domains." They remained attached to the idea that art could be both democratizing and morally educational. Yet they also conceded that new means were necessary to achieve this aim. In the second Congrès d'art public of 1900, Charles Normand had explained the importance of publicly accessible space for *art public*, declaring that it was "in the school of the street where one finds not only truly inescapable education, but also one that is imposed on all most equally."²⁰ Admitting that change at the level of the urban environment could only come about very slowly, by 1905, *art public* sought to locate a new "public domain" in which art could enact its social mission. This new public domain was the school. The Belgian politician Jules Detrée explained this choice as follows:

If there is a means to change the mind of the public in this way, if there is a chance to teach it charm and power and beauty, we should assuredly pursue this means in primary schools. The primary school addresses the totality of the nation, as no child can escape its beneficial action. The primary school imprints upon students from a young age, in the mysterious and impressionable regions of sentiment, the notions and understandings that persist during one's entire life. I strongly believe that those who will be able to develop, in children in schools, a kind of artistic fervor, will have done more for the happiness and strength of the nation than many politicians.²¹

²⁰ Société des Amis des monuments parisiens, *L'Ami des monuments* (Paris: Vol. 15, 170. Of course, as discussed in Chapter 3, the *art public* movement did not cease to have implications for urban public space simply because of the new direction of the international congresses.

²¹ IIIe Congrès international d'art public (Brussels: Imprimerie Schaumans, 1905), 2.

In this way, the 1905 congress moved the site of *art public*, eliminating "the street" from Normand's formulation in 1900. *Art public* would now be incubated not in the school of the street, but merely in the school. It was this new location, through negotiations between art and pedagogy, where nature emerged as the new foundation for art that would work on the public, in public.

This reorientation consequently shifted its emphasis from the promotion of *art* and *artists* through art to the promotion of *education* through art. Proposing art as a tool whose utility lay outside itself, rather than understanding art as an end in itself, the Congrès decided that it was "much more important to form a public able to appreciate, encourage, and support artistic efforts than to recruit artists whose work could remain, for quite some time, or perhaps forever, without effects on the public."²² In 1905, the raison d'être of the conference, as articulated by Eugène Broerman, was to ask what a group of elites concerned with the arts could do to elevate the quality of art produced by workers and the public at large, rather than to improve the productions of professional artists and architects whom were their peers.²³ While the belief in art's ability to instruct the public was to some degree made explicit at the 1898 congress, more often it was implied, or construed as less important than the mere proliferation of art. However, by 1905, education had become, for the members of the Congrès d'art public, and in many ways for the Third Republic, not only an, but also the intermediary in creating an affective environment which would transform the morality of the French public.²⁴ This was reflected in the stated goals of the group, which were:

²² Ibid.

²³ Ibid., 17-20 See also all reports given in the first section, *l'art à l'école*, of the congress.

²⁴ The difference in focus between the first and second congresses of art public is elucidated by Georges Sorel's critique of Guyau's *L'Art au point de vue sociologique*. While Sorel notes that Guyau's work contains "many solid observations," he concludes that while "Guyau *wanted* art to be moral, he did not

To aesthetically regenerate morality; To react against the uniformity of schooling; To prevent pedagogy from stifling budding personalities; To infuse instruction with art; To expand and strengthen the artistic competence of teachers and administrators; To realize in the domains of collective life a social pedagogy proportional to its utility in the development of *art public*.²⁵

This turn of the third Congrès d'art public to primary education did not occur in isolation. Rather, it can be seen as part of a larger movement, whose goal was to suffuse French schools with art, with the ultimate goal of producing a more morally and intellectually educated French public. One could call this movement *art à l'école*, after the 1895 article by Roger Marx of the same name, and after the Société de l'art à l'école, founded in 1907, which became the movement's most prominent advocate. Like many other groups advocating for the arts at the time, *art à l'école* drew from the network of artists, art critics, architects, and politicians who sought to reform society through the aesthetic landscape. Yet these figures were joined by pedagogues, most notably Ferdinand Buisson, director of primary education under Jules Ferry, who established connections between *art à l'école* and the most prominent pedagogical organizations of republican France, such as the Ligue française de l'enseignement and the Musée pedagogique. With the Société de l'art à l'école coordinating efforts outside of Paris, this movement spread throughout France. Artists and architects associated with newly established regional schools of art such as the École de Nancy, became involved as advocates for the

provide any theory of how it would act in that way." The first congress, still drawing on Guyau's work, waned art to improve morality by virtue of its existence. On the contrary, the second congress examined the specific way that an artistic sense could be inculcated in the same organ in which morality was developed: the mind. Georges Sorel, "La Valeur sociale de l'art," *Revue de métaphysique et de morale*, 9, no. 3 (1901), 10-11.

²⁵ IIIe Congrès international d'art public, 6.

movement, while teachers in primary and secondary education throughout the French provinces were inspired to make changes to their own schools to the best of their ability.²⁶

The union of aesthetic reformers and pedagogues that formed the *art à l'école* movement came three decades into a "pedagogical fervor" among politicians, psychologists, teachers, and, as the discipline emerged, pedagogical theorists. This new interest in educational theory was in large part prompted by the Third Republic's focus on education as a means to re-establish and regenerate the French nation.²⁷ In the years between 1879, when the Republican faction of the Third Republic government finally secured its tenure, and the founding of the Société de l'art à l'école in 1907, the structure and pedagogies of French schools had been dramatically remade through both major and minor reforms. In 1882, the Jules Ferry laws made primary education free, laïc, and mandatory. In 1896, the university system was completely dissolved and reformed.²⁸ In 1902, secondary school pedagogy was "modernized," in an attempt to make curricula reflect new forms of knowledge produced in the nineteenth century.²⁹ With secondary schools initially designed to give a privileged minority a "universal and disinterested" education, these reforms deemphasized the study of classics, classical languages, and philosophy to make

²⁶ Note that in the early part of the decade of 1900-1910, *art à l'école* was a term used primarily to refer to the objective of placing more art, physically, in the school environment, as well as to make the furniture and architecture of schools more "artistic." Although the pedagogues responsible for drawing reforms in many ways operated in parallel, rather than in conjunction with the elite aesthetic reformers in this early phase, the creation of the Société de l'art à l'école represented, to a large extent, both of these groups. Hence, in this chapter I use the term *art à l'école* to refer to reforms of both drawing instruction and the physical environment of the school.

²⁷ Maurice Pellison, "La Reforme de l'enseignement du dessin," *Revue pédagogique*, 54 (1909), 23. For a general history of the "pedagogical fervor" of the early Third Republic, see For a history of French education SEE For a history of French psychology's interest in children, SEE

²⁸ On reforms of French universities, see George Weisz, *The Emergence of Modern Universities in France*, 1863-1914 (Princeton, NJ: Princeton University Press, 2014).

²⁹ On reforms of French universities, see Ibid.

way for more modern and applied subjects such as chemistry and physics, in line with the Third Republic's emphasis on science and technological progress.

By the beginning of the twentieth century, the questions posed by artists, architects, and art critics about the capacity of art to improve the morality of the French public paralleled those that were being asked by politicians and educators regarding the capacity of children's education to work to the same end. Yet while the questions of each group approached each other, they had different inflections. Aesthetic reformers, seeking to demonstrate art's social utility, asked how art could be deployed in schools to improve the taste and morality of the French public. At the same time, pedagogues and educational reformers, seeking to redefine the public utility of schooling, were inquiring as to whether the incorporation of art and images into French pedagogy could be useful in the moral education of French youth. In other words, aesthetic reformers wanted to make art more useful by making it a part of education, while pedagogues wanted to make education more useful through the addition of art. This proximity of concerns led to the eventual coalescence of these two interests groups in the art à l'école movement. Notable events in the movement's development include Roger Marx's aforementioned 1895 article; the 1897 founding of the Association des professeurs de dessin de la Ville de Paris; the first Congrès internationale de l'enseignement de dessin at the 1900 Exposition universelle, staged by this association of drawing teachers; the second of these conferences, held in Bern in 1904; the founding of the Société libre pour l'étude de l'enfant in 1900, whose first president was the psychologist Alfred Binet, the 1904 Exposition de l'art à l'école and concurrently, the Congrès de l'art scolaire; the 1907 founding of the Société de l'art à l'école; and in 1909, a Salon des enfants organized by Henri Matisse as well as another exhibition of children's drawings at

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the Salon d'automne. 1909 also saw a fundamental reform of the French drawing curriculum in primary schools.

The near unanimity of desire among the French elite to elevate French taste and the quality of industrial production, in combination with nearly two decades of the pursuit of this goal led the figures of *art à l'école* to finally debate *how* to make effective changes, deciding which new methodologies would be most effective and what kind of new environments could be created to further this goal. They agreed that the strategy of improving the trade skills of workers, which had been initiated by Léon de Laborde's report on the 1851 Great Exhibition, had proven inadequate.³⁰ So had the proposal that developed out of urban aesthetics to surround the public with any form of art so as to elevate the public's taste and appreciation of, and hence demand for, art. Thus in contrast to earlier instantiations of *art public* that dismissed stylistic prescriptions as irrelevant in the deployment of art through public space, artistic elites and pedagogues now asked specifically what *kind* of art and images were best suited to improving and educating French youth.

These questions were answered not only through speculation about art itself. Rather, through the influence of pedagogues and pedagogical theory, *art à l'école* sought to tailor their prescriptions to the child's mind and its capacities. Unlike *art public* which treated individuals as simply uniform constituents of the public, *art à l'école* acknowledged differences in the public, both between adults and children, and between individuals. New knowledge produced by the flourishing field of psychology allowed *art à l'école*, unlike *art public*, to specify a particular source of aesthetic sentiment that could best permeate, and educate, the minds of children. No longer would art be morally salutary simply by virtue of its stature as art or as something

³⁰ Laborde, Léon de, Exposition universelle de 1851. Travaux de la commission française. VIe groupe. XXXe jury, Application des arts à l'industrie 1856), Vol. 8.

beautiful. Rather, its capacity for moral education came through being beautiful, intelligible, and pedagogical at once, without being didactic. That which *art à l'école* identified as the optimal synthesis of both beauty and knowledge, and that which became its dominant theme, was nature. While the *art à l'école* movement still eschewed specifying a particular style for the images and art that would be placed in French schools, they did determine that the art should be drawn, both literally and metaphorically, from nature. In their minds, nature would serve as a new type of pedagogue, instructing students in matters of beauty, knowledge of the world, and knowledge of themselves.

Art à l'école sought to disseminate nature to students in two ways. It proposed the propagation of art depicting nature, the use of natural motifs in decoration, as well as bringing living nature into the classroom to transform schools into visually stimulating environments. Additionally, it sought to reform the drawing curriculum of French primary schools to allow students to not only draw from nature, but also according to their own nature. It may seem that the concerns of aesthetic reformers for the social utility of art could have gotten lost in this emphasis of nature as the primary category of pedagogical beauty for children, rather than art itself. However, given the turn of the century idea that nature was knowable through observation rather than through reason alone, these proposed reforms in the use of nature in the schools in fact underscored the social utility of the image, and art, as a means of learning and knowing.

Pedagogical Images

The beginnings of the *art à l'école* movement lay in the stillborn efforts circa 1880 spearheaded by the Third Republic government, and undertaken by artists, architects, and proto-

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art critics to integrate images into French schooling. In 1870, Victor Duruy, who, as Minister of Public Instruction during the Second Empire had proposed free and mandatory primary schooling, was among the first educational administrators to call attention to the power of images in the education of youth. "For the child," he wrote, "we are not using enough of the most active agent: education by the eyes. I have always wanted that the walls of our seventy thousand schools be covered from top to bottom with images."³¹ This idea of education through images reflected a larger interest in vision and the eye in nineteenth century French sciences and arts. This could be seen in the work of physiologists on the mechanisms and functioning of the eyes, the invention of many new means of capturing and displaying images, including the camera, and positivism's emphasis on observable facts, among others.³² The effects of the this interest in vision had began to trickle in to schools, with didactic material such as maps, images of natural history, and charts of the metric system having been introduced into the classroom during the Second Empire.

In 1880, Jules Ferry, then Minister of Public Instruction and the Fine Arts, assembled a committee composed of artistic elites to examine how Duruy's vision of using images in the school could contribute to the education of French youth.³³ In its report of 1881, the committee

³¹ L'Art à l'école. Bulletin de la Société national (Paris: Scheniderfrères et Mary Levallois, 1909), 29.

³² On the attention given to vision in the nineteenth century, see Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge, MA: MIT Press, 1992); Andrea Goulet, *Optiques: The Science of the Eye and the Birth of Modern French Fiction* (Philadelphia: University of Pennsylvania Press, 2013); and chapter 1 of Martin Jay, *Downcast Eyes: The Denigration of Vision in Twentieth-Century French Thought* (Berkeley, CA: University of California Press, 1993).

³³ France, *Journal officiel* (Paris: Imprimerie et Librarie du *Journal officiel*, July 7, 1881), Vol. 13, no. 184, 3734. Members of the commission were the following: Anatole de Baudot, architect; Berger, director of the Musée pédagogique; Paul Bert, deputy and physiologist; Charles Bigot, publicist; Ferdinand Buisson, director of primary education; Charton, senator; Paul Dubois, director of the École des Beaux-Arts, Gréard, member of the Institut de France; Eugène Guillaume, sculptor and member of the Institut; Hauréau, director of the *Imprimerie nationale* and member of the Institut; Henri Havard, publiciste; Janssen, director of the Observatory of physical astronomy in Meudon, member of the Institut; Alexandre de Laborde, member of the Institut; Henri le Bourgeois, *inspecteur générale* of public education; Henri

first affirmed that "education through the eyes was the most important and most effective" form of education. The report argued that, using images, lessons could be imparted in a less arduous yet more pervasive fashion than those which engaged only the intellect and required active cognition, particularly for younger students. Images were also touted as critical to republican pedagogy due to the democratic nature of vision, with the committee noting that "the eye is, of all the senses, the most naturally equal among men; it is the eye that puts us in communication with the exterior world; it is that which brings us the most sensations and ideas."³⁴

However, the committee was concerned with more than simply using images to teach students in any and all subject matters. Specifically, they used this opportunity to discuss the need for the *aesthetic* education of French children. At the time, the arts were represented in French primary and secondary education solely by literature, poetry, and music.³⁵ Students did take classes in drawing, but it was devised as a technical skill for craft and industrial production, bearing no relationship to the world of art and aesthetics. This presented a problem for the committee, which emphasized the role of the eye, above both cognition and the other senses, in recognizing and understanding beauty. Not only was "a child's first revelation of beauty is made through the eyes," but as well, it was "always through the eyes that one has the strongest and

Martin, senator; Paul Mantz, under-director of the Ministry of the Interior; Maze, deputy; Stanislas Meuner, geologist; Gabriel Monod, historian; Eugène Müntz, archivist at the École des Beaux-Arts; Félix Pécaut, director of the École normal supérieure; Jules Pillet, inspector of drawing education; Antoinin Proust, deputy; Riu, colonel; de Ronchaud, general secretary of the administration of Beaux-Arts; Émile Trélat, architect and director of the École speciale d'architecture; and Zévort, director of secondary education. On the work of the commission, see Ibid.; France, *Journal officiel* (Paris: Imprimerie et Librarie du *Journal officiel*, June 14, 1883), Vol. 15, no. 161; Idem, *Journal officiel* (Paris: Imprimerie et Librarie du *Journal officiel*, March 16, 1885), Vol. 17, no. 74; and Henri Havard, *L'Imagerie scolaire* (Paris: Imprimerie nationale, 1889).

³⁴ France, Journal Officiel, July 7, 1881, 3734.

³⁵ The description of the new pedagogy for French schools following the Ferry reforms can be found as an annex to Ferry's bill of 27 July 1882. France. Ministère de l'instruction publique, "Arrêté réglant l'organisation pédagogique et le plan d'études des écoles primaires publiques," *Bulletin administratif*, 504 (1882).

most certain impression of beauty."³⁶ Even if drawing had been taught as an art rather than a trade skill, it alone could not achieve this goal of educating students' eyes. Holding up beauty as one of the three "sentiments" of civilization, alongside justice and truth, the committee concluded:

We need to make the school itself into a museum, a sort of sanctuary under the reign of beauty just as much as science and virtue. The child must be surrounded by noble works of art that continually speak to their eyes, stimulate their curiosity, and elevate their spirit. All that he is taught must be through harmonious forms, which will envelop him in an atmosphere of joy and serenity. Art must come to him like the ambient air that he breathes, such that from these delightful images, as a poet would say, 'life and beauty descends into his heart.'³⁷

The art to be displayed could be didactic, drawing from history paintings to convey the history of France, or it could be purely "artistic" with no other pedagogical value.³⁸ While the first type of images would educate students through their eyes, the second would educate students' eyes themselves to better apprehend beauty.

The commission proposed three means with which to create this thoroughly artistic environment.³⁹ First, school architecture, its decoration, and its furniture would become more lively, colorful, and "artistic." All surfaces would be considered opportunities for the display of images that would stimulate children's minds. Images would not only cover walls, but as many other surfaces as possible. For example, cards which were given out for exceptional work, known as *bon points*, typically created without adornment, would feature artwork, rewarding diligence with the ability to create one's own collection of art. Second, each school was to be

³⁶ France, Journal Officiel, July 7, 1881, 3734.

³⁷ Ibid.

³⁸ Ibid., 3735.

³⁹ Havard, L'Imagerie scolaire, 4-5.

given reproductions of selected art works that collectively would constitute a "petit musée" for the classroom, so as to expose children to great works of art. Finally, the commission, along with leading artists, would work with editors to incorporate visual material into schoolbooks.

The commission continued to meet for seven years. In 1882 it staged an exhibition of the various decorative images and objects that had been proposed for use as *imagerie scolaire*, as the program was known. In 1885 it submitted to the Minister of Public Instruction and Fine Arts an extensive list of specific artworks drawn from art history's canon designated for use in schools.⁴⁰ However, initial budgetary constraints, which were followed by reductions in the already insufficient funds allotted to the program, prevented the work of the commission from ever being enacted.

While the 1880 commission did contain some members whose primary focus was pedagogy, such as Ferdinand Buisson and Jules Pillet, the majority of members, men such as the architects Émile Trélat and Anatole de Baudot, the historian Gabriel Monod, later Minister of Fine Arts Antonin Proust, the archivist of the École des Beaux-Arts and city of Paris Eugène Müntz, and the sculptor and head of the École des Beaux-Arts Eugène Guillaume, were from the artistic and academic elite. The dominance of this latter group meant that, while the program of *imagerie scolaire* reflected Ferry's desire to augment existing education, in large part, the commission developed the program to assure a greater respect for the arts through a rudimentary education in art history, rather than to argue for the utility of art in education. For the commission, the pedagogical value of the art objects to be added to the classroom, which included reproductions of classical bas-reliefs and capitals, photographs of paintings by Rembrandt, Rubens, Dürer, Michelangelo, Raphael, and Van Dyck, and photographs of

⁴⁰ For the list of approved images and topics to illustrate, see France, *Journal officiel* (Paris: Imprimerie et Librarie du *Journal officiel*, March 31, 1887), Vol. 19, no. 89.

monuments such as the Amiens cathedral, the Arc de Triomphe du Carrousel, and the colonnade of the Louvre, was self-evident. With art having yet to fully undergo its crisis in social value that would come later in the century, when debates in aesthetic theory would destabilize naturalized convictions about the value of "great art," teaching students about the most masterful artworks from all ages seemed intrinsically worthwhile. With the dissolution of the commission, interest among many of its artistic elites in the pedagogical utility of the image, and its use in schools, art faded out, with architects such as Baudot and Trélat focusing primarily on the design of school buildings themselves rather than the decoration of their interiors, much less the selection of appropriate images.

However, among the pedagogically oriented members, this interest in developing an education through vision alongside traditional means of learning that engaged cognition, such as listening and reasoning, continued. By the turn of the century, what had been a new idea in education — that images could educate — had become a commonplace and accepted fact across a number of disciplines. Extending into territory beyond the school, it underpinned many of the claims of art's social utility, including that of the *art public* movement. Yet just as properly selected images could educate, improving both the intellect and morality, other images, which pedagogues saw proliferating in public space due to both technological and cultural modernization, could also corrupt. Educators, politicians, and others concerned with children's welfare and "the moral question," spread awareness of the deleterious effects of "obscene and wretched" images outside of the schoolhouse, which "spread all over shop windows, boutiques, and kiosks, disgraced the space of the city."⁴¹ As a means to counteract the uncontrollable world

⁴¹ Paul Beurdeley, "Le Congrès de l'art à l'école," *Revue pédagogique*, 45, no. 10 (1904), 332. On the idea of a "question morale," in contrast to the "question sociale," see Alfred Fouillée, "La Question sociale, est-elle une question morale?," *Revue des deux mondes*, 160 (1900).

of images and general immorality outside the schoolhouse, pedagogical reformers, and to a lesser extent artists such as the painter and printmaker Jules Benoit-Lévy and art critics such as Roger Marx recommended "penetrating [the child's] mind with notions of taste and harmony." In this sense, these figures reinvigorated the goals of the commission on *imagerie scolaire* though this time as *art à l'école*, focusing specifically on images that could improve the morality of students rather than those that would have satisfied *imagerie scolaire* 's goal of displaying images with whatever sort of pedagogical capacity.

Art à l'école distinguished itself from the work of the commission on *imagerie scolaire* through the attention it gave not only to the moral capacity of images, but additionally, to their intelligibility by children. The idea that images should be calibrated to the minds of children rather than to the canon of art history had in fact been put forth by Viollet-le-Duc immediately before the 1882 commission was instantiated. In February of 1879, he delivered a report to the Conseil municipal of Paris advocating for the creation of a new art that would better serve the public through being "a thousand times more attractive and instructive."⁴² This suggestion extended to the art to be used in schools as well. Yet in this case Viollet-le-Duc argued that children required a different type of art than that which would be morally instructive for adults. For children, Viollet-le-Duc proposed that works of art that were "executed very simply (primitive)," were "much better understood...than more developed and refined works of art." Curiously given Viollet-le-Duc's stature in the world of architecture and art, the ideas presented in his report were never acknowledged by the commission on *imagerie scolaire*, perhaps attesting to the extent that its members were more concerned with introducing a curriculum of art history than merely furnishing education through and of the eyes.

⁴² Eugène Emmanuel Viollet-le-Duc, "Rapport présenté par M. Viollet-le-Duc au nom de la Commission spéciale des Beaux-Arts," *Rapports et documents*, (February 11, 1879), 22.

Between 1879 and the turn of the century, pedagogues and instructors emerged as the most audible champions of images in education, more so than figures concerned primarily with the fate of the arts. Hence, when the first conference on l'Art à l'école was held, accompanied by its first exhibition, the idea of developmentally appropriate images — an idea which reflected new interests in pedagogical theory in France at large and had been raised by Viollet-le-Duc in 1879 and Roger Marx in 1895 — formed the foundation of the conference's agenda. What had not been decided, however, was what kind of images would invigorate and stimulate children so as to improve their morals. Reflecting the larger philosophical movement associating beauty with morality, pedagogues and artists agreed that the images should be beautiful. However, how beauty was to be defined, how it was to be assessed, and how it was to be understood by children highlighted disagreements between the two groups.

Many pedagogues insisted that images be as simple as possible in order for children to understand them. While these views echoed Viollet-le-Duc's prescriptions, pedagogues extended them even further, questioning whether images that were "artistic" in any way were even appropriate. The thoughts of Parisian primary school teacher Lucien Trautner took many teachers' skepticism towards artistic images to its logical extreme. Trautner insisted that the images presented must not only be beautiful, "simple and without complexities," but also "correct and true," such that they were intelligible by children. By "correct and true," Trautner meant that the images needed to be realistic representations of the visible world, so that a student could not say, "this might be beautiful, but it is not true."⁴³ He contended that "true beauty was simple, and if not, it ceased to be beauty."⁴⁴ Trautner believed that this notion of beauty reflected "eternal conditions" of beauty "which have never varied," and that "aesthetic truths existed just

⁴³ Beurdeley, "Le Congrès de l'art à l'école," 333.

⁴⁴ Ibid., 334.

as mathematical truths did, with fixed and certain laws that the teacher could impart to his student."⁴⁵ He also conjectured that if artistic images had pedagogical value, then they should be used by instructors to teach children the principles of beauty, in much the same was as instructors could teach the principles of spelling.

Yet many others at the conference, pedagogues and instructors included, believed that children were not so simple minded, and refuted the idea that children could understand only the most simple of images. Roger Marx suggested, in contrast Trautner, that not only could the works of contemporary artists be "understood" by children, but by virtue of being more beautiful, they would also better capture children's attention as well. Attendees opposed even more forcefully Trautner's idea that the principles of beauty could be didactically taught. While some who were intent on defining beauty suggested, in keeping with psychology's constant recourse to empiricism, that the characteristics of beauty could be found by studying which images children preferred, many more argued that beauty must be in no way defined by instructors or pedagogues, believing that attempts by instructors to define beauty would in fact ruin the image's pedagogical capacity.

In many ways, this reflected a larger crisis in the definition of beauty that extended well beyond the school. At the time, the scientistic ideas of figures such as Charles Blanc, who attempted to formulate a "grammar" of aesthetics, were coming under attack philosophically, and also pragmatically, in that they had failed to elevate the taste of the French public.⁴⁶ Although the end of the nineteenth and beginning of the twentieth centuries saw a dramatic uptick in the production of theories of aesthetics and beauty, these theories yielded no consensus on the nature

⁴⁵ Ibid.

⁴⁶ Note that the idea of using Charles Blanc's grammar of drawing as a means of teaching primary school students was sarcastically critiqued in the Conference de l'art à l'école by Charles Bayet, director of *enseignement supérieur*. Ibid., 336.

of beauty, or what constituted the beautiful. In fact, their cacophony to a large extent signaled the beginning of a new, modern era of aesthetic philosophy, marked by a new rejection of a belief in the metaphysical idea of beauty alongside the preoccupation with formulating specifically scientific theories of beauty. By the end of the conference, the majority of pedagogues and artists expressed agreement that beauty stemmed from quite the opposite of eternal rules. While not rejecting the Kantian theory, popular in the mid-nineteenth century, that beauty was a psychological experience in the beholder, their theory, albeit not formalized, more so emphasized Kant's notion of beauty as a shared experience.⁴⁷ Rather, they believed that beauty was understood to lie within the artist's particular interpretation of what he or she painted. Beauty was thus a product of the "expression of personal emotion" in the artwork, unable to be defined by a consistent set of visual characteristics. Henri Bernès, a teacher at the elite Lycée Lakanal, framed the presence of this quality in a work of art as a sign of its "sincerity," arguing that it was a work's sincerity, more so that its simplicity, which made it intelligible to children.⁴⁸ This idea was broadly accepted at the conference, where it was construed as both a conclusion regarding the kind of images which would best serve a pedagogical purpose, and a call to artists to produce work of this sort to be used in schools.

Not only was Trautner's proposition of fixed principles of beauty rejected, so too was his idea that instructors could or should teach students to identify and comprehend beauty. Bernès proposed that the "the best education, both in art and morality, is that which the child gives himself, learning instinctively from the milieu in which he lives."⁴⁹ The view was widespread at the conference, as was the general sentiment that neither beauty nor morals were to be

⁴⁷ See Immanuel Kant, *Critique of the Power of Judgment* (Cambridge: Cambridge University Press, 2000).

⁴⁸ Beurdeley, "Le Congrès de l'art à l'école," 337.

⁴⁹ Ibid.

prescribed. Rather than to instruct directly, the role of the teacher should be, according to Bernès, "to try to provoke [the student's] unawakened aesthetic sensibility, in order to make him understand, if possible, the beauty of things around him. It is no longer about teaching him to cognitively know, but rather about teaching him to sense and the feel."⁵⁰ This type of education, which taught students to learn for themselves, allowed school education to better percolate in its students throughout their lifetimes, hence making this a more effective strategy in inculcating the French public with a uniform set of state-determined values. This rejection of didactic teaching extended to artworks as well. Although the images displayed in schools needed to have "real moral and social value," they "must not be a lesson in virtue, as Diderot and his friend Greuze believed. If our images were to directly comment on some moral precept, they would need to be returned to the pile with images of the metric system and natural history."⁵¹ Students were to learn from images rather "by a sort of infused virtue, by a concealed and unconscious action."⁵² Nonetheless, the images needed to be "as effective in presenting examples of honest life, of kindness, or perhaps heroism alongside examples of nature and action, as a directly taught lesson,"53

During the 1904 conference, Henry Marcel, then Director of Beaux-Arts and later head of the Bibliothèque nationale, adopted the idea that students learn best from their milieu as the anchor of his argument that school images should depict, specifically, the beauty of the world in which children live. From this, he suggested that this type of image would not only give children a moral education, but an education about humanity as well. For Marcel, the beauty of the world

⁵⁰ Paul Vitry, "L'Art à l'école," *Revue pédagogique* 45, no. 7 (1904), 53.
⁵¹ Ibid.

⁵² Beurdeley, "Le Congrès de l'art à l'école," 345.

⁵³ Vitry, "L'Art à l'école," 53.

was found in nature, and accordingly, school images should depict both "the grand spectacles of nature" as well as "the great work of humanity in contact with natural forces."⁵⁴ Agreeing with the idea that art derived from personal expression rather than attempts at an objective verisimilitude, Marcel believed that these images should "bring together that which is nature and that which is art," such that the images could mediate between the realm of nature and that of man, to "give to nature a signification that is otherwise hidden and diffused, to give nature something to put it in accord with our minds."⁵⁵

This idea was confirmed many times over, particularly by the members of the Société nationale pour l'art à l'école, which became the central clearinghouse for the *art à l'école* movement after its 1907 founding. According to the society's founder Maurice Couyba, a staunchly republican senator and poet who published a number of pieces on art's relationship to the state, the group hoped "encourage in the individual the highest understanding of nature and of himself, and to thus to contribute to a more extensive civic education that is also more in keeping with the spirit of a civilization on its way to a better future."⁵⁶

As a private society, the group's capacity to obtain funding directly from the state was limited. Instead, most of the funds with which it could enact immediate changes in schools came from philanthropists such as the Rothschilds. This is not to say, however, that politicians were unaware of the group — its activities were the subject of frequent reports to legislative bodies, and a number of the group's members, such as Couyba and Buisson, were representatives to the Sénat and Chambre des Députés.⁵⁷

⁵⁴ Beurdeley, "Le Congrès de l'art à l'école," 344.

⁵⁵ Ibid., 345.

⁵⁶ Beaux-Arts Charles-Maurice Couyba, Les Beaux-Arts et la nation (Paris: Hachette, 1908), 157.

⁵⁷ The initial central administration of the group consisted of Maurice Couyba, president; Ferdinand Buisson; Amédée Gasquet, director of primary schools and Minister of Public Instruction and Fine Arts;

Greater influence in effecting change in both the classroom pedagogy and environment came through figures already engaged in other civil society efforts in education and the arts two realms of interest which had not yet been brought together. Aside from Couyba and Buisson, other prominent and influential figures in the group included aesthetic reformers such as Roger Marx and Frantz Jourdain; art historians and aesthetic theorists such as Léon Rosenthal and Paul Soriau; educational reformers and administrators such as Charles-Victor Langlois, director of the Musée pedagogique, France's primary organ for the discussion and formulation of pedagogical theories, and Amédée Gasquet, director of primary education in France; director of the Imprimérie Nationale Victor Dupré; Georges Moreau, director of the Larousse publishing house and editor of the *Revue Encyclopédique* and later the *Revue universelle*; and Louis Guébin, who oversaw drawing education in Parisian schools. Artists and architects who were official members of the group included the painter and art historian Étienne Moreau-Nélaton, the sculptor Albert Besnard, along with his wife Charlotte, the engraver Jacques Beurdeley, the painter Cuyer, and the architect Charles Plumet.

Many members of the group served as part of the French administration of education. These included Buisson, the Minister of Public Education and Fine Arts; a number of *inspecteurs* of both general education and drawing, both in Paris and the provinces; and teachers in primary, secondary, and tertiary levels of education, the latter of which were instrumental in propagating new pedagogical theories among their peers, and making actual changes to classroom environments. With its influential figures in the arts, such as Marx and Jourdain who directed of the Salon d'Automne, the broad reach of the group within artistic culture compelled artists and designers to create works to be displayed at the exhibitions of of *art à l'école* that were held

Frantz Jourdain; Roger Marx; Henri Turot, journalist and member of the Paris conseil municipal; and Léon Riotor, art critic, journalist, and poet.

regularly in the Salon d'Automne, or to be installed in schools themselves, albeit in a limited number. Georges Moreau's relationship with Larousse allowed the group to collaborate to produce inexpensive, illustrated schoolbooks.⁵⁸ Additionally, through installments in their *Bulletin*, the group produced a *guide pratique* — a manual of changes that schools could easily and affordably make, such as the use of colored paint — to create a more artistic environment.⁵⁹ Of these changes, the use of flowers within the schoolhouse was particularly encouraged, as it was a means to put students in contact with a nature with both visual and olfactory beauty.

Both Marx and Jourdain expressed no confidence in the ability of state architects, still beholden to the design principles of the École des Beaux-Arts, to create the type of artistic environment called for by *art à l'école*. Jourdain, a prominent opponent of Beaux-Arts architecture, accused these architects of "an unequivocal and spiteful indifference to the task that [*art à l'école*] is trying to achieve," while celebrating the Société national de l'art à l'école for "being dubious of orthodoxy, for acting according to the ideas of independence and modernity — I am going to say, *modernism*, scaring the timid and irreconcilable defenders of outdated doctrines. [*Art à l'École*] seeks to combat the moldy and dusty formulas responsible for the atrophy of the French mind."⁶⁰ This is not to say that the group saw no place for architects in

⁵⁸ L'Art à l'école. Bulletin de la Société national (Paris: Scheniderfrères et Mary Levallois, 1909), 84.

⁵⁹ The *guide pratique* can be found in the following Bulletins: no 2, p. 15; no 4, p. 10; no 5, p. 8; no 6, p. 18; no 8, p. 35; no 15, p. 97; no 20, p 143.

⁶⁰ For Jourdain's admonition of architects, see *L'Art à l'école. Bulletin de la Société national* (Paris: Scheniderfrères et Mary Levallois, 1909), 70. For Marx's, see Maurice Couyba, *et al.*, *L'Art à l'école* (Paris: Larousse, 1908), 55-56. Alongside the commission on *imagerie scolaire*, in 1880, the Ferry administration created a Commission des lycées and collèges to study new types of school architecture for the new educational agenda of the Third Republic. The commission consisted of two bureaucrats and four architects: Anatole de Baudot, Émile Bœswillwald, Émile Trélat, and Émile Vaudremer. Although Baudot and Trélat have been appraised as "proto-rationalists," as followers of Viollet-le-Duc, the designs proposed by the commission still fell very much in line with traditional Beaux-Arts design principles. Certainly there was no opportunity for nature or natural motifs to enter the designs, nor did the architecture make any concessions to the psychological capacities of children. On the Commission des lycées and collèges, as well as the short-lived Commission des Bâtiments scolaires, see chapter 4 of Alice

achieving their goals. In fact, they understood that architecture could make a great contribution to their cause. Jourdain in particular, as an architect himself, praised the school designs of the young architect Sautereau [Figure 3.5], whose "naïve, charming, and not at all doctrinal" design replaced the classical motifs and rigid design principles of Beaux-Arts architecture, unintelligible to the school's children, with an architecture inspired by nature.⁶¹ The rejection of symmetrical, historicist forms for pitched roofs and asymmetric floor plans was repeated in designs of the architects Henri Sauvage and Charles Sarazin, also praised by Jourdain. [Figure 3.6] Sauvage and Sarazin also designed simple wooden classroom furniture that was displayed at the 1907 Salon d'Automne, which Jourdain described as, like their architecture, having an air of "freshness and gaiety, with a touch of reverence and serenity."⁶² [Figure 3.7]

Marx, perhaps France's most prominent art critic at the turn of the century, was less concerned with architecture than Jourdain. Rather, he was primarily invested in the images that would be put before children's eyes within the classroom. For Marx, it was the poster that could best educate children's eyes in matters of nature and beauty. With the proliferation of chromolithography in the late nineteenth century, the poster had become a hallmark of French art and a pervasive visual presence in cities by the 1890s. Between 1896 and 1900, Marx published a series of posters by French artists under the title *Maîtres d'affiche*, and in 1895 had begun promoting the use of posters in schools, heralding them for their "harmonious and lively colors, with straightforward and intelligible subjects," well-suited to the developing minds of children, able to "gently impress upon then without putting too much stress on their minds."⁶³ Posters

Thomine, Émile Vaudremer, 1829-1914: la rigueur de l'architecture publique (Paris: Editions A&J Picard, 2004).

⁶¹ Couyba, et al., L'Art à l'école, 44-46.

⁶² Ibid., 48.

⁶³ Marx, Roger, "L'Art à l'école." Le Français quotidien, February 5, 1895.

were also ideal for school use because of their relative low production cost as well as their mobility. So as not to distract students when lessons involved other images, they were able to be moved around in the classroom. They could also be easily replaced by new images when appropriate. Additionally, lithographs exposed children to artworks as they were intended to be seen, in keeping with the *art à l'école* movement's "absolution prohibition" of "the facsimile, the trompe-œil, [and] the replica framed in fake cold frames."⁶⁴

Between 1896 and 1912, a number of images were printed which Marx found particularly appropriate for use in schools, many of which were displayed at the 1904 exhibition of art à l'école held in conjunction with the first congress.⁶⁵ The first to be released was a set of three images, printed by the city of Paris for use in its schools, titled *Images pour l'école*. The set was composed of Henri Rivière's *l'Hiver*, Willette's *le Chaperon rouge*, and *l'Alsace* by Étienne Moreau-Nélaton. At Marx's suggestion, Larousse, via Georges Moreau, printed four additional images by Moreau-Nélaton in 1898, titled les *Fruits de la Terre: le Blé, le Vin, le Troupeau, le Bois*. The painter Charlotte-Hélène Dufau created four images for use in schools, printed by the printer Ollendorf: *Aidons-nous mutuellement, Aimer vos parents; Mieux fait courages que force, and Pas de moisson sans culture*. These moralizing titles belay the simplicity of their subjects and depiction of nature that for Marx made an image most apt for young students. Finally, Eugène Verneau, between 1897 and 1912 printed four series of prints by Henri Rivière: *Les Aspects de la nature*, Paysages parisiens, La Féerie des heurs, and À Vent de Noroit. Rivière would become, through both Marx's personal advocacy in a number of reviews published

⁶⁴ Paul Vitry, "L'Art à l'école," Art et décoration 15, no. 2 (1904), 53.

⁶⁵ Roger Marx, "Éducation. L'Art à l'école. 1. L'Imagerie murale," L'Enfant 138 (1906).

between 1895 and 1898, as well as that of the Société nationale de l'art à l'école, the most representative artist of the *art à l'école* movement.⁶⁶

The commonality of these prints was not merely their depiction of nature. At the same time that Marx commissioned *les Fruits de la Terre*, Moreau himself decided to create a series of images for schools, with the assistance of Rivière and Georges Auriol, titled *Tableaux intuitifs*. [Figures 3.8, 3.9, 3.10] Although the images depicted nature, including the human body, for Marx, Moreau's posters were far too didactic in nature, appealing to the faculty of reason more so than that of vision and sentiment. For example, in the poster titled "Forme," with the exception of the Henri Riviève image that adorned the top of the image, the drawings of nature were used to explain various geometric forms, and displayed no trace of artistic interpretation.⁶⁷

On the contrary, the images of Moreau-Nélaton, Dufau, and Rivière all depicted scenes of man fully within the natural world. In Dufau's *Aidons-nous mutuellement*, the children are not merely playing in nature as visitors to the natural world. **[Figure 3.11]** Rather, they can be understood as themselves a part of nature, with one of the children's arms entwined with the branch of a tree, having lost his hat through the same wind that rustles the trees, with his billowing coat taking the same rounded shape as the tree branches blowing in the background. Moreau-Nélaton's "Le Blé," taken from his *Fruits de la Terre* series, as well as Rivière's print *l'Hiver* also depict man in an intimate relationship with nature. **[Figures 3.12, 3.13]** With the stripes of his shirt replicating the striations of the tilled land, the farmer in Moreau-Nélaton's print regenerates nature as he seeds the land. In *l'Hiver*, two women, rendered rather

⁶⁶ Note that Marx was personal friends with Rivière, working with him in other aesthetic reform groups such as the Société de l'art populaire et d'hygiène. Some critics of the *art à l'école* movement alleged that Marx advocated so stridently for art to be placed in schools as a means of promoting the work of his associates. See Jules Leroux, "L'Art à l'école," *Pages Libres* 15, no. 1 (1908).

⁶⁷ Marx, "Éducation. L'Art à l'école. 1. L'Imagerie murale," 91 and Vitry, "L'Art à l'école," 52.

inconspicuously in the middle-ground of the scene and toward the edge of the print, carry harvested grain on their backs as they walk out of the forest that visually dominates the image, sinking into the snow underfoot. The sturdiness of the rooted tree trunks contrasts with the light movement of the women through the forest, portraying a durable nature capable of graciously hosting humans in its domain.

For Marx and the art historian and Louvre curator, Paul Vitry, the superiority of these images for use in schools derived from their multi-faceted capacity to educate children both aesthetically and morally. Their depiction of the familiar subject of nature, as well as the simplified style in which the scenes were executed, made them easily intelligible to the child's mind, while the beauty of nature would attract students' attention, preparing their minds to understand and seek out beauty over the course of their lives. The images' portraval of "tranguil labor and serene peace" extended their value beyond mere intelligibility, allowing them to "fill the spirit with calm and healthful impressions...[and] examples of honest life."⁶⁸ Finally, the expressiveness of the artist in the print, "the firmness of the line and the true simplicity of the gesture," made the artworks able to "awaken the spirit of the child, to make him take hold of the fact of the intervention of the artist who...captures a detail of life and preserves it in his work."69 This interpretive quality of this type of art — or the "intervention" in the depiction of subject matter, seen through the stylistic choices of the artist — was for Vitry, "also a form of the beauty of nature." Hence, these simply rendered artworks showing man in harmony with nature, exposed children to an extensive natural beauty that encompassed both the natural world and human beings within it, including both the artist and the children themselves.

⁶⁸ Ibid., 55-56.

⁶⁹ Ibid., 55.

Drawing Geometry, Knowing the World

While those proponents of *art à l'école* whose interest lay primarily in the arts devoted most of their energies, particularly in the movement's early years, to creating artistic environments within schools, many of those more invested in pedagogical issues, from Buisson at the highest level of educational administration, to a number of teachers in local schools, focused their attention on the reform of drawing instruction in primary schools. The two projects operated in parallel, yet, particularly with respect to implementing the desired changes on a national scale, these two projects of *art à l'école* had very different means available for carrying out their objectives. Whereas state budgetary concerns hindered the movement to place art in the school, a reform of drawing instruction required no additional funding, with drawing having been taught in French schools, and state funds having been allocated for this purpose, for nearly a century.

Both of these movements still were undertaken in service of French education's ultimate goal of forming children in to ideal citizens. Yet they differed from earlier attempts to reform education in their creation of pedagogies tailored specifically to the child's mind, which they held to be fundamentally different than that of the adult. United by this principle, the drawing reform movement reached the same conclusion as the movement to create an artistic school environment: that nature was the form of beauty most apt to instruct French children and provide an aesthetic and moral education. Hence the newly proposed drawing pedagogy would ask children to draw from nature, according to their own nature.

In 1901, the doctor Émile Galtier-Boissière staged an exhibition of drawings by French children at the Petit Palais. Drawings made in schools had been displayed at Expositions

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universelles for decades. Thus without seeing the exhibited images, the exhibition would only have been notable in that it was not organized by the state. At the time, Galtier-Boissière was best known for his moralizing posters that, over the course of the past year, had been hung throughout the nation in French schools. These posters promoted healthy and hygienic practices while warning students of those that would lead to physical and moral decline. The posters were visually didactic, with lessons taught by images, with text often used only as a supplement, in keeping with the shift toward visual education initiated by Jules Ferry in 1879. For example, Galtier-Boissière's most famous poster, which promoted an anti-alcoholism message, showed two renderings side by side of a man's head, one in good health with a rosy complexion and a neatly tied tie, and the other appearing unkempt, sickly, and fatigued, with a red nose and a deeply furrowed brow. **[Figure 3.14]** Between the two images the "physical troubles" and "moral troubles" of alcoholism are written out in list form, parts of which are in text so small that one would have to come within inches of the poster to read it. However, even with a quick glance from the back of the room, a student could readily ascertain the perils of alcohol.

One imagines that the children's drawings on display at the Petit Palais would have seemed incongruent with Galtier-Boissière's interest in hygiene and use of images as a didactic tool in the teaching of morality. They demonstrated none of the precision and orderliness that the state had been so eager to show off to other nations at earlier Expositions as examples of French drawing education's superiority. Their subject matter had no coherence. The drawing styles and skillfulness varied from picture to picture. Some drawings attempted perspectival representations of space, while others depicted three dimensional figures and objects in a flattened horizontal oblique. **[Figures 3.15, 3.16]** Others, such as a drawing of the Métro by a nine and a half year old, displayed imagined conceptions of subjects rather than attempts to draw representationally.

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[Figure 3.17] One might in fact wonder if Galtier-Boissière intended the exhibition to demonstrate the need for a moral reform among children to ensure their development into orderly and dutiful French citizens.

Galtier-Boissière in fact intended the exhibition not as a means to assess and comment on the quality of French children's drawing, but rather "to gain insight into the daydreams of children and the way they view the world in this era."⁷⁰ There was much enthusiasm for this inquiry and for the exhibition among the artists, academics, psychologists, intellectual elites, and philanthropists responsible for choosing which drawings would be put on display. Unlike previous exhibitions of children's drawings, the task of this jury was not to identify students whose evident talent, if developed and encouraged, could transform them into master artists. Instead, the images, drawn by children without guidance from instructors or drawing manuals, functioned as a set of objects for experts to study as a means to empirically understand the artistic sensibility and capacity of the French public at large. The artist, aesthetic reformer, and member of the exhibition's jury, Charlotte Besnard, described the purpose of these drawings as such:

We wanted to understand the vision of the largest number possible. That was the interest of this undertaking, which has showed us the origin of this fundamental division currently existing between the public and true artists — a sterilizing division which will fatally halt all spontaneous, unified, and national expression in the domain of the arts, which, in our epochs of greatness, were the uninhibited translations of the aspirations of the entire nation, and a critical step in the nation's evolution.⁷¹

Thus in 1901, the children's drawings in the exhibition served as a means of taking the artistic pulse of the future French public, assessing the innate capabilities of French citizens

⁷⁰ Charlotte Besnard, "Dessins des enfants," *Revue universelle* (1901), 817.

⁷¹ Ibid., 821.

the "spontaneous" children's drawings in Galtier-Boissière's exhibition had taken on a new status in French education and in French society. No longer were they evidence of a child's abilities before he or she was properly educated. Instead, they were products of already educated children — artifacts of a new drawing methodology that was to be implemented in French schools — and indices of a new understanding of the purpose of drawing for France as a nation.

This new methodology came over one hundred years after the establishment of drawing as part of French primary and secondary education. While a number of changes and reforms were undertaken in the years between, one form of drawing had been taught continuously. This was "geometric drawing," which involved the construction of representations through geometric figures.⁷² Geometric drawing had been implemented during the Revolution as preparation for vocations in the technical and industrial arts. Drawing was not taught as an art, but rather, for younger students, as a means to explain the principles of geometry, and at more advanced levels, it was introduced as part of the teaching of surveying. In 1833 school reforms under Guizot introduced a new form of drawing, known as *dessin linéaire*, to the existing methods of teaching geometry in *écoles primaires supérieures*.⁷³ Formulated as a systematized pedagogy in 1819 by the mathematician Louis-Benjamin Francoeur, *dessin linéaire* asked students to draw various geometric figures by hand, without a straight edge or compass. At the youngest age, students

⁷² This history of drawing in French schools which follows draws on the following sources: Jocelyne Beguery, "Le Dessin: vers un problématique enseignement artistique," in *L'École républicaine et la question des savoirs*, ed. Daniel Denis, and Pierre Kahn (Paris: CNRS Éditions, 2003); "Dessin," in *Dictionnaire de pédagogie et instruction primaire*, Vol. 1, ed. Ferdinand Buisson (Paris: Hachette, 1887); Renaud D'Enfert, "Inventer une géometrie pour l'école primaire au XIXe siècle," *Tréma* 22 (2003); and Maurice Pellisson, "Dessin," in *Nouveau dictionnaire de pédagogie et d'instruction primaire*, ed. Ferdinand Buisson (Paris: Hachette, 1911).

⁷³ An *école primaire supérieure* was an intermediary school between an *école primaire* and a secondary school. For a history of legislation on drawing in French schools, see "Dessin" and D'Enfert, "Inventer une géometrie pour l'école primaire au XIXe siècle".

would draw the most simple of figures, such as straight lines or right angles. They would progress through more difficult shapes as they grew older, combining various geometric forms to draw objects of greater and greater complexity, culminating in the drawing of architectural ornament and models of classical sculptures. By the time of Guizot's reforms, *dessin linéaire* education had been modified slightly such that students would draw their objects for a second time, this time using tools such as a compass and rule, as a means of self-correction.

In 1850, dessin linéaire became both mandatory for all students and a subject unto itself, no long taught in service of geometry. In fact, the Falloux law of 1850 removed geometry entirely from primary education, being deemed more appropriate, given that it was intended to develop intelligence, to the lycées where the nation's elite were instructed. *Dessin linéaire*, on the contrary, was conceived as a means to develop the ability to observe as well as precision in motor skills. It was hence deemed appropriate for schools which in large part educated future artisans and technical workers, not only because it would prepare students to contribute to the French industrial economy, but also because, with the reforms following on the heels of 1848, it was understood not to improve the intelligence of the future working classes. Just a few years later, in 1853, after France's embarrassing showing at the International Exhibition in London, the French legislature asked the philosopher Félix Ravaisson to redesign drawing education such that it would to improve students' artistic abilities, and not only their vocational preparedness. Along with artists such as Ingres and Delacroix, Ravaisson formulated a new "artistic" pedagogy in which students would draw from the observation of the masterworks of art history, represented by plaster reproductions of sculptures, as well as prints and reproductions of paintings. Ravaisson's method was adopted, but only for the elite lycées.⁷⁴

⁷⁴ For greater detail on Ravaisson's pedagogy, see Félix Ravaisson, *De l'Enseignement du dessin dans les lycées* (Paris: P. Dupont, 1854).

The Expositions universelles that continued to occur in the second half of the nineteenth century prompted France to take measures to both improve its artistic production and advance its scientific development. At the level of tertiary education, in which science and art were entirely extricated from one another, this posed no problem. Yet in primary and secondary drawing education, this created a conflict of interests. While Ravaisson's "artistic" methodology would allegedly raise pupils' artistic aptitudes, dessin linéaire was systematic and hence a "scientific" form of instruction. These tensions came to a head in late May of 1878, when, in the wake of France's defeat in the Franco-Prussian War and the 1878 exhibition, the legislature ordered a nationwide examination of drawing pedagogy. It created a commission to organize this inquiry, which would ultimately recommend a new pedagogy for drawing in France.⁷⁵ Prominent figures on the commission included the Minister of Education and Fine Arts, Agénor Bardoux, Ferdinand Buisson, Ravaisson, and the sculptor and director of the École des Beaux-arts, Eugène Guillaume.⁷⁶ In January of 1879, a second commission of nineteen inspectors was formed to carry out the investigation throughout schools in France. Of the original commission, Guillaume was appointed to summarize the reports of the inspectors.

Since his report "Idée générale d'un enseignement élémentaire des beaux-arts appliqués à l'industrie," given at the newly founded Union centrale des beaux-arts appliqués à l'industrie in 1866, Guillaume had continually argued that the ultimate purpose of drawing education was to enhance the quality of industrial production, rather than that of the fine arts, and that educational policies should be formulated accordingly.⁷⁷ In the context of the commission, he hence

⁷⁵ "Enseignement secondaire: rapport et arrété relatifs à l'enseignement du dessin," *Journal générale de l'instruction publique* 41, no. 29 (July 19, 1879).

⁷⁶ For a full list, see Ibid.

⁷⁷ Eugène Guillaume, *Idée générale d'un enseignement élémentaire des beaux-arts appliqués à l'industrie* (Paris: Union Centrale, 1866).
advocated for the implementation of drawing that was a rational, and above all, a scientific practice, throughout state schools in France. "Exactitude! Precision! Truth!" he proclaimed in a lecture given in 1886, "these are the goals that drawing must realize; it is the goal toward which all branches of human knowledge aim."⁷⁸ For Guillaume, only *dessin linéaire*, a self-correcting and precise practice based on the geometric construction of forms, could impart this scientific character, giving results that were "truly certain."⁷⁹ For Guillaume, the primary goal of drawing instruction was to be *useful*. It sought not "to stimulate the personality of the student, [or] to develop in him artistic sentiment and taste," but rather "to educate the student such that he could reproduce, with a rigorous exactitude, the models placed before his eyes."⁸⁰

Guillaume's proposal did not go without critique or opposition. Primarily, it was contested by Ravaisson, who re-articulated and further developed his methodology in two pamphlets published in 1879 and 1880.⁸¹ The rivalry between these two ideas for drawing instruction, published side-by-side in Ferdinand Buisson's authoritative *Dictionnaire de pedagogie* in 1882, extended beyond the decision in 1880 regarding which new pedagogy would be implemented. Analyses of the comparative advantages of each plan in fact continued into the early twentieth century. The longevity of this debate can be attributed to two causes. First was the anticipation of perceptible results of Guillaume's plan, and the eventual disappointment when they failed to come to fruition. In 1909, the art critic and historian André Michel conclude that, "after being taught for thirty years, it seems that [Guillaume's] teaching is now condemned. The

⁷⁸ Idem, "L'Enseignement du dessin," Congrès international ayant pour objet l'enseignement technique (1886), 116.

⁷⁹ Idem, "Dessin," in *Dictionnaire de pédagogie et d'instruction primaire*, Vol. 1, (Paris: Hachette, 1882), 684.

⁸⁰ Pellisson, "Dessin," 466.

⁸¹ Félix Ravaisson, *L'Art dans l'école* (Paris: A. Quantin, 1879) and Idem, *Enseignement Du Dessin* (Paris: 1880). The latter of these two pamphlets would be included in Buisson's *Dictionnaire de pédagogie et instruction primaire*, published in 1882.

results have been more than mediocre — closer to nothing — and, at the admission of all of the heads of our schools, it has bored our students to such an extent that drawing classes have become a nightmare for instructors.^{***} Second was the fact that Guillaume and Ravaisson did not merely formulate two different types of drawing instruction. Their plans reflected both different political positions as well as mutually exclusive propositions regarding science and the intelligibility of the natural world.

Guillaume did not just propose that drawing should be taught through geometry. He also believed that geometry underlay and ordered the world. Hence the exactitude of geometric drawing was not merely the straightness of its lines, or the consistency of its curves, but rather that the figures produced through geometrical drawing had the potential, when executed correctly, to be perfectly mimetic with the objects they represented. As an example, Guillaume contended that the laws of drawing in perspective, and furthermore, those used to construct shadows "could achieve a certainty such that the realism of the drawing, which was perfect, would become a mathematical truth."⁸³ For Guillaume, the laws of geometric drawing were the same as the laws of the natural world. Taking this proposition to its logical extreme, he argued that not only did "the figures of celestial bodies and their systems, many inorganic bodies, and all organic bodies attest to the intervention of a supreme geometry," but additionally, that, "this regularity appears in creation like the mark of a intelligent intervention and as an essential condition of life. And if geometry presides over the forms of beings, if it intervenes as a cause and a sign of their perfection, it exists also in their minds...the most intimate relationship of

⁸² Michel, André, "Causerie artistique: La Réforme de l'enseignement du dessin." *Journal des Debats*, Febuary 2, 1909.

⁸³ Guillaume, "Dessin," 684.

geometry is to human intelligence.^{***} This natural accord between the human thought and geometry thus rendered geometric drawing not only the most precise method of drawing, but the most useful method of *instruction* for students in all levels of schooling, from primary and secondary schools to industrial and fine arts schools, and for all future vocations, whether artisan, worker, or artist.⁸⁵

In contrast to Guillaume, Ravaisson's advocacy of "artistic" drawing, a continuation of his pedagogy developed for lycées in 1854, rested on an idea of a natural world which could never be isomorphic with a scientific, or human, understanding of it. Science, understood by Ravaisson as the discovery of the "laws" of the universe, and in particular the human fabrication of geometry, would always be an approximation or an *a priori* abstraction of life; no straight line or perfect curve would ever exist in nature. Accordingly, for Ravaisson, reason, the faculty used to deduce mathematical principles, could never completely know the world in the way that Guillaume maintained that it did, as human reason did not govern the world. "The figures of living beings...can be neither calculated nor rationally constructed...we understand them rather through an irreducible action of intelligence which is totally separate from the deduction used in mathematics, an action that we call either intuition...or judgment, or sentiment."⁸⁶ For Ravaisson on the other hand, art and artistic representation made no claim to fully understand the workings of the world, but rather, were an exercise in seeing it. Prioritizing vision over reasoning, art sought to see the things and beings of the world as indivisible wholes — forms with infinite variety and spontaneous movements that are expressions of the will and spirit rather than

⁸⁴ Ibid., 685.

⁸⁵ Ibid., 689.

⁸⁶ Félix Ravaisson, "Dessin," in *Dictionnaire de pédagogie et d'instruction primaire*, Vol. 1, (Paris: Hachette, 1882), 672.

mechanical principles.⁸⁷ Allying himself with Pascal, Leibniz, and da Vinci, and working in the pedagogical tradition set forth by Jean-Jacques Rousseau in *Émile*, Ravaisson characterized science as a "reasoning, a discursive operation which, in its regular exercise, proceeds from unity to plurality, and returns to the plurality to assemble a unity and does not stop until it has found in the elements of the plurality the reason of the whole that they form." In contrast, he contended that "art does not look for the reason of the totality in all of the details, and neither the reason of the details in the totality. That which interests art is the whole form, is unity. For art, beauty is the only reason, the true principle of things. Elements are no longer distinguished, perceived in succession, then reassembled into a whole. The details of the work are found in a single thought."⁸⁸ This was not to say that Ravaisson thought that science had no value. In fact, he saw the artistic faculty of imagination as an essential part of the scientific process, as it was imagination that allowed science to make initial hypotheses.⁸⁹ Merely, he maintained that drawing as a practice should be taught as an art and not a science, contending as well that it was imagination and intuition, rather than reason, that would allow students to apprehend beauty.⁹⁰

Ravaisson's objective for the new pedagogy was to expose students to and inculcate in them a sense of beauty. For this he chose ancient Greek sculpture, which he deemed the apex of artistic beauty, as the first objects that students would draw. In particular, students were to draw from models of the Apollo Belvedere, having assessed that particular statue not only as beautiful but also most accessible to children.⁹¹ However, despite his agreement with academic ideals of

⁸⁷ Ibid.

⁸⁸ Gabriel Séailles, "Deux méthodes dans l'enseignement du dessin," *La Revue politique et littéraire* 19 (1881), 184.

⁸⁹ Ravaisson, "Dessin," 673.

⁹⁰ Ibid., 672.

⁹¹ Gaston Quénioux, "Le Dessin et son enseignement," L'Art décoratif 8, no. 1 (1906), 145.

beauty, Ravaisson made clear that his stance on drawing instruction was not motivated by lofty ideals regarding the purpose of art, but rather by the utility it would provide for the nation. Aside from this, he also contended that drawing education should be considered an education of students' intelligence, rather than a mere technical skill. Somewhat surprisingly given his academicism, he acknowledged the political implications of providing all students with this kind of education, arguing against the grain of the majority view, which held that, for purposes of national stability, it was best not to educate workers in the same way as the elites. Yet despite his mention of the "injustice...in a society such as ours, where we declare that there are no more slaves...of drawing a line of demarcation between a multitude doomed to barbary and a preferred class for whom true civilization was reserved," above all, Ravaisson's prescriptions for the teaching of drawing sought to address the same goal as did Guillaume's: the improvement of French national production.⁹² However, contrary to Guillaume, he argued that only the imagination, the faculty cultivated by artistic drawing, had the capacity to truly improve the artistic quality of French industry. If drawing were taught as a science, "the industrial works of art produced by workers used to, since childhood, understanding everything in the same way such that everything had the same character, we would no longer see supple and gracious lines, or the harmony of colors which are the prize of French industrial production."⁹³ He felt that geometric drawing, in its quest for objectively perfect constructions of an object, each of which was ideally the same, would render future workers into undifferentiated machines. In comparison, a curriculum of artistic drawing would create intelligent and creative workers who could appreciate beauty and continue to apply it to industrial goods in innovative ways.

⁹² Ravaisson, "Dessin," 683.

⁹³ Ibid., 673.

In 1880, *dessin linéaire*, newly theorized by Guillaume as *dessin géometral*, became the official pedagogy of both primary and secondary schools in France. Guillaume enjoyed a number of advantages in securing the approval of his pedagogy. While both he and Ravaisson held extremely prominent positions in the French intellectual bureaucracy, Guillaume additionally had the backing of Charles Blanc, then professor of aesthetics and history of art at the Collège de France, member of the Académie des Beaux-Arts and the Académie française, and former Minister of Fine Arts.⁹⁴ But more so, Guillaume put forth his proposition in a moment during which the utterance of the words science, scientifique, raison, or rationalisme lent credibility to whatever it was attached to, with the positivism of Auguste Comte and, more so, Émile Littré dominating France's intellectual and political spheres, and a more idealist, though related, rationalism pervading art theory.⁹⁵

Although positivism originated in the 1830s with Comte's *Cours de philosophie positive*, after 1848, it transformed, under Littré, into a materialist doctrine that served both as an explanation of civilization, and as a political doctrine. Positivism as a theory proposed both a theory of progress and a theory of knowledge. According to the doctrine, modern civilization had reached the third, and final phase of its development, known as the "positive" or "scientific" phase. In this phase, science had finally overcome both theology and metaphysics as systems of knowledge, and hence man could finally understand the "true" nature of the world through scientific, observable facts. Politically, positivism contended that the domination of science and truth, as opposed to false ideologies, would lead to a stable, peaceful state. In the context of

⁹⁴ Michel, "Causerie artistique: La Réforme de l'enseignement du dessin".

⁹⁵ On the role of positivism in the early Third Republic, see chapter 6 of Claude Nicolet, *L'Idée républicaine en France - Essai d'histoire critique (1789-1924)* (Paris: Gallimard, 2014). For Littré's formulation of positivism, see Émile Littré, "Les Trois Philosophies," *La Philosophie positive*, 1, no. 1 (1867), 22-30.

nineteenth century France, this translated into advocacy for a *juste milieu* politics of republicanism, ensuring an era of peaceful prosperity absent of the threats of social upheaval that absolutism, on the right, and socialism, on the left, would cause. Not only ideals, these politics formed the foundation of early Third Republic politics, as the men who had been important figures in in Littré's positivist salons, his journal La Philosophie positive, and other positivist associations during the Second Empire rose to positions of political power with the formation of the Third Republic. These figures included not only Littré, himself an influential senator, but many of the most prominent minsters of the new government, such as Léon Gambetta, Antonin Dubost, Louis André, and, most notably in this context, Minister of Public Education Jules Ferry as well. Positivism's interest in empirical observation was echoed in the Realist movement in the arts, constituted by painters such as Courbet and writers such as Zola who sought to capture the details of everyday life.

At the same time, the desire for scientificity that formed a backbone of positivism emerged elsewhere in the arts as rationalism, a doctrine that sought to understand the ordered, underlying, and reasoned principles of the world, and to deploy them accordingly. In theories of both art and architecture, these scientific principles began to replace the authority of the ancient world. For example, in his 1867 *Grammaire des arts du dessin*, whose popularity merited it seven editions by 1888, Charles Blanc outlined the "certain and invariable," "essential and absolute" laws of color. His famous "chromatic rose," a figure displaying the relationship between primary and secondary colors was constructed with precise geometry such that "each of the binary colors are equally distant from the two primaries that compose it," so as to "render visible the law of complementaries, and express its truth."⁹⁶ [Figure 3.18]

⁹⁶ Blanc, The Grammar of Painting and Engraving, 153n1.

Additional evidence of rationalism's pervasiveness, and its appeal in light of stagnant academic art, in the 1870s and 1880s can be seen in a 1876 update of the nameplate for the "théorie" section in the Revue générale de l'architecture et des travaux publics. [Figure 3.19] The revised drawing spoke to the increasingly audible call for the replacement of the Vitruvian tradition and its metaphysical idea of beauty with a de novo design methodology based on geometry, mathematics, reason. The original design, from the journal's origin in 1840, demonstrated the importance of neoclassical forms and treatises, as well as a burgeoning interest in the structural logic of Gothic architecture. [Figure 3.20] This is depicted through an image of large treatises and a partially unfurled scroll sitting atop on a Greek altar, which is flanked by two women in Grecian robes, one an allegory of architecture holding a triangle and the other, and allegory of history, writing on a scroll. The treatise located in the center of the altar is open to show its contents. On the left page is a study of buttresses featuring a vertically oriented building with a pointed arch. On the right is a plan, symmetrical around an axis, and a written description. The back of the altar hints at the growing interest in science, showing an equation of Newtonian mechanics, work (here, T for *travaille*) = force x distance, expanded in terms of mass and volume so as to calculate the work done in moving an object, such as the lever weighted by the hanging ball in the figure below the equation. Yet despite this one understands this application of Newtonian mechanics as a representation of a man-made architecture, rather than a scientific principle which itself would govern architectural form.

The updated nameplate, in contrast, represents the turn toward science and its understanding of the natural world, and away from the neoclassical tradition and historical styles. The image shows a vertically oriented book in front of a neoclassical temple, decorated with garlands, and on the ends, overgrown with winding, flowering plants. The book, which is now

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the primary figure in the image, in contrast to the older image which is dominated by the altar itself, is open to a spread whose left-hand page is titled "mathematique," and has depictions of various geometrical figures and projections. Its right hand page, with the title "esthétique," shows human figures, including Leonardo's Vitruvian Man, an ancient Egyptian figure drawn on a vertical scale, and various elements of architecture — a capital, a column, a triumphal arch, and a church, drawing inscribed in geometrical proportioning systems. Again, two women, this time in statue form, stand on either side of the book. While one remains in Grecian dress, the other has bare breasts and wears only a loincloth. Although architecture, in 1876, as Guillaume was lobbying for an intensification of *dessin linéaire* in French education, continued to be castigated for rewarming various historical forms, here one can see how the growing interest in "scientific" drawing corresponded to a growing interest in a *de novo* design methodology which to supplant the Vitruvian tradition and its metaphysical idea of beauty with geometry, mathematics, reason, and a scientific aesthetics.

Finally, this cultural partiality to reason and scientificity, and more specifically, to geometry as a means of understanding the world, and hence the basis for drawing education, can be seen in Viollet-le-Duc's last book, *Histoire d'un dessinateur: Comment on apprend a dessiner*, published posthumously in 1879 amidst the Guillaume-Ravaisson debate.⁹⁷ The book is a story of the young boy petit Jean, and his mentor M. Majorin who teaches him to draw. Although presented in the form of a story, *Histoire d'un dessinateur* functions much like Rousseau's *Émile*, elaborating Viollet-le-Duc's theory both of how children should learn to draw and the purpose of this education. Yet while *Histoire d'un dessinateur* shares Guillaume's belief

⁹⁷ On Viollet-le-Duc's positivism, particularly as it pertains to his formulation of "style," see Jerzy Frycz, "Viollet-le-Duc, créateur romantique ou positiviste," in *Actes du Colloque international Viollet-le-Duc, Paris, 1980*, ed. Pierre-Marie Auzas (Paris: Nouvelles Éditions Latine, 1982).

that drawing should be taught as a science, as well as his belief that the world is ordered by rational principles of geometry, the work offers a pedagogy different from both Guillaume's and Ravaisson's — one which would presage *Art à l'école*'s turn of the century declaration that, in terms of educating children, the process of drawing was more significant than the final product.

Histoire d'un dessinateur begins when petit Jean meets Majorin, a friend of M. Mellinot, the father of Jean's friend André. While Majorin manages a factory, Mellinot is a distinguished professor. One day, Majorin sees petit Jean's drawing of a cat. Rather than depicting an idealized image of a cat, with four legs, the drawing shows the cat head-on, with only two paws drawn and its tail sticking up above its head. **[Figure 3.21]** While Mellinot criticizes the drawing for failing to depict all four paws, and for the placement of the tail, petit Jean argues that he cannot have drawn the cat incorrectly, as he drew it from observation. This rejection of idealized images in favor of drawing through observation prompts Majorin, who has strong opinions about how drawing should be taught and executed, to take an interest in helping petit Jean learn to draw. Majorin thus takes petit Jean under his wing, and over the course of the next few months of spending each day together, teaches Jean to truly draw.

Majorin begins by teaching Jean "a bit of geometry." Although petit Jean has learned to draw circles and squares in school, Majorin shows him how to verify the precision of his angles through various geometric constructions. The next day Majorin takes petit Jean on a walk, on which they pick up leaves. He then shows petit Jean how each leaf corresponds to a pentagram, how to use a circle to construct a pentagram, and how to draw a rough outline of the leaf using the pentagram as an underlying structure. **[Figure 3.22]** Their time together precedes along these lines, with Majorin explaining to petit Jean not only how to draw objects from the natural world through geometry, but how geometry explains what we see — for example, the horizon **[Figure**

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3.23], shadows [Figure 3.24], the up-lighting of clouds at sunset [Figure 3.25], the diminution of tall buildings as we look up at them [Figure 3.26] — in the world. The book is illustrated with a number of images that provide a veritable education in geometric drawing to the reader. After Majorin has taught Jean a sufficient amount of geometry, he begins to take petit Jean further out into the world. At first they travel locally, to observe and draw flora and fauna. Petit Jean begins to subconsciously combine his lessons in geometry with his innate power of observation, and begins to draw natural objects more realistically. [Figure 3.27] Through the act of drawing, petit Jean, according to Majorin who is please with his progress, begins to understand the workings of nature.⁹⁸ Next Majorin gives lessons in anatomic drawing, the drawing of landforms, wood construction, and carpentry.⁹⁹ Majorin and Jean travel to Italy where petit Jean learns to draw antiquities, and finally they voyage to the Alps, so that petit Jean can learn to draw the most difficult of things: mountains.¹⁰⁰ But despite the challenge of accurately depicting their shapes, for Majorin, the mountains can still be understood as "large crystalized rhomboids, subdivided into small rhomboids."¹⁰¹ As Majorin tells Jean early in their time together, "geometry is in everything, one recognizes it everywhere, it is the grand master of nature; thus, one must know it if one wants to observe and understand the products of natural creation."¹⁰²

⁹⁸ Eugène Emmanuel Viollet-le-Duc, *Histoire d'un dessinateur: comment on apprend à dessiner* (Paris: J. Hetzel & Cie, 1879), 35.

⁹⁹ These lessons are not unconnected to Viollet-le-Duc's other work. For example, in the lesson on anatomy, which Majorin explains once again through geometry, the "*machine animale*" with its structure and movement, is compared to industrial mechanisms. While the joint between the tibia and femur is compared to a pin connection of an iron structural rod [Figure 3.28], the muscles and tendons of a leg are compared to the structural members, now surrounded by a system of cord and pulleys to regulate their motion at the joint. [Figure 3.29]Ibid., 132-33.

¹⁰⁰ On Viollet-le-Duc's interest in mountains and his own drawings of them, see Eugène Emmanuel Viollet-le-Duc, *Le Massif du Mont-Blanc* (Paris: Baudry, 1876).

¹⁰¹ Idem, *Histoire d'un dessinateur: comment on apprend à dessiner*, 269.

¹⁰² Ibid., 32.

At the end of the story, petit Jean, grown to become Jean, finds himself working not in the factory, as his father had early on wished for him, but rather as the head of an atelier of a modest furniture maker.¹⁰³ Jean installs machines to speed up certain tasks, and develops the "elegance" and "solidity" of his work, such that it is presented in an exhibition on the Champs-Elysées. He develops a reputation among bourgeois clients for his abilities "to satisfy their desires, to give them what they wished for, and to resolve technical difficulties." His fluid sketches attract the attention of intellectuals, and above all, his designs, present "a simple solution, governed by good sense and practicality." In his free time, Jean "does not cease to study and perfect his taste."

While this was precisely the position which Majorin wished for petit Jean to one day achieve, Mellinot, the distinguished professor, could never understand why Majorin wished for such a seemingly modest fate for Jean. During moments when Mellinot comes into contact with either Majorin or petit Jean, he consistently assumed that petit Jean's education in drawing was a preparation for a career as an artist. At first, he asked Majorin whether petit Jean truly has the capacity to be an artist. Upon seeing his skillful sketches later on, Mellinot insisted that Jean must become a painter and show his paintings at exhibitions and salons. Furthermore, he thinks that Majorin should have Jean draw from models and prints of works of art rather than nature.¹⁰⁴ Majorin of course calmly assured Mellinot that he is not trying to turn Jean into an artist simply by teaching him to draw. "My friend," Majorin responded to Mellinot, "I never said that. I said that this child is a natural observer, and that I in no way want to work against his dispositions. On the contrary, in developing them, I am putting in his hands a profession, opening the door to an independent career, which will only be that of an excellent worker. I will not push his to

¹⁰³ Ibid., 298.

¹⁰⁴ See chapter 6, "On a Memorable Conversation Between MM. Mellinot and Majorin and That Which Follows," Ibid., 59-71. See also p. 189-193.

become an artist, he will do that himself if his taste makes him so inclined, I am simply trying to help him become a person useful to the world."¹⁰⁵

As a treatise on both the purpose and methodology of drawing education, *L'Histoire d'un dessinateur* was born out of Viollet-le-Duc's long history with drawing education and the reforms thereof, in both personal and official contexts. However, Viollet certainly would have been aware of the drawing reform inquiry that was begun in 1878. Hence to some extent, the work functions as a critique of official drawing methodologies.¹⁰⁶ Yet Viollet puts forth a proposition for the role of drawing education that veers away from that of both Guillaume and Ravaisson. To some extent, Viollet's theory of drawing mirrors that of Guillaume. Both men understand geometry as not only a means to draw the world, but as the correct means to draw it, reflecting the notion that it is geometry that provides the rational structure of the world itself.

¹⁰⁵ Ibid., 60.

¹⁰⁶ Viollet-le-Duc died in September of 1879, and the book was published in December of 1879. Violletle-Duc himself was on neither the overseeing commission nor the commission of inspectors associated with the reforms, which were initiated in May of 1878. However, he knew Guillaume not only as the director of the École des Beaux-Arts, but also from serving together on the jury of the Beaux-Arts section in the 1878 Exposition. Additionally, Viollet-le-Duc had a long history of interest in drawing and art education that makes it difficult to believe that he was unaware of the drawing reforms of 1878-1882. The positions on drawing education that he put forth through L'Histoire d'un dessinateur in many ways reprise those that he developed in response to Louis Vitet in the 1864 investigation into drawing reforms at the École des Beaux-Arts, undertaken in the wake of the 1863 reorganization of the Beaux-Arts administration. Additionally, in early 1879, he presented a report to the Conseil municipal de Paris arguing for the physical installation of art within schools — a project that would be taken up again by the L'Art à l'école movement at the beginning of the twentieth century. Also note that on page 62 of L'Histoire d'un dessinateur, "our official instruction," is named as the object of critique. On Viollet-le-Duc's debate with Vitet on drawing at the École des Beaux-Arts, see Ludovic Vitet, and Eugène Emmanuel Viollet-le-Duc, À propos de l'enseignement des arts du dessin (Paris: Ecole nationale supérieure des Beaux-arts, 1984). For his report to the Paris Conseil municipal, see Eugène Emmanuel Viollet-le-Duc, "Rapport présenté par M. Violet-le-Duc, au nom de la Commission spéciale des Beaux-Arts, sur la répartition du crédit de 300,00 fr. inscrit au budget de 1879 pour travaux de peinture, sculpture, gravure en médailles et en taille-douce," Conseil municipal de Paris. Rapports et documents, (Feburary 11, 1879), 21-22. Note that L'Histoire d'un dessinateur has also been interpreted as an autobiographical story relating to Viollet-le-Duc's own life. See Chapter 15, "Conclusion: Autogentic Rebirth" of Martin Bressani, Architecture and the Historical Imagination: Eugène-Emmanuel Viollet-le-Duc, 1814 -1879 (Farnham, UK: Ashgate, 2014). On the book, see also E. H. Gombrich, "Viollet-le-Duc's Histoire d'un dessinateur," in Discovering Child Art: Essays on Childhood, Primitivism, and Modernism, ed. Jonathan Fineberg (Princeton, NJ: Princeton University Press, 1998).

Additionally, they both propose that drawing be taught not as an art, but as a "*méthode scientifique*."¹⁰⁷

However, despite the similarities in their prescriptions, the differences between these two propositions can be read through the type of drawings for which each figure advocated. Those drawings included in L'Histoire d'un dessinateur, after the basic lessons of geometry, in fact differ greatly from those shown in the manual created for instituting Guillaume's drawing method, compiled in 1883 by Louis Charvet and Jules Pillet, two of the appointed inspectors of design education.¹⁰⁸ While petit Jean's drawings of advanced subjects are three dimensional and shaded, realistically depicting their objects of study as seen in nature, the drawings that students were to produce during the advanced lessons of Guillaume's pedagogy would be, for the most part, two dimensional figures of geometrically constructed patterns of ornament. [Figures 3.30, **3.31** While natural motifs such as leaves and flowers appear in these drawings, they are drawn as complete abstractions, existing as pure constructions of geometry. [Figures 3.32, 3.33] Despite Guillaume's belief that geometry "could achieve a certainty such that the realism of the drawing, which was perfect, would become a mathematical truth," the types of drawings that students were to produce though the advanced lessons in their drawing education made no attempt to be mimetic with nature. Rather, they were an ensemble of lines and constructed forms stemming from earlier-taught principles of geometry, sometimes with no reference to objects outside the figures in any way. In comparison, while the leaves drawn by Majorin at the beginning of the story began through the construction of a geometric figure, reflecting Viollet-le-

¹⁰⁷ Viollet-le-Duc, *Histoire d'un dessinateur: comment on apprend à dessiner*, 275.

¹⁰⁸ Louis Charvet, and Jules Pillet, *Enseignement primaire du dessin à l'usage des écoles primaries et des lycées et collèges* (Paris: Librarie Ch. Delagrave, 1883).

Duc's belief that geometry underlay natural forms the final product represented the individuality of the leaf that served as a model. [Figures 3.34, 3.35]

While both Majorin and Guillaume believed that the social role of drawing education was to enliven the French production of industrial and decorative goods by making them artistic, the means of instruction as well as the drawings that they produced could not have been more different. These disparities reflect a similar difference in opinion between Guillaume and Violletle-Duc regarding *how* drawing education would elevate French production. From the drawings included in the Pillet and Charvet manual, it is easy to understand how the two dimensional *dessin géometral* could create surface patterns and decoration which could be applied, sometimes literally, to French industrial goods. In developing these skills, *dessin géometral* also industrialized students, such that, like a machine, they had the capacity replicate the same drawing, with exactitude, over and over. In contrast, *L'Histoire d'un dessinateur* in fact never furnished the reader with an image of Jean's furniture, only with naturalistic drawings created through the observation of nature. Based on these drawings, one assumes that Jean is not replicating them in the practice of his trade, but rather than his ability to observe and to draw strongly yet indirectly influences the final shape of his product. In other words, it is not Jean's hands that have been educated, but his mind.

Drawing Nature According to Nature

Viollet-le-Duc's notion that the acts of observing and drawing toward no particular end could educate children, elevating their taste and developing their appreciation of beauty lay at the heart of the drawing reforms of 1909 that replaced *dessin linéaire* with a new method, dubbed

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dessin intuitif, or sometimes, dessin libre. These reforms came as a result of a growing sentiment that Guillaume's method of *dessin linéaire* was neither particularly useful for contemporary France, nor attentive to the new knowledge of children and pedagogy that had developed in their thirty years since the 1880 reform. In 1889, French officials still hopefully anticipated the blossoming of a new, artistic form of industrial production as a result of the 1880 reforms and the implementation of *dessin géometral* in French schools. At the Exposition universelle, Jules Pillet, the architect and engineer who had authored the instruction manual for Guillaume's curriculum, remarked that "the moment is near when genuine results of all of our efforts will be obtained, being visible to the nation and manifesting in a powerful fervor imprinted on the industrial and artistic production of the nation."¹⁰⁹ This perceived necessity for dessin géometral to provide students with a scientific and rational method of drawing was again affirmed, though with slightly less enthusiasm, in the 1900 Congrès international de l'enseignement du dessin. Despite many reports from foreign participants discussing success with other, less mechanical methods of instruction, the French representatives ultimately resolved that dessin geometral should continue to be taught in French schools.¹¹⁰ However, by 1906, the majority of the pedagogues had lost faith in Guillaume's method. Instructors complained of bored and disruptive students, industrialists were disappointed in the drawing skills of their workers, with many blaming the comparative decline in French products to ineffective drawing education, and artists found the students' work "cold, without life, and without invention."¹¹¹ Even Pillet, the ardent

¹⁰⁹ Pellison, "La Reforme de l'enseignement du dessin," 25. On Pillet more generally, see Guy Lambert, and Estelle Thibault, *L'Atelier et l'amphithéâtre: les écoles de l'architecture, entre théorie et pratique* (Paris: Editions Mardaga, 2011), 163-64.

¹¹⁰ 1er Congrès international de l'enseignement du dessin (Paris: Librarie des Arts du Dessin, 1900). See in particular "Titre III, premier section."

¹¹¹ Pottier, Edmond, "La Réforme de l'enseignement du dessin." Le Temps, March 22, 1908.

supported of Guillaume in the 1880 reforms, insisted on experimentation with new methods of teaching.¹¹²

The most vocal advocate for a new form of drawing instruction was Gaston Quénioux. While teaching drawing at the École des Arts décoratifs, Quénioux had spent a number of years mobilizing support for drawing reforms. In the face of this progressive loss of faith in the then official method of instruction, the city of Paris allowed Quénioux to offer an alternative method of drawing instruction as an optional subject at three secondary schools, using his new pedagogy of *dessin intuitif*. In late 1907, upon seeing the results of Quénioux's teaching, the Union des amicales des professeurs de dessin urged the minister of public education to form a commission to revise drawing curricula across all levels of schooling. The fifteen-member commission, which included Quénioux; Pillet; the Fourierist Louis Guébin; the chief inspector of the teaching of drawing in Parisian schools; Luc-Olivier Merson, an academic painter and designer of French postage stamps; the engraver Philippe Cattelain; and the art historian and archaeologist at the École du Louvre, Edmond Pottier. In January 1909, the Ministry of Public Education ordered that Quénioux's *dessin intuitif* replace *dessin géometral* in both primary and secondary schools, becoming the new official French drawing pedagogy.

Quénioux's new pedagogy drew on two sources: Rousseau's theory of education in Émile, and the vast discourse of child psychology that had developed in France in the nearly three decades between the adoption of Guillaume's method and the 1909 reforms. Echoing Rousseau's statement that "instead of teaching them our way, we should do better to adapt to theirs,"¹¹³ the

¹¹² Pellison, "La Reforme de l'enseignement du dessin," 27 and Pellisson, "Dessin".

¹¹³ Jean-Jacques Rousseau, *Emile* trans. Barbara Foxley. (London: Dent, 1966), 110. Quénioux's appreciation of Rousseau's work on education can be seen in his article "Dessin" in Buisson's 1911 edition of the *Dictionnaire pédagogique*. See Gaston Quénioux, "Dessin," in *Nouveau dictionnaire de pédagogie et d'instruction primaire*, ed. Ferdinand Buisson (Paris: Hachette, 1911). For a nineteenth

first precept of Quénioux's new method of instruction was that "all teaching must be adapted to the development of the children to whom it is directed."¹¹⁴ Quénioux's teaching methodology also reflected a number of contemporary movements in pedagogy at large. From these, he adopted the view that rather than trying to teach students new drawing skills in conflict with their spontaneous instincts, the new "teaching" would allow children to learn based on their innate intuition.

What precisely constituted these spontaneous instincts was knowledge that Quénoiux drew from contemporary psychology. A relationship between pedagogy and psychology had developed a number of years before Quénioux's reforms. Already in 1879, the pedagogical theorist Gabriel Compayré proclaimed that "pedagogy and psychology are from now on two inseparably united terms...the more we will know about man and especially the child, the more we will be prepared to educate him."¹¹⁵ Compayré's understanding of psychology drew from the theories of Herbert Spencer and John Stuart Mill, both of which underscored the principle that human development occurred not merely generationally, but also in the course of an individual's life. For Compayré, this evolution of the mind was "governed by...a constant and natural law...in the same way that immutable laws governed the development of plants, from their existence as seeds to their flowering."¹¹⁶ One of these laws, drawn from Spencer's 1861

Education: Intellectual, Moral, and Physical, stipulated that as a child matured, "intellectual

century source on the significance of Rousseau in pedagogy, see Gabriel Compayré, *Histoire critique des doctrines de l'éducation en France depuis le seizième siècle* (Paris: Hachette, 1879), Vol. 2, 39-93.

¹¹⁴ Pellisson, "Dessin," 467. Note that in Quénioiux, in his contribution to the entry "Dessin" that follows Pellison's, notes that Pellison has "quite exactly summarized [my] method." Quénioux, "Dessin".

¹¹⁵ Compayré, *Histoire critique des doctrines de l'éducation en France depuis le seizième siècle*, 427. Note that these two disciplines remain entwined even in present day. From 1949 to 1952, this was the subject of Merleau-Ponty's lectures at the Sorbonne, in which he argued that the extent of indivisibility of these two fields had yet to be fully understood. See Maurice Merleau-Ponty, *Child Psychology and Pedagogy: The Sorbonne Lectures 1949-1952* (Chicago: Northwestern University Press, 2010).

¹¹⁶ Compayré, Histoire critique des doctrines de l'éducation en France depuis le seizième siècle, 429.

progress is of necessity from the concrete to the abstract."¹¹⁷ Spencer recognized the influence that this theory of mental development was beginning to have on pedagogy, in which "the old method of presenting truths in the abstract has been falling out of use, [and] there has been a corresponding adoption of the new method of presenting them in the concrete."¹¹⁸ Interestingly, despite Spencer's formulation of his theories through abstract principles, his recognition of the shift toward presenting ideas in the concrete presaged psychology's new interest in concrete facts.

By the 1890s in France, one of psychology's foremost concerns was to establish itself as a specifically scientific discipline. As such, it changed from a discipline almost indistinguishable from philosophy to one that employed laboratories, experiments, and empirical observation to acquire its knowledge. Along these lines, it rejected the idea that it could, as a science, find abstract, mathematical "constant and natural" laws that governed both nature and human nature.¹¹⁹ This position of French experimental psychology is exemplified by the empirical work of Alfred Binet, France's leading psychologist of children at the beginning of the twentieth century. To develop theories about the mind of the child and its aptitudes, Binet used the school as a new type of laboratory in which to measure physiological and psychological responses of

¹¹⁷ Herbert Spencer, *Education: Intellectual, Moral, and Physical* (London: G. Manwaring, 1861), 30.
¹¹⁸ Ibid., 63.

¹¹⁹ Although this may seem to be at odds with with late nineteenth century reaction against positivism, particularly considering the close relationship between the two disciplines at the time, in fact, positivist philosophy, at least as espoused by Comte, posited that factual knowledge of the mind was limited to knowledge of its physiology, in fact precluding psychology altogether. On the proximity of psychology and philosophy, see John III Brooks, *The Eclectic Legacy: Academic Philosophy and the Human Sciences in Nineteenth-Century France* (Newark, DE: University of Delaware Press, 1998). On Comte's position on psychology, see Walter Bodenhafer, "Comte and Psychology," *Papers and Proceedings, Seventh Annual Meeting of the American Sociological Society* 17 (1922).

children while undertaking various types of schoolwork.¹²⁰

Much of the data Binet collected in schools, prior to his more famous interest in the measurement of "intelligence," was used to study the relationship between pedagogical methods and what he called "intellectual fatigue."¹²¹ The concept of intellectual fatigue stemmed from a concern about the physical fatigue of French workers that doctors began to identify as a malady in the 1870s.¹²² As a symptom of industrialization, fatigue endangered the health of individual workers, and consequently, the health of the French economy. Intellectual fatigue, which by the turn of the century was a veritable epidemic according to psychologists and pedagogues, was French children's counterpart of the physical fatigue experienced by adult workers. While workers suffering from fatigue exceeded the capacities of their bodies, students, increasingly referred to as "victims of schooling," and "amputees of intelligence," ran the risk of exceeding the capacities of their minds.¹²³ If workplace fatigue led to the shoddy production of goods. intellectual fatigue in schools led to the shoddy production of French citizens, further contributing to fears of moral decline. The types of activities that Binet identified as causes of intellectual fatigue included activities such as calculation and recitation from memory, with the rote nature of these activities industrializing the process of learning. However, it was not simply the intellectual fatigue caused by repetition that presented a problem for Binet. More significant

¹²⁰ On Binet's work in primary schools, see Alfred Binet, and Nicolas Vaschide, "La Psychologie à l'école primaire," *L'année psychologique* 4, no. 1 (1897).

¹²¹ Alfred Binet, and Victor Henri, *La Fatigue intellectuelle* (Paris: Librairie C. Reinwald, 1898). On Binet's measurements of intelligence, see Alfred Binet, and Théodore Simon, "Le Développement de l'intelligence chez les enfants," *L'Annee psychologique* 14, no. 1 (1907); chapter 6 of Martin Staum, *Nature and Nurture in French Social Sciences*, 1859-1914 and Beyond (Montreal: McGill-Queen's University Press, 2011); and chapter 5 of Stephen Jay Gould, *The Mismeasure of Man* (New York: WW Norton & Company, 1996).

¹²² On the development of fatigue as a diagnosable malady in the nineteenth century, see Anson Rabinbach, *The Human Motor: Energy, Fatigue, and the Origins of Modernity* (Berkeley, CA: University of California Press, 1992), in particular, chapters 1, 6, and 8.

¹²³ Binet, and Henri, La Fatigue intellectuelle, 10.

was the intractability of this issue through subjects such as math and literature, which, Binet surmised could *only* be learned through repetition. Confirming Spencer's theory, for Binet, the abstract nature of these subjects meant that a true understanding, as opposed to memorization of them, was beyond the scope of the child's mental development. His 1903 findings that sensation dominates children's experiences while those of adults are perceived and understood primarily through "intelligence," or rational processing, further supported this conclusion.¹²⁴

Assessing the influence of these developments in child psychology on education at the turn of the century, the Swiss child psychologist and pedagogue Édouard Claparède remarked that "the old school of pedagogy...concerned itself with what the pupil *ought* to do, without every concerning itself with what he *was able* to do."¹²⁵ While disappointment in the results of *dessin linéaire* spurred drawing teachers and the aesthetic reformers behind the *art à l'école* movement to call for drawing reforms, it was this transformation of pedagogical theory, spurred not by artists or members of the academy as it had been in 1880 but rather by teachers themselves, that made the method of *dessin intuitif* adopted in the 1909 reforms so drastically different than Guillaume's method. While Guillaume developed his pedagogy in service of an end goal, for Quénioux, the only goal was the act of doing. Hence, it was precisely the question of what a child was *able* to do — the question of a child's own nature — that drove the formulation of Quénioux's new pedagogy.

If children, according to both the theories of Spencer and the empirical findings of Binet, understood the concrete before the abstract, it followed that drawing instruction should eliminate the drawing of abstractions. Even before this theory of childhood development was framed as

 ¹²⁴ Alfred Binet, "From Sensation to Intelligence," *The Experimental Psychology of Alfred Binet* (1969).
 ¹²⁵ Édouard Claparède, *Experimental Pedagogy and the Psychology of the Child* trans. Mary Louch and Henry Holman. (London: Longmans, Green and Co, 1911), 209.

scientific knowledge, Rousseau had also declared that "geometry is beyond the child's reach."¹²⁶ Quénioux used this theory to critique Guillaume's method, and rectifying the method's failure in his own pedagogy by eliminating geometric drawing and proposing that students draw that which was deemed most concrete: nature. This formed the second principle of Quénioux's pedagogy: "Drawing should not be abstract...Nature is concrete...Geometry is not in nature such that we can immediately perceive it and that we can try to draw it."¹²⁷ Quénioux described this even more plainly in an early summary of his method, in 1906. The goal of *dessin intuitif* was, "very simply to return to the direct study of nature, the inspirer of all the arts, and dismiss all studies of drawing that proceed scientifically."¹²⁸

Quénioux's method also responded to a second premise of child psychology, which argued that children's faculties of observation developed far before their faculties of reason. Thus the first means of children's comprehension of the world around them, before writing and even before language, was the image.¹²⁹ In this sense, observation, and then the drawing of what was seen, functioned as the most developmentally appropriate way for students communicate their understanding of the world. Moreover, children's early capacity to intently observe made the natural world a doubly apropos subject for children to draw. With the dismantling of a mechanistic, Newtonian understanding of the world as well as the rejection of positivism's insistence that the world could be known only by scientific facts that effected all French intellectual thought at the end of the nineteenth century, abstract laws of science, including those of geometry, became understood as approximations, loosing their status as formulas which

¹²⁶ Rousseau, *Emile*, 109.

¹²⁷ Pellisson, "Dessin," 467.

¹²⁸ Gaston Quénioux, "De la Formation du sentiment artistique et du danger d'un mauvais enseignement du dessin," *L'Enfant* 15 (1906), 77.

¹²⁹ Idem, "Dessin," 470.

themselves governed, and hence fully explained, the workings of nature.¹³⁰ Reflecting psychology's emphasis on empirical science, nature could now only be understood through observation. And if the ability to observe was one of the first faculties of the child's brain, then the subject with which a child would be most knowledgeable, even at a young age, and hence most "naturally" drawn to, would be that which she or he had observed the most in her or his life: nature.

Combined, these two propositions about the abilities of children put forth the idea that children had a "natural," pre-rational, intuition to observe and then to draw nature, the latter as a means of expressing the child's own knowledge. For Quénioux, nurturing this aspect of children's nature, rather than suppressing it, would allow his pedagogy to fulfill the social goals of which *dessin linéaire* had fallen short. Guillaume's theory of drawing instruction had sought to educate students to better perform specific tasks. This education, it was presumed, would directly benefit the nation, in that an elevated level of drawing ability would lead to an elevated level of craftsmanship in French industrial goods. Quénioux too conceived his pedagogy as a means to improve French industrial, as well as artistic production, yet the connection between

¹³⁰ On the questioning of Newtonian mechanics at the end of the nineteenth century, J. L. Heilbron, "Fin-De-siècle Physics," in Science, Technology & Society in the Time of Alfred Nobel: Nobel Symposium 52 Held at Björkborn, Karlskoga, Sweden, 17-22 August 1981, ed. Carl Gustaf Bernhard, Elisabeth Crawford, and Per Sörbom (Oxford: Pergamon Press, 1982) and Helge Kragh, "A Sense of Crisis: Physics in the fin-de-siècle Era," in The Fin-de-siècle World, ed. Michael Saler (London: Routledge, 2014). For a more general overview of the turn of the century shift "from certainties to anxieties of indeterminism," examining changes in physics alongside the anti-materialist turn in philosophy in the French context, see chapter 2 of Suzanne Guerlac, Thinking in Time: An Introduction to Henri Bergson (Ithica, NY: Cornell University Press, 2006). The work of Gustave Le Bon presents an interesting example of a transdisciplinary reevaluation of the idea of order and certainty. While Le Bon is best known in the humanities for his work The Crowd: A Study of the Popular Mind, which describes the irrationality of the collective mind of the crowd at the turn of the century, he also wrote a best-selling speculative theory of physics in 1906, titled The Evolution of Matter. Le Bon's knowledge of physics was limited to that of an amateur, yet his hypothesis — that matter could not be explained through materialistic understandings of science, and that matter was inherently unstable, in a constant state of degeneration ---is a notable example of the resonance between the sciences and the "human sciences" at this time characterized by a fear of instability.

the effect of drawing education on the student and its effect on the nation was "less immediate and less tangible."¹³¹ His method of instruction, in which a teacher's primary role was to "respect each student's own vision and sentiment...to encourage more than critique, to suggest more than correct, to propose more than impose," and to let the child draw what he wished, as he wished, sought to form students as differentiated individuals rather than industrialized workers. Dessin intuitif was intended to "develop in the individual independence of thought, the habit of observation. In one word," claimed Quénioux, "it liberates his personality."¹³² On the social purpose of drawing education, on the one hand, he concurred with the engineer and syndicalist theoretician Georges Sorel that "artistic education, instead of being destined to provide happiness for men and women of leisure, becomes, for us, the base of industrial production and an element of social progress; it is best to turn to artistic education to allow people enjoy work, to make men understand that grandeur of their destinies, and to assure material progress."¹³³ On the other, drawing education was to serve the nation morally, as well as toward a particular political end. Quénioux declared that "if the ultimate goal of education is to elevate the spirit, to form judgment, to affirm character, even more than teaching the rudiments of all science, no doubt that our artistic culture would work toward this goal with great effort. There is reason to believe that the individual, thus cultivated, more perceptive, with a better-developed conscience, will be prepared to become a better citizen of a better democracy."¹³⁴

Reflecting his association with figures such as Frantz Jourdain and Roger Marx who approached the idea of *art à l'école* from an artistic rather than pedagogical perspective,

¹³¹ Quénioux, "Dessin," 472.

¹³² Ibid. and Quénioux, "Le Dessin et son enseignement," 163.

¹³³ Sorel, "La Valeur sociale de l'art," 32 quoted in Quénioux, "Dessin," 474.

¹³⁴ Ibid.

Quénioux accorded nature more significance than its mere concreteness, or even its intelligibility by children. Nature was not only a source of unbounded beauty, but it was the source of beauty. While art could indeed be beautiful, it was nature that had "inspired all of the arts, and [hence] it is always nature to which we must return." While art was indeed outside the natural world, its beauty came from observing the beauty in nature, and then translating it into an artistic work through one's own personality. Merely observing and reproducing other art, as Ravaisson had advocated, would never produce either beautiful art nor an understanding of beauty. Certainly beautiful art could be produced, by older students, without direct observation of nature. However, in this case, it would be the student's visual memories of nature, instilled at a younger age, in combination with a student's imagination — a part of human nature — which would produce the beauty therein. Additionally, like so many other aesthetic reformers, Quénioux believed so thoroughly in a causal relationship between exposure to beauty and the elevation of morality that he stated it as fact, claiming that "through an education which makes aesthetic feelings more accessible, we thus make a better man."¹³⁵ In this respect, not only beauty but morality as well lay in nature.

Nature additionally functioned as the source from which knowledge was produced. Given Quénioux's belief that drawing was "a natural language, even more natural than speech…innate, common to all people," the drawing of nature according to one's own nature would ideally form the foundation of education at large.¹³⁶ Not only would children learn to draw through observing nature, but they would learn about the nature of the world, the nature of beauty, and the nature of themselves. Replacing the traditional teacher, who would now only facilitate students' engagement with nature, nature was, for Quénioux, "the only infallible guide" in children's

¹³⁵ Ibid., 469.

¹³⁶ Couyba, et al., L'Art à l'école, 98.

education. This role of nature is remarkably similar to the theories of both Rousseau and Violletle-Duc. According to Rousseau, "nature should be [Emile's] only teacher" in the instruction of drawing.¹³⁷ For Viollet-le-Duc, "to put the child in the face of nature ... is still the best way to develop his intelligence and to give him the desire to learn."¹³⁸ Despite these similarities, a comparison of the drawings of petit Jean and those of school children participating in Quénioux's early experimental programs speak to a significant shift in the understanding of the relationship between nature and education in the years between 1879 and 1906. Although Majorin is struck by petit Jean's early drawing of a cat, produced from his innate ability of observations, his goal is to improve petit Jean's talents by teaching him to see the world, and understand the world, allowing him to realistically draw the world. [Figure 3.36] [Figure 3.37] In other words, Majorin's pedagogy is devised so as to bring about a particular end. With Quénioux's methodology, students are asked to aspire to neither to abstraction nor to realistic representation. While their drawings may in fact combine abstraction and representation, with both forms and spaces being drawn both two and three dimensionally in the same drawing, alongside simplified figures, pedagogically speaking, they should aspire to nothing. [Figure 3.38] [Figure 3.39] Rather, children's drawings should come into being as pure expressions of a nature in which the material and motive senses of the term are inextricable. In Quénioux's words, the drawings should stem from children's "natural curiosity about the world around them," and a "love of nature, [which] is an inherent sentiment of human nature."¹³⁹ In this sense, the foundation of Quénioux's pedagogy and dessin intuitif was not simply a turn to nature as the object of observation and drawing, but an entirely different conception of nature than that of

¹³⁷ Rousseau, Emile, 108.

¹³⁸ Viollet-le-Duc, Histoire d'un dessinateur: comment on apprend à dessiner, 104.

¹³⁹ Quénioux, "Dessin," 470.

either Viollet-le-Duc or Guillaume. This new nature was a single nature in which "nature," as the natural world, and one's "human nature" were one and the same, and in which a child's drawing represented the image that the child observed as much as the child himself. Man's understanding of the relationship between himself and a nature in which man is included has been theorized by Foucault as a product of the development of the "human sciences" during the nineteenth century. Only with the invention of man's study of himself, does he adopt what Foucault describes as "the strange stature of a being whose nature (that which determines it, contains it, and has traversed it from the beginning of time) is to know nature, and itself, in consequence, as a natural being."¹⁴⁰

[Figure 3.40] [Figure 3.41] In the case of Quénioux's pedagogy, it was his incorporation of knowledge produced by psychology, the science of the human mind that allowed *dessin intuitif* to, in its own way, impart this understanding of the world to French children. While the material products of *dessin intuitif* were what we would now recognize as stereotypical children's drawings, the intellectual result of drawing nature according to the child's own nature was something more: "when the young drawer has discovered the infinite beauty in nature and when he has tried to interpret it; when for some time he has sought to translate his personal impression

¹⁴⁰ Michel Foucault, The Order of Things (London: Routledge, 2002), 338. Foucault's explanation of the change in the relationship between man and nature from that under the Classical episteme to that of the modern episteme bears repeating at length: "This establishing of communication between nature and human nature, on the basis of two opposite but complementary functions - since neither can take place without the other – carries with it broad theoretical consequences. For Classical thought, man does not occupy a place in nature through the intermediary of the regional, limited, specific 'nature' that is granted to him, as to all other beings, as a birthright. If human nature is interwoven with nature, it is by the mechanisms of knowledge and by their functioning; or rather, in the general arrangement of the Classical episteme, nature, human nature, and their relations, are definite and predictable functional moments. And man, as a primary reality with his own density, as the difficult object and sovereign subject of all possible knowledge, has no place in it. The modern themes of an individual who lives, speaks, and works in accordance with the laws of an economics, a philology, and a biology, but who also, by a sort of internal torsion and overlapping, has acquired the right, through the interplay of those very laws, to know them and to subject them to total clarification – all these themes so familiar to us today and linked to the existence of the 'human sciences' are excluded by Classical thought: it was not possible at that time that there should arise, on the boundary of the world, the strange stature of a being whose nature (that which determines it, contains it, and has traversed it from the beginning of time) is to know nature, and itself, in consequence, as a natural being.

of things, he [then] understands the accord which exists between the universe and his own nature."¹⁴¹

Nature into the City, City into Nature

For all of the rhetoric of the *art à l'école* movement concerning nature's ability to improve children's morality and to create better citizens, with the exception of the suggested field trips into nature, students, particularly in Parisian schools, still had little contact with the material natural world outside of city limits. Léon Riotor, secretary of the Société nationale de l'art à l'école, recognized this disparity between the ideal relationship to nature and the best effort that *art à l'école* reformers could make. "Certainly the ideal school is under the sky, among the trees, in the immortal decor of the earth. But if it is possible to introduce this nature to the [school]house, why not try it?" he wrote in a history of the origins of the movement.¹⁴² Yet the images depicting the natural world, the ornament drawn from it, and the living flowers that *art à l'école* entrusted with the task of bringing nature into the school were far from the unadulterated nature into which Majorin and petit Jean travelled.

At the same time, the seemingly contradictory goals of *art à l'école* — their attempts to bring the natural world into the constructed environment alongside their prescription for man to wander forth into nature — in fact reflected a merging of the constructed and natural worlds. This was reinforced by a similar dissolve of the physical and conceptual boundaries between the city and its surroundings, by means of a new movement that worked simultaneously to preserve nature outside of the city and to bring nature into the city. Collectively, this new focus on nature

¹⁴¹ Quénioux, "Dessin," 473.

¹⁴² Couyba, et al., L'Art à l'école, 32.

by urban elites suggests that in the first two decades of the twentieth century, the binary between nature and man was being reformulated into gradient between these two worlds, with nature existing as an integral part of the city, and man existing as an integral part of the natural world. In 1919, this new understanding of the relationship between man and nature culminated both symbolically, with the removal of the last physical barrier between Paris and its surroundings, and pragmatically, in a new law requiring all French cities over ten thousand people to implement a plan for both their expansion into the countryside and their preservation of nature within this growing city.

At the time when Quénioux was developing his pedagogy, this conceptual distinction was also manifest in a physical boundary. Since 1844, Paris had been encircled by a zone of fortifications known as the Thiers Wall, erected under the July Monarchy, ostensibly as a means to protect the city from invasions.¹⁴³ At the turn of the century, the wall served as the limits of the city both legally and in the Parisian imagination as well. The fortifications formed a continuous wall around Paris, nearly twenty-four miles long, with seventeen gates pierced by major roads. In front of the fortifications lay an artificial slope raised to the level of the top of the fortifications by a trough of land that mediated the difference in elevation between the top of the slope and the base of the fortifications. Collectively, the fortifications and the slope spanned a width of two hundred and fifty meters. **[Figure 3.42]**

¹⁴³ On the political debates surrounding the Thiers Wall, and the extent to which the wall was understood as a means to protect Parisians against an external attack, or a means to protect France from an uprising among the Parisian masses, see Patricia O'Brien, "L'Embastillement De Paris: The Fortification of Paris During the July Monarchy," *French Historical Studies* (1975). For a comprehensive history of the zone of the fortifications in the nineteenth and twentieth centuries, see Jean Louis Cohen, and André Lortie, *Des Fortifs au périf: Paris, les seuils de la ville* (Paris: Editions A&J Picard, 1994).

On one side of the wall was an expanding Parisian population. When the Thiers Wall was constructed, it was placed not at the city boundaries, but rather outside of them. Between the city limits and the wall lay faubourgs, inhabited by Paris' poor, whose informal development much more resembled villages than Paris' dense core. In 1860, Haussmann annexed these faubourgs into the official terrain of the city. Continuing to grow in population and density of physical development, the faubourgs confirmed Victor Hugo's 1842 vision of Paris's seemingly never-ending growth:

You Parisians are so accustomed to the spectacle of a city perpetually expanding that you no longer even notice...the city pushes outward like a forest. One could say that the foundations of your houses are not foundations, but roots, living routes where life flows. The small house becomes a large house just as naturally, it seems, as the young oak becomes a large tree...If you go away for two weeks, you will find everything changed upon your return. Where will this growth of Paris stop? Who can say? Paris has already pushed itself beyond five city walls. There are rumors of building a sixth, yet within a half-century, it will be full to the brim, before it expands beyond the walls once again. Each year, each day, each hour, through a slow and unstoppable infiltration, the city spreads into the faubourgs and the faubourgs become cities, and the faubourgs become the city.¹⁴⁴

On the other side of the wall was a space that was understood, by metropolitan elites including Quénioux, in many ways as the opposite of all that the city represented — Haussmannian geometric planning, the accumulation of capital, secularism, republicanism, and modernity at large. However, world outside the wall was conceived in different ways by different actors. For the Third Republic government, it was a space of autonomous villages and towns that needed to be infiltrated with modernizing principles, unified and standardized through an extensive transportation network and the dissemination of republican ideas through laïc schools

¹⁴⁴ Victor Hugo, "Lettre XXVI," in *Oeuvres complètes de Victor Hugo: Littérature et philosophie mélées*, Vol. Le Rhin II, (Paris: J. Hetzel et Cie, 1884), 81-82.

with controlled curricula.¹⁴⁵ For industrialists, *extramuros* territory was a resource to be exploited. The natural world was the source of their raw materials and for large-scale producers, the sites for manufacturing facilities themselves, advantageously located in close proximity to the resources they would consume. For aesthetic reformers as well as the burgeoning tourist industry, this space contained the sort of nature idealized and idolized by the *art à l'école* movement — the forests, mountains, rivers, streams, and untamed fields that existed outside of the constructed environment, whose utility, at least as it was imagined, was above all its beauty.

Hugo's equation of the city to a forest — the kind of natural growth that was typically found on the outside of city walls — foreshadowed the eventual amalgamation of the city and the "natural world" that lay outside it.¹⁴⁶ In 1901, Jean Lahor, the doctor, poet, author of *L'Art nouveau* (discussed in chapter 3), and associate of Roger Marx and Henri Rivière, with whom he founded the Société des arts populaires et d'hygiène, wrote an article in *La Revue des revues* that constructed a similar parallel between nature and the built environment, though reversing Hugo's comparison. Lahor's article was a call to arms for a reform movement that would mobilize for the protection of nature, in the face industry's increasing consumption of and expansion into nature. In his editorial, Lahor argued that if the monuments of architecture were to be afforded legal protection, as they had been by the law of 1887, so too should the monuments of nature — "our mountains, our valleys, our forests, our streams…monuments too…put equally in peril by the brutalities of the present, which, without warning or scruple…do not hesitate to compromise

¹⁴⁵ See Eugen Weber, *Peasants Into Frenchmen: The Modernization of Rural France, 1870-1914* (Stanford, CA: Stanford University Press, 1976).

¹⁴⁶ Because the space exterior to Paris's city walls was conceived in so many different ways, not only by metropolitan elites, but by the inhabitants of that space as well, it is difficult to find an appropriate term with which to designate it. Because I focus on role of aesthetic reformers in effecting this change, "natural world" is still a useful term given the understanding that this was a conception of aesthetic reformers, and not a descriptor of any reality.

or ruin the patrimony given to us by the past in order to turn it over to the future.¹⁴⁷ Like his friends who mobilized for bringing nature into schools, Lahor emphasized nature's status as one of the only remaining sources of beauty. However, Lahor's nature was no longer an abstraction, nor did he argue for its preservation so that it could create a more morally correct citizenry. Additionally, nature was no longer an entity absent of humankind, and accordingly he did not propose its preservation for nature's own sake.

Rather, he argued that nature should be preserved, like monuments historiques, for its utility to the public. Accordingly, he called for a limitation on the rights of private property holders to exploit the nature of their land or to alter the visual beauty of the particular natural landscapes. It was this visual beauty that he contended should be protected like monuments historiques. One such natural landscape that Lahor discussed in his article was the *Perte du Rhone*, a sixty foot deep geologic fault through which the Rhone ran in a series of waterfalls. Due to alterations to its terrain, modifications of the river upstream by engineers, and the appropriation of the Rhone's water by factories, the *Perte* began to live up to its name, all but disappearing as the river dried up. In his argument for the falls' protection, Lahor admitted "that factories are useful, if not necessary, but," he claimed, "the *Perte du Rhone*, for its beauty alone, is useful and necessary as well."

Lahor's justification of the utility of nature was convoluted and at times contradictory. As noted, he contended, on the one hand, that nature was useful for its beauty alone. "The beauty of a landscape…is an assured and perpetual revenue," he wrote, seemingly emphasizing the longevity of its beauty as a cultural utility for both the nation.¹⁴⁸ Yet, recognizing the need for pragmatism and an "idea that is not sentimental but practical," Lahor also used the word

¹⁴⁷ Jean Lahor, "Une Société à créer pour la protection des paysages français," *La Revue* 36 (1901), 526.
¹⁴⁸ Ibid., 527.

"revenue" literally, underscoring the income that could be yielded through tourist excursions to beautiful natural sites. This income would compensate for that which would have been created had industry been allowed to exploit the territory as a "natural resource."¹⁴⁹ In fact, he argued that beauty's revenue would eventually surpass that of industry, as the continued revenue of the latter was antithetically contingent on the preservation of the natural resource it needed to consume. Lahor did criticize some of the results of tourism as unsightly, such as advertisements erected along railroad lines and along the beaches of the Côte d'Azur. However, he sharply distinguished between viewing the beauty of nature through tourism and the physically destructive activity of industry, which he described as "bestiality, the human brutality...this human egotism, which thinks nothing of anyone, and which too often, criminally, ferociously, and at any price, only wants to satisfy itself."¹⁵⁰ While the confusing nature of this argument might have made Lahor's critique less potent, it also reflects the extent to which aesthetic reformers attempted to transform nature from an entity that they valued for its mere existence, to one that could be justified in the terms of its value to the public and the constructed world.

Lahor's article did in fact provoke the formation of a group, in 1902, committed to lobbying for state protection of nature: the Société pour la Protections des Paysages de France (S.P.P.F.). The group was founded by Charles Beauquier, a deputé from the department of Doubs, with the support of the poet Sully Prud'homme and Lahor as well. Among the named precursors of the group were the Société des Amis des Monuments parisiens, who had successfully campaigned against the destruction of the trees of the Invalides, the Congrès d'Art public, who, in their 1900 conference in Paris, had, like Lahor, articulated the need for the protection of nature, as well as the Club alpin and the Touring Club de France, groups whose

¹⁴⁹ Ibid.

¹⁵⁰ Ibid., 531.

concern with the protection of nature revolved around their interests in tourism, mountaineering, and other excursions into nature. Other members of the S.P.P.F.'S central committee its the early years included many of the same figures involved in other aesthetic reform groups. Members who also were active in the Société des amis des monuments parisiens included Robert de Souza, Charles Normand, Lucien Augé de Lassus, André Hallays, Maurius Vachon, and Eugène Müntz. The architects Émile Trélat, Eugène Hénard, Augustin Rey as well as Jean-Claude-Nicholas Forestier, along with de Souza and Beauquier himself, would all be later associated with the Section d'hygiène urbaine et rurale of the Musée social after the section's founding in 1908. The S.P.P.F. also attracted advocates of French regionalism — the political, cultural, and intellectual decentralization of France — and such as Jean Charles-Brun and the senator Honoré Cornudet, who introduced legislation for the 1919 law regarding the planning of French cities that would bear his name.¹⁵¹ When the group decided to create an "honorary diploma" in order to celebrate particularly meritorious individuals, it was the artist, and S.P.P.F. Member Henri Rivière who designed the diplomas. **[Figure 3.43]**

Beauquier at the time was best known for having provided legal council in the first case in which the state adjudicated a concern over the conservation of nature. In this role, he assisted the town of Nans-Sous-Saint-Anne in the conservation of a thirteen-meter high waterfall, which attracted an average of ten thousand visitors per year. The waterfall would have disappeared at the hands of the industrialist Joseph Prost, who proposed turning an eighteenth century mill he had recently purchased into a hydroelectric plant. This plan entailed the construction of an eight-

¹⁵¹ The S.P.P.F. still functions in France as a group protecting "national patrimony," including nature, architecture, and other monuments. In 1952 it merged with the Société pour l'Ésthetique générale de France (founded 1832) to become the Société pour le Protection des Paysages et de l'Ésthétique de la France.

meter high dam upstream and the removal of over one hundred cubic meters of rock.¹⁵² Beauquier's prosecution hinged on the argument that, in purchasing the mill property, Prost had only acquired rights to use the amount of water that would have been used by the mill as it had stood when it was originally deeded in the eighteenth century. He contended that Prost did not have the right to alter the flow of water such that it would affect properties downstream, where the town lay. This argument was made through the law of April 8, 1898 on water, which declared that no private property owner could disrupt the flow of water on other properties.¹⁵³ While the town received a favorable judgment, for Beauquier, relying on relatively obscure property laws did not present a comprehensive or sustainable means to mitigate the disappearance of natural features as they were transformed into sites of industry. Hence in March 1901, Beauquier introduced legislation to the Chambre des deputés that would extend the law of 1887, devised to protect monuments historiques, to natural sites of beauty.

Like Lahor, Beauquier argued in the text accompanying his proposal for the law that, if the state were to protect beauty as a national resource, as it did with Monuments historiques, and with the collection of art in public museums, then it must do so uniformly, protecting all forms of beauty in France, not just those of man's construction. He pointed out the "shocking contradiction between the state's unwavering support of the fine arts, with the considerable sacrifices it is willing to make for the teaching of the arts, and its barbarous indifference it has demonstrated to natural beauties." Continuing, he argued:

¹⁵² Bulletin de la Société pour la protection des paysages de France (Paris: Imprimerie Chaix, 1902), Vol. 1, 21-23. Note that hydroelectricity, or "houille blanche" (white oil) in French, was a new technology at the turn of the century. This relationship between the "beauty" of waterfalls and the generation of electricity is both symbolized and actualized in Eugène Hénard's Palais d'électricité at the 1900 Exposition universelle, where the primary visual feature is an ornate cascading fountain, designed to spill forth from a grotto located at approximately two-thirds of the height of the building, which also pumps water from the Seine in order to power the building's elaborate nighttime displays of light.

¹⁵³ Ibid., 82-86.

Our museums are extremely expensive to maintain. We justify them as places that bring together the works of the greatest masters, for the enjoyment and education of all. Yet we let acts of vandalism be committed in our 'museums of nature,' in the splendid collection of beautiful sites that constitute that which is France! What a strange contradiction! The state will religiously protect a painting by a master artist that depicts a landscape and it will, without any concern, let the magnificent and irreplaceable original be destroyed!¹⁵⁴

Beauquier's law, eventually passed in 1906, legally confirmed Lahor's argument for the utility of nature, giving the state the power to protect natural sites through the right to expropriate *pour* cause de l'utilité publique, or, as he stated in 1908, pour cause de la beauté publique.¹⁵⁵ Just as the law of 1887 had, the 1906 law established an equivalence between the world of beauty and the world of public works. In setting forth the goals of the S.P.P.F., Beauquier addressed current ideas about public utility, noting that "it is too often that engineers and manufacturers, with their insolent autocracy, consider their utility as the only profitable utility for everyone."¹⁵⁶ Although the group's most concrete goal in its early years was to ensure the passage of Beauquier's law, more generally, the S.P.P.F. sought to elevate the value of the "nature" found outside of the city among the metropolitan elite who would decide its fate. "We have the greatest confidence in our cause," Beauquier wrote in the group's first Bulletin. "Whatever will come of the powers that oppose us, we do not expect all of our demands will be achieved today." Imagining a slow transformation of public understandings of nature, he hoped that the actions of the S.P.P.F. would "penetrate little by little, yet so profoundly, into the collective consciousness, that the acts of barbary toward inanimate things we now see will one day be as impossible as acts of barbary

¹⁵⁴ France, *Annales de la Chambre des députés* (Paris: Imprimerie des Journaux officiels, 1902), Vol. 60, part 1, 325.

¹⁵⁵ Musée social, *Mémoires et documents* (Paris: Arthur Rousseau, 1908), 224.

¹⁵⁶ Bulletin de la Société pour la protection des paysages de France, 2.
toward human beings."157

The S.P.P.F. worked toward this goal not only through advocacy for nature in the departments and far reaches of French territory, later including French colonies, but also for nature in the city itself.¹⁵⁸ "That which is in the interest of France, is in the interest of its capital as well," explained Beauquier regarding the seemingly odd choice of a society dedicated to the protection of landscapes, which at the time would not have been associated with the urban environment, to concern itself with the city as well.¹⁵⁹ The group's first action to address urban issues was to the protect of a tax levied on gardens throughout the city, which it successfully lowered, arguing that the tax deincentivized the establishment of green spaces. Particularly, the group was concerned with the absence of green space in the growing outer arrondissements, which were being constructed nearly exclusively according to the logic of capitalism, in contrast to the center of Paris which was developed at a time when gardens were desirable as marks of prestige and representations of power.¹⁶⁰ Its members also argued in front of both the Conseil municipal and the Chambre des Députés against the sale and subdivision of both the Parc de la Muette and the Champ du Mars, against the gating of the forests surrounding Paris, and, beginning in 1902, against the "mutilation" of a small part of the Bois de Boulogne along its border with the sixteenth arrondissement, involving the removal trees such that the land could be subdivided and sold, planned as part of the demolition of Thiers Wall. Given the seemingly trivial nature of the transforming of only a small part of the natural world outside the city walls into a part of the constructed city, the outcry against the proposal to remove the trees, not only by

¹⁵⁷ Ibid., 3.

¹⁵⁸ On nature conservation in the French colonies, see Caroline Ford, "Nature, Culture and Conservation in France and Her Colonies 1840-1940," *Past and present* (2004).

¹⁵⁹ Musée social, *Mémoires et documents*, 223.

¹⁶⁰ Bulletin de la Société pour la protection des paysages de France, 16-19.

the S.P.P.F., but many other individuals and groups, was formidable, and speaks to the value of nature in French culture at the time.

With its lack of utility becoming increasingly glaring, in 1882, the municipal councilor Yves Guyot put forth the first official proposal to dismantle the Thiers Wall. The Conseil municipale approved the removal of the fortifications the following year.¹⁶¹ Yet because it was the state that owned the fortifications and their land, the Conseil municipal in fact had no authority to alter the wall in any way. In principle, the state consented to the wall's demolition. It initially planned to sell the land to the city and use the proceeds to build another defensive wall further outside the city, and it set the price of the land accordingly. With the city unwilling to pay the price demanded by the state, the issue of the wall's demolition was set aside until 1898, when negotiation on the price of the land between the two parties would begin again. It was finally agreed that the state would finance the city's purchase of the land in advance, with the city subdividing and selling the land for development as a means to pay back the state, reminiscent of the financing structures used in the construction various public works and Haussmann's renovations of Paris. Yet still, the city deemed the price too high given the predicted revenues based on land values at the time in western Paris, where the first demolitions would take place. Hence the project remained at an impasse. In 1904, the Ministry of War declared the further fortification of Paris unnecessary, allowing the city and state to move forward with their plan without the price that the city would pay for land being tied to that of the construction of new fortifications. As a means to generate additional revenue, the Conseil municipal added four

¹⁶¹ On the history of the negotiations between the state and the city regarding the demolition of the fortifications, see Marie Charvet, "La Question des fortifications de Paris dans les années 1900. Esthètes, sportifs, réformateurs sociaux, élus locaux," *Genèses* 16, no. 1 (1994); *Bulletin de la Société pour la protection des paysages de France* (Paris: Imprimerie Chaix, 1905), 75-78; de Souza, Robert, "Les Espaces Libres. Résumé Historique.," *Le Musée social. Mémoires et documents*, 13, no. 2 (1908); Cohen, and Lortie, *Des Fortifs au périf: Paris, les seuils de la ville*; and Marie Charvet, *Les Fortifications de Paris: de l'hygiénisme à l'urbanisme, 1880-1919* (Rennes: Presse Universitaires de Rennes, 2005).

hundred thousand square meters of the Bois de Boulogne bordering the zone of the fortifications — one-tenth of the entirety of its surface area, to the land that would be sold and developed.

The decision to develop the edge of the Bois de Boulogne sparked an outpouring of criticism among the Parisian intellectual elite against the "massacre" of the trees at the eastern edge of the park. The protest was most visible in the pages of *Le Figaro*, where the journalist and accomplished sportsman Frantz Reichel penned fifteen articles in the month of September 1905 admonishing the replacement of forested land with urban development. He also printed letters of support from figures such as Beauquier, Frantz Jourdain, the pedagogue Ferdinand Buisson, president of the Touring club de France Abel Ballif, judges, members of the Conseil municipal, deputies, senators, and those who simply gave their title as "Parisien."¹⁶² A response to these protest articles from City Hall attempted to absolve the city from responsibility, shifting it onto the state. In the eyes of Reichel, the city's reply downplayed the gravity of the proposed removal of the trees. Upon the its mention that the project would require the cutting down of "some trees," Reichel responded: "*Some* trees!...*Some* trees!" objecting to the equation of the estimated six to eight thousand trees to be removed with the vague and minimizing term "some."¹⁶³

Reichel's response, as well as the outpouring of support for his position, reflects the symbolic function of the trees in the larger movement for the preservation of nature against the encroachment of human construction. In his letter of support, Frantz Jourdain, who would found the Comité de Defense du Bois de Boulogne later in the month, underscored the extent to which nature provided a source of beauty unachievable by the modern city, as well as the extent to which it had become a *utilité publique* — a resource to be shared among the French people.

¹⁶² Articles were published on the following dates in 1905: September 3, September 6, September 7, September 8, September 9, September 10, September 11, September 12, September 13, September 14, September 15, September 18, September 20, and September 26.

¹⁶³ Reichel, Frantz, "Sauvons les arbres du bois." Le Figaro, September 6, 1905.

"Beauty belongs to no one," wrote Jourdain in his letter to *Le Figaro*. "It is for all — it is the property of all humanity, floating above the law and regulations, of committees and bills."¹⁶⁴ In contrast to his praise of the beauty of nature, Jourdain, an architect and president of the Société de nouveau Paris — in other words, someone committed to the constructed world — described "our miserable Paris" as "submerged in ugliness." This ugliness, according to Jourdain, derived at least in part from the divisions among the Conseil municipal, with representatives caring only about their own arrondissements and refusing to work in concert with others, making it impossible to devise a considered and intelligent plan for the entirety of the city that could rectify the city's aesthetic inadequacies. The disdain for the buildings and constructed sites of Paris was stated even more emphatically by the playwright Henri Bataille in his letter of support of Reichel's campaign:

The project is abominable. It is a sudden and immediate death of the Bois du Boulogne. We shouldn't be saying 'save the trees,' but rather, save the Bois altogether — the hygiene of Paris, the fragrant breath of the Bois which sleeps, with her young and beautiful head uncovered, on the embankment of the city...There is no need to have any particular foresight to guess what will happen, no matter what promises will be made...we will not allow a city to mutilate itself in this way. What would we think if Venice, through the hands of its own administrators, had destroyed the Campanile?...if [the city of Paris] needs money for their various administrative divisions, they should sell the Morgue, the four pillars of the Eiffel Tower, the bronze of all of the statues that dishonor Paris, but, *bon dieu et bon sang*! They should not destroy the sacred finery that constitutes our only supremacy of aesthetics and hygiene — the charm, the miracle, the glory, and the health of Paris.¹⁶⁵

For Bataille, the glory and beauty of Paris could no longer even be found within the city walls. Bataille's rather shocking comparison of the Bois du Boulogne, located on the outskirts of the city and transformed into a destination for Parisians only during Haussmann's renovations, with

¹⁶⁴ Idem, "Pour sauver les bois." Le Figaro, September 7, 1905.

¹⁶⁵ Ibid.

the Campanile of Saint Mark's, which had stood for centuries in the center of the city as one of the most recognizable symbols of Venice, reveals just how much nature, for Bataille, Paris's "*only* supremacy of aesthetics," had supplanted architecture, art, and human constructions as a source of beauty in the minds of many artists and aesthetic reformers in the early twentieth century.

As the fate of the fortifications and their surroundings were not decided upon for nearly two more decades, the success of the mobilization to save the trees of the Bois de Boulogne rested in creating a public face within the city for the issue of the conservation of nature among both intellectuals and political representatives. Additionally, this threat to "nature" sparked a new debate on the fortifications. Prior to the proposition to develop the edge of the park, the debate over the territory had been exclusively bureaucratic, with the matter of the development of the fortifications' land firmly and uncontroversially decided upon. In the years that followed this initial protest, the Section d'hygiène urbaine et rurale of the Musée social, founded in 1908, in conjunction with the S.P.P.F. would advocate, through a number of means, for a reevaluation of the early plans in order to transform the zone of the fortifications into a network of *espaces libres*.¹⁶⁶

The term "*espace libre*" was initially popularized by the Comité pour la Conservation et création des Espaces libres, founded in 1902 by Gabriel Bonvalot — a group which brought together figures interested in hygiene, sport, and art who belonged to groups such as the Fédération des Ligues contre la Tuberculose, the Ligue antialcoolique, the Presse médicale, the journal l'Auto, the Société des Amis des Monuments parisiens, the S.P.P.F., and Frantz

¹⁶⁶ The term *espaces libres* was compared at the time to the term *open space* that was popular in Britain at the same time, yet *open space* fails to capture the idea of freedom and individuality embedded in the term *libre*, thus I am leaving the term untranslated. Given the importance of freedom in the idealist understanding of nature at the time, it might be interesting to further explore this connection.

Jourdain's Nouveau Paris group.¹⁶⁷ The next year, in his *Études sur la transformation de Paris*, the architect Eugène Hénard made a comparative study of the *espaces libres* of Paris and London, which would serve as a foundational document of the *espaces libres* movement. In it, Hénard promoted *espaces libres* both as a design solution to the question of the zone of the fortifications and as the basis of a new way of designing the city.¹⁶⁸

Although Napoleon III himself had ordered the construction of a number of small parks and squares during Haussmann's renovations, Hénard's analysis revealed how little area of parks, gardens, and open spaces per capita Paris had in comparison to London. Additionally, in examining the relationship between the Parisian population and the area of its green spaces over the course of the nineteenth century, Hénard found that as a function of the area of the city, the area of green spaces had declined by two-thirds since the Revolution.¹⁶⁹ [Figure 3.44] These studies lent credence to Hénard's proposal for the zone of the fortifications, also devised in 1903 and published in his *Étude*, a series of urban propositions that Hénard issued serially. This scheme involved first what he called a "boulevard à redans" - a boulevard whose apartment buildings were turned at a 45° angle, rather than lining up to form a single, uninterrupted street façade. [Figure 3.45] The serrated pattern that they formed relative to the street allowed each building more surface space, accordingly allowing more light and air into its apartments. Additionally, the configuration provided a space for trees or small gardens in the v-shaped area created between the buildings. This boulevard would run along the length of the fortifications, or along the perimeter of the city, with twelve parks spaced relatively evenly along its length, with

¹⁶⁷ de Souza, Robert, "Les Espaces Libres. Résumé Historique," 184.

¹⁶⁸ Eugène Hénard, Études sur les transformations de Paris, et autres écrits sur ' l'urbanisme (Paris: Editions Equerre, 1982), 56-88.

¹⁶⁹ Musée social, Mémoires et documents, 191.

approximately two kilometers of distance between them.¹⁷⁰ Hénard's plan established the groundwork for the introduction of alternate plans for the development of the fortifications and was followed by plans from a number of others, such as those by the J.C.N. Forestier, Louis Dausset of the Conseil municipal, and later, Louis Bonnier and Marcel Poëte for the official Commission d'extension de Paris eventually formed by the Conseil municipal, which also sought to transform the fortifications into a network of open spaces.¹⁷¹

In 1908, as part of a "reunion en faveur des espaces libres" organized by the newly founded Section d'hygiène and held in the Grand Amphitheater of the Sorbonne, Hénard put forth a new plan for Paris that included not only the twelve open spaces in the zone of the former fortifications, but the creation of an additional nine parks within the interior of the city.¹⁷² [**Figure 3.47**] Hénard's attention to the interior of the city as well as its periphery reflected the broadening of the conception of *espaces libres* from that of a solution to the question of the fortifications to that of a more general strategy for constructing the environment. While Hénard's plan was intended to create a sufficient amount of open space for the Parisian population at the turn of the century, it was developed as Hénard, the député Jules Siegfried, Robert de Souza, and other members of the S.P.P.F. and Musée social asked the question, "can the population of a

¹⁷⁰ Hénard, Études sur les transformations de Paris, et autres écrits sur ' l'urbanisme, 24-53. Rédan refers to a wall which protruding in a v-shape in military fortifications as part of a defensive strategy. [Figure 3.46] The Boulevard à Rédans was designed as a typology that could be deployed at will, as part of the movement to disrupt the monotony of Haussmannian streets and avenue. Hénard's depiction of varied architectural forms above the cornices of the buildings lining the street reflect the Louis Bonnier's 1902 reform of building regulations, also designed to allow for more variety in Parisian architecture than had been allowed under Haussmann.

¹⁷¹ On the debates among the Conseil municipal on the fate of the fortifications, as well as the alternative proposals, see Chapter 3 of Cohen, and Lortie, *Des Fortifs au périf: Paris, les seuils de la ville*.

¹⁷² Hénard, Études sur les transformations de Paris, et autres écrits sur ' l'urbanisme, 193-94.

large city grow indefinitely?^{**173} Although the population of Paris did in fact peak, historically, in 1921, given the huge influx of people into the city in the nineteenth century, in 1908 many believed that the answer to this question was that it both could and would.¹⁷⁴ For the members of the Musée social and S.P.P.F., no matter how many new technologies such as electricity, water, gas, and elevators could improve hygiene within the domicile, the insalubrity that resulted from overcrowding that came at the hands of land speculators could only be remedied by the designation of additional open spaces. Hence if the population continued to rise indefinitely, the number of open spaces, or *espaces libres*, would have to as well.

The projection of population trends into the future thus turned the attention of members of the S.P.P.F. and the Section d'hygiène, and later, following these associations' lead, the Conseil municipal, from the state of the contemporary city to its shape in the future. The type of planning envisioned by these groups was fundamentally different than the planning that Paris had known before hand. Whereas Napoléon III conceived his plan for Paris, adopted by Haussmann, as a blueprint for the transformation of the existing city, intended to be realized immediately, even overnight had it been possible, plans would now be drawn to establish rules for the growth of cities in the future, determining both how cities would expand outward into land beyond current city boundaries, and what of this newly planned land should be conserved in light of continued modernization. In other words, whereas previously, architects and statesmen had drawn plans of cities, Beauquier, Hénard, Sigfried, de Souza, and their colleagues were initiating the practice of *planning* cities — a practice which saw cities not as static and constrained, but as entities that would change in both time and space.

¹⁷³ Ibid., 88. See also Jules Sigfired's introduction to the July 1908 conference on *espaces libres* at the Sorbonne. Musée social, *Mémoires et documents*, 201.

¹⁷⁴ Ibid., 225.

"Would it be an exaggeration to say that the first skill (*art*) in the world, and unfortunately the least practiced, is the skill of planning (*prévoir*)? Is planning not the means *par excellence* of combatting ills, suppressing them by avoiding them altogether to begin with?" asked Georges Risler, president of the Musée social.¹⁷⁵ In the 1908 conference at the Sorbonne, Risler presented the recommendations of a subcommittee of the Section d'hygiene that was charged with "studying the modifications that should be made to our laws to create and execute a rational plans of *aménagement* for large cities."¹⁷⁶ They resolved first that all "agglomerations" of more than 20,000 inhabitants should create an inventory of all open spaces, belonging either to the municipality, the department, or the state, and that those spaces already allocated for public use should remain unbuilt for the foreseeable future. Second, they proposed that before the fate of the Parisian fortifications was determined, a commission should be founded to examine and plan for the continued expansion of the city as a whole. This commission would be responsible for "determining the legal, administrative, and financial conditions to which the operation would be subject, and to protect the primary interests of hygiene, transportation, and urban aesthetics."

The following year, on January 22, Beauquier, president of the S.P.P.F., introduced legislation in the Chambre des députés in order to assure that "before any virgin land be placed on the market in order for it to be built up...that a plan anticipates (*prévoir*) the *aménagement* of the land as well as its character and the placement of its streets."¹⁷⁷ Specifically, the law stipulated that "within five years, every urban town with more than 10,000 inhabitants establish a plan for its extension and *embellissement*. This plan will determine placements of public gardens,

¹⁷⁵ Musée social, Mémoires et documents (Paris: Arthur Rousseau, 1912), 302.

¹⁷⁶ Idem, *Mémoires et documents*, 205. *Aménagement* is a word which, fittingly, was used primarily in the context of forestry through the nineteenth century, as a term to denote the management of the forest, regulating the cutting of trees for use as a resource so as to ensure sufficient supplies for the future.

¹⁷⁷ Société pour la protection des paysages de France, Bulletin (Paris: Chaix, 1909), 89.

squares, parks, and *espaces libres*; establish the size of streets and their directions, the means of construction of houses, and schematically, all necessary easements from a hygienic or artistic perspective, in service of the overall aesthetics and sanitation of the city."¹⁷⁸ For Beauquier, this law would function in conjunction with his 1906 law for the preservation of landscapes and natural sites of beauty, as well as the 1887 law for the protection of historic monuments. "If these laws permit us to conserve the beauty and character that nature and past generations have left us," Beauquier wrote in his argument presented along with his proposal, this new law "will permit us to, in our own time, create things worthy of being conserved by future generations."¹⁷⁹

For the Section d'hygiène and the S.P.P.F., it was *espaces libres* that would serve as the cardinal unit of planning. This reflected their concern for the conservation of "nature" as it existed outside the city as well as their interest in open spaces within the city. Additionally, it acknowledged the reality of speculation and real estate development, whose logic, if unimpeded, would entail that every square meter of land be constructed upon. If *espaces libres* were not planned before development occurred, they would not exist at all. Beauquier's 1909 proposition for a law was submitted in revised forms a number of times, but never ratified under his name. On March 14, 1919, the bill was finally passed, submitted by the député Honoré Cornudet, who also had taken over from Beauquier, after his death, as president of the S.P.P.F.. This law, known as the loi Cornudet, entered into the parliament in various forms for nearly a decade. Its eventual approval was hastened by the great destruction of World War I and the urgent need to rebuild, yet the text of the law remained nearly identical to Beauquier's law of 1909. It stipulated that all cities with more than 10,000 inhabitants produce a plan "*d'aménagement, d'embellissement et*

¹⁷⁸ Ibid., 95. Note that in November of 1909, the Musée social sought to amend the text of the law such that the plan only needed to determine the placement of "public gardens, squares, parks, and *espaces libres*."

¹⁷⁹ Ibid., 91.

d'extension, " and asked for the power for the state to expropriate, for the first time, not just individual properties, but entire "zones" of land to effectuate these plans, *pour cause d'utilité publique*.¹⁸⁰ The plan was required to "establish the direction, size, and character of the streets to be either created or modified; to determine the placement, size, and layout of *places*, squares, public gardens, sporting grounds, parks, and various *espaces libres*; and to indicate forested areas to conserve, as well as the locations of monuments, buildings, and public services."

In 1913, Robert de Souza offered a definition of *espaces libres* in the *Bulletin* of the S.P.P.F. that demonstrates the centrality of the discourse on *espaces libres* in the creation of this new idea of a planned environment. It also illuminates the conceptual changes brought about by the Cornudet law. In his article, de Souza contended an *espace libre* was:

not always what one thinks it is. It is not an ordinary boulevard, no matter how large. It is not an intersection, no matter how immense. Arteries of circulation are not *libre*...It is not only, no longer, an expanse of grass embellished by flowers, underneath a few trees, protected by a gate. Nor is it merely a ground of paths at right angles, with benches and chairs, between which one has just enough space to avoid stepping on the hands of babies. This Parisian square is a charming space of repose or *flânerie* — an outdoor reading *salon*, where one relaxes the mind and the eyes — a space unique to Haussmann and Alphand — that is imitated everywhere despite responding to not even half of the needs of an urban population. This *salon* is not the play space of children — the space where they are truly free (*libre*) to move as they wish. Nor it is the vast *terrain de spor*t so necessary for young men, nor is there any space for a long promenade or a vast expanse of nature that refreshes us entirely.¹⁸¹

Continuing, he somewhat confusingly called the *espace libre* "something else entirely." Yet this "something else entirely" was in fact the amalgamation of all of the types of spaces he had just named. *Espaces libres* thus encompassed:

¹⁸⁰ France, *Journal officiel* (Paris: Imprimerie et Librarie du *Journal officiel*, March 15, 1919), Vol. 51, no. 73, 2726.

¹⁸¹ Société pour la protection des paysages de France, *Bulletin* (Paris: Chaix, 1913), Vol. 63, 5-6.

the space of repose that is the garden, above all an aesthetic composition where play would not be permitted; then, a space in which children could play, with large open spaces, whose surface could be either grass or sand, sometimes in the sun, sometimes in the shade, which would be reserved for women and young children, similar to some spaces in England and the United States; then large sports fields, interspersed within large parks; and finally, the magnificent solitude of the woods, of the forest, of the sea shore, or a river, left in their natural state, where one can know, not only freedom, but the virginity of space as well.¹⁸²

For de Souza, *espaces libres* could not be adequate for the needs of a population if they consisted of only one type of garden, park, green space, or open space. Rather, as a concept, *espaces libres* were constituted by a network of spaces that both fell on a gradient between "natural" and "constructed," and also dissolved this binary altogether.

Interestingly, the Cornudet law made no stipulations regarding the boundaries of the *plans d'extensions*, either in time or space. Hypothetically, a city could plan its development up to its administrative boundaries, on the other side of which would be another urban agglomeration spreading to its own limits. Certainly, this did not entail uniform density across the city's territory. Yet it did entail uniformity in planning, such that now, all territory was constructed by the plan. In this sense, "unbuilt" spaces — or *espaces libres* — became, in plan, as figural as buildings themselves. What de Souza had called "the magnificent solitude of the woods" — undoubtedly the kind of terrain into which petit Jean and Majorin wandered so that petit Jean could learn from a nature unadulterated by human civilization — was now created by the same *plan d'extension* that determined the location of a new railroad station. Hence with the advent of the total planned environment in early twentieth century France came the dual promises that, first, nature could suffuse all of man's creations and that, second, through planning and *aménagement*, man could, for his use, enjoyment, and physical and moral

¹⁸² Ibid.

amelioration, create nature.

At the end of a meeting of the Section d'hygiène urbaine on December 23, 1913, during which "the problem of *espaces libres*" was discussed, de Souza decided that further precision was needed for the term *espace libre*, and ordered the "establishment of a real definition." In the 1884 *Dictionnaire de l'Académie française, espace libre* had been defined as a "space that is not occupied, empty" — a definition that applied more to an open seat ("*on dit de même, 'cette place est libre*") than territory.¹⁸³ For de Souza, "enumerating uninhabited *espace libres* provokes confusion. We need to distinguish *espace libre* from uncovered space from space that is part of a covered area. The term *espace libre* took on and entirely new meaning in 1904 with the creation of the Ligue d'espaces libres. We should henceforth define *espace libre* as a space entirely reserved for free movement."¹⁸⁴ In making this designation de Souza implied that an *espace libre* was anything but unoccupied. In fact, it was the site where individuals were able to move about at their own accord, free from the restrictions created by the material built environment, pursuing their own interests and desires as they wished.

The term *libre* appeared in many guises in the early twentieth century. While de Souza was advocating for the creation of *espaces libres*, he was also theorizing the *vers libre*. Quénioux's drawing method was alternately referred to as *dessin libre*. Associations of *libre penseurs* (free thinkers) reached their apogee in French culture, serving as the foundation of programs of laïcité. The question of *libre arbitre* (free will) was brought back into philosophy after mid-century theories of materialist determinism. The "*mouvement libre*" which, for de Souza, was the essential characteristic of *espace libre*, can be seen as a common thread to all of these instances of free and unencumbered actions. Children were left free to draw as they wished

¹⁸³ "Libre," in Dictionnaire de l'Académie française (Paris: Firmin-Didot, 1884), 117.

¹⁸⁴ Musée social, Annales 1914), Vol. 21, no.7, 257.

in schools, poets were no longer bound by the conventions of traditional rhythm, free to compose as they wanted, intellectuals were free to understand the world outside of the metaphysics of religion, and philosophy considered the extent to which man was able to move freely in any of this circumstances.

It is difficult to believe that all of these freedoms — and new understandings of both the individual and society — were merely coincidentally conceived through appeals to "nature." Nature at the turn of the century was invoked not simply to produce new forms in architecture and interior objects, but to imagine a new society that freed itself from the man-made social, political, religious, and physical constructions that had resulted in French turn-of-the century pessimism and the pervasiveness of la question sociale. Aesthetic reformers, with their strong convictions and art and beauty could reform French society, turned to nature as a means to move beyond what they felt were insipid positivist geometries for precisely these reasons. Yet this new infatuation with nature as the most potent source of beauty brought about an unexpected outcome. It backed these reformers into a corner, leaving architects and artists without the capacity to actually, themselves, create an aesthetic that could pervade society. Quénioux's drawing pedagogy ostensibly allowed children to elevate their own morality, with no need for artists to intervene, and de Souza and company's espace libres similarly called for restraint from building anything. De Souza perhaps best summarizes this fate in his 1913 publication, Nice, *Capital d'hiver.* In describing factors to take into account in the creation of urban plans, de Souza proclaimed: "one would think that the first concern of a city would be to build it. Big mistake! Every city with the countryside opening out before it must first ask itself where it will not build."185

¹⁸⁵ de Souza, Robert, *Nice: capitale d'hiver: regard sur l'urbanisme niçois 1860-1914* (Nice: Serre, 2001), 69.

In 1927, Corbusier formally codified his famous Five Points of Architecture, two of which, like *espaces libres* and *dessin libre*, also promised a new freedom of action: the *plan libre* and the *façade libre*. However, unlike the freedoms conceptualized at the beginning of the century, Corbusier's freedoms came from an attitude toward nature that could not have been more different. In his article "L'Ordre," published in *L'Esprit nouveau* in 1920, Corbusier began to formulate his theory about the relationship between man, building, and nature:

The house, the street, and the town are all applications of human labor. They must be in order, if not they thwart the fundamental principles on which we are grounded. In disorder, they oppose us, they shackle us, just as we are shackled by the nature that surrounds us, which we have always battled, and which we continue to battle everyday.

Man, product of the universe, integrates, from his point of view, the universe. He begins from its laws, and he believes that he understands them, he has formulated them and built them into a coherent system, to form a body of knowledge according to reason on which he can act, invent, and produce. This knowledge does not put him in contradiction to the universe, it puts him in accord with it. Thus he can act in accord with it — and he cannot do otherwise...Nature appears to our eyes as a chaotic form. The canopy of heaven, the outline of lakes and seas, the jagged edge of the mountain. The site that is in front of our eyes, cut up and chopped in pieces, mixes everything together — it is pure confusion.¹⁸⁶

Corbusier's cosmology here combines the mid-nineteenth century's fetish of knowledge whose truth rested upon its ability to be formulated through mathematical laws with the late nineteenth century's discovery, through the human sciences, that man himself is a part of nature — now called "the universe" — which has created him. Yet this did not entail the return of nature, as the non-human world, to its mid-century status as a wilderness that is fundamentally independent from human civilization. For Corbusier, nature was actively antagonistic to civilization. It was ostensibly a part of the universe, but a part of the universe that does not conform to its ordering and orderly laws. This conception of the world is stated perhaps even more dramatically in

¹⁸⁶ Le Corbusier, The City of To-morrow and its Planning (London: The Architectural Press, 1971), xxi.

Corbusier's 1925 *L'Urbanisme*, in which the first few words to appear are: "a City! It is the grip of man upon nature. It is a human operation directed against nature."¹⁸⁷

The result of this line of thought, so different from that of de Souza, Quénioux, and the other aesthetic reformers who understood nature as the locus of knowledge of the world, which man could never fully understand, was that the freedoms that Corbusier promised are fundamentally different than those of aesthetic reformers. Whereas aesthetic reformers promised freedoms to the *public*, allowing them to move freely of the strictures of geometry, and consequently, were able to prescribe only the act of not prescribing and not building, Corbusier promised freedom not to the inhabitants of his free plan and free façade villas, but to the *architect* who would design them, endowing him or her with all of the agency to act on the world that aesthetic reformers had placed in beauty by itself.

¹⁸⁷ Idem, "L'Ordre," L'Esprit nouveau, 18 (1920).

Conclusion

Aesthetic reformers' interest in creating a specifically *public* art is somewhat surprising given that the term *public*, particularly in its nominative form, was seldom used, and even more seldom theorized in turn of the century France. Despite the pervasiveness of republican ideals, for the most part, *public* was not used to describe the collective of people in France, nor was there a particular concept of a unified populace of France. Conceptually, French society was split along class lines — lines that were only reinforced by social reform. One part of society consisted of members of the elite and bourgeois classes --- those who made up Habermas's "public sphere," and those whose voices constituted "public opinion." This segment also included those who had the privilege to study and formulate theories about French society, from which they were conceptually excluded. This group of elites acted as "a public" through giving their collective attention to a theater piece, literature, or art at the salon, but were certainly not "the public." The other part of French society was comprised of the newly visible underclasses, which were seen by the state not as a collective, but rather as individual, moldable citizens, and by sociologists as "the masses," or "the crowd." None of these epithets, even citizens, were terms that would have connoted a unified inclusion of French elites --- no longer did French political representatives address each other as "Citoyen." Even sociological and statistical studies tended to focus on traits, such as criminality or suicidality, which were believed to pertain almost exclusively to the French underclasses. Hence there was little idea of a public that incorporated all of French society. Despite interest in democracy, describing "the masses" as "the public" would have, in giving the lower classes a collective voice, threatened the stability of the

Republic, and at the same time, the class privilege of the elites who would have been responsible for this attribution.

Although their use of the term was far from systematic or even theorized, it is worth asking what aesthetic reformers in fact meant by the term *art public*, particularly given that they themselves were among these elites. One possible clue as to what more this term could entail lies in the way that *public* was most often used at the time, which was to signify functions of the state, as in *l'instruction publique* or *travaux publics*. Interestingly, at the time that aesthetic reformers were conceiving *art public*, architecture itself was detaching from the institutions of the state. With increasing competition from private *constructeurs*, not to mention the perceptions of Beaux-Arts and state architecture as antiquated and myopic, architecture professionalized, with private practices flourishing in the twentieth century. Certainly *art public* did not look to state architects and artists, or to state ministries, to accomplish its goals. In fact, aesthetic reformers sought, ideally, to circumvent the state altogether, with artists and architects creating an environment that could work directly on those who came into contact with it. What they really envisioned was much more an *art privé*, if one is looking at institutional location.

In this light, I suggest that aesthetic reformers employed the term *public* because, at some level, they wanted architecture to act as the state. Two significant changes brought about by aesthetic reformers were first, the birth of the idea that architecture and the physical environment had effects on its public beyond simply directing movement within the city. Rather, they put forth the idea that architecture could affect the behavior and workings of the mind of those who were surrounded by it. Second, aesthetic reformers shifted the focus of architects' attention from the building to the environment at large. In his 1913 *L'Art social*, Roger Marx spoke to this first idea, noting that modernization's alterations — or in his words, "mutilations" — of the physical

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environment "only serve to underscore its benefits, making us more conscious of the links that unite man and his milieu."¹ Milieu was a term that had been used extensively in the nineteenth century, explaining the phenomenon of change through the physical environment in sciences ranging from biology to geography, and through the social environment in history.² In watching the changes to the physical environment brought on by modernization correlate to changes in French social conditions, aesthetic reformers posited that a corrective change to the physical environment would likewise bring about changes in the organisms — that is, human beings that inhabited the milieu of the physical environment. Critical to this understanding of architecture was that it operated in the exterior, or in other words, in public. Yet the underlying goal of *art public* was not to bring art to the public, or even to a public, by virtue of its existence in public. Rather, it was to operate as a public authority, ensuring its perpetuity in society through taking on functions which were typically enacted by the state, using the physical environment to replace means which previously had in large been part immaterial.

In 1913, the socialist art critic and historian Léon Rosenthal spoke to the new concept of the artistic environment put forth by the work and discourse of aesthetic reformers in an article titled, "Le Rôle social de l'art." He argued that "since the beautiful can be found in everything,"

art thus plays a role in all instances of our life. It intervenes in the home, which it renders more warm and amicable; it transforms the school, which becomes welcoming and agreeable; it presides over the life of the city and ensures that public buildings are harmonious, that the streets, promenades, and gardens furnish both health and joy. In the transformed city of which we dream, men, set free of the perpetual fight against poverty, will all live the life of the mind (*vie de l'esprit*), which is the only true life...Art will finally blossom as it emancipates humanity.³

¹ Roger Marx, *L'Art social* (Paris: Bibliothèque Charpentier, 1913), 5.

² On nineteenth century theories of the milieu, see Georges Canguilhem, "The Living and Its Milieu," *Grey Room* (2001).

³ Rosenthal, Léon, "Le Rôle social de l'art." *L'Humanité*, January 28, 1913.

Aesthetic reformers suggested that it was beauty that could improve life in response to particular social conditions and intellectual currents of their time. Yet what Rosenthal points out, and what constitutes the lasting impact of the work of aesthetic reformers, is the extent to which architecture and art were reconceived to penetrate life, and consequentially, to effect life. Roger Marx too spoke of the potential territorial pervasiveness of design by bundling together all of the physical things and spaces that were of concern to the aesthetic reformers in this dissertation, claiming that "the same piety moves us to defend, in the name of the same ideal, the soil and the building, the *espace libre*, and the old stones that recount history."⁴ With the Third Republic government seeking to govern at both the scale of the individual, transforming her or him into a proper French citizen, the artistic environment as conceived by aesthetic reformers, mirrored the scope of state functions, seeking to govern at both the territorial and capillary scale.

Interestingly, what is now considered the solution to "the social question," — a term which in contemporary France still refers to what Donzelot formulated as the gap between the political ideal of equality and social reality — comes in the form of immaterial mechanisms of social security such as various types of insurance as well as subsidies to help meet the basic needs of life. It was the invention of these mechanisms that allowed the shift between nineteenth century economic and social policies of liberalism to the twentieth century French welfare state.⁵

With architecture's increasing separation from the state beginning in the turn of the century era, where has this left architecture today? In many ways, it has left it in a position

⁴ Marx, L'Art social, 5.

⁵ On the rise of the French welfare state, see François Ewald, *L'Etat providence* (Paris: Grasset, 1986), Idem, "Insurance and Risk," in *The Foucault Effect: Studies in Governmentality*, ed. Graham Burchell, Colin Gordon, and Peter Miller (Chicago: University of Chicago Press, 1991), and Janet Horne, *A Social Laboratory for Modern France: The Musée Social and the Rise of the Welfare State* (Durham, NC: Duke University Press, 2002).

similar to that of the late nineteenth century, at the time when this dissertation begins. Architects both lament and are actively fighting the demolition of Modernist buildings. Contemporary practice, on the one hand, is criticized for producing "mere images" — renderings to be dropped next to a block of text in a magazine, or circulated on the internet, where they exist independent of any context, not unlike nineteenth century Beaux-Arts competition renderings. On the other hand, a different part of architecture has become almost subsumed by technology, seeking to find new tasks, new problems to solve, and new relevance in an era in which the utility of the arts and humanities, and hence of architecture understood as such, is once again under threat. Yet despite seemingly similar anxieties, for today's architects, unlike those that predated the aesthetic reform movement, the question of architecture's public utility — even for those who have made the argument for architectural autonomy — cannot be ignored.

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IMAGES



Figure 0.1 *G: Material zur elementaren Gestaltung* no. 1, 1923, n.p.



Figure 1.1 (top) Figure 1.2 (bottom)

Direction générale des Ponts et Chaussées Carte générale, Chemin de Fer de Paris, à Rouen, au Hàvre et à Dieppe, n.d. Nivellements généraux de deux projects de Chemin de Fer de Paris à Rouen, au Havre, et à Dieppe, n.d.

Figure 1.3 Edouard Baldus Tour Saint-Jacques, 1852-53

Figure 1.4 Edouard Baldus Tour Saint-Jacques, c. 1858



Figure 1.5 (top) Figure 1.6 (bottom) Auguste Hippolyte Collard Vue de l'ancien pont Saint-Michel, prise le 12 mai 1857, jour où la circulation est complètement interdite, 1857 Vue du nouveau pont Saint-Michel à Paris, 1859

SUIDE

PUBLIÉ SOUS LE FATROFAGE

de la

SOCIÈTÉ DES AMIS DES MONUMENTS PARISIENS



Diant par Phrotidate saiding Cash prana)

Ng. 13. — Thés du Nessel Bindreire-Guide de Paris, par Charles Normand. Spécimen des schene, mode tort nouveau d'application détaillée su dégagement le texis de longe et forigents descriptifs auxquels sont substituée des croquis applicaties d'une précision toute particulière.

Figure 1.7

Charles Normand Schema of Porail de Saint-Étienne, Notre-Dame extract from *Nouvel Itinéraire-Guide de Paris*, 1889-1891 published in *Bulletin de la Société des amis des monuments parisiens*, Vol 10, 1889



Figure 1.8 Charles Normand Schema of interior of south façade, Notre-Dame *Nouvel Itinéraire-Guide de Paris*, 1889-1891



Figure 1.9 Charles Normand Schema of Porte Saint-Anne, Notre-Dame *Nouvel Itinéraire-Guide de Paris*, 1889-1891



Figure 1.10 Albert Robida, "Transformisme" *L'Ami des monuments,* Vol 2, 1888



Figure 1.11 Albert Robida, "L'Embellissement de Paris par le Métropolitain" *La Caricature*, June 19, 1896



L'EMBELLISSEMENT DE PARIS PAR LE MÉTROPOLITAIN (Suite), - par A. ROBIDA

Garzier avait prévu le métropolitain. L'emplacement central du Paris moderne, c'est le nouvel Opéra, aussi a-t-il d'avance tout arrangé sur le sommet de son monument pour que la station centrale du chemin de ter métropolitain pôt s'y établir. Il n'y a qu'à culever le grand converde le narmaire qui surmonie la forsaie et l'on a one gave en terranse commede et artistique. Non le métropolitain ne peut unire a nos monuments, avec quelques légres modifications, on pours toujonns harmonines ne lignes anchieventraise et les lignes ferréirs.

> **Figure 1.12** Albert Robida, "L'Embellissement de Paris par le Métropolitain" *La Caricature,* June 19, 1896



L'EMBELLISSEMENT DE PARIS PAR LE MÉTROPOLITAIN (Suite), - par A. ROBIDA

Figure 1.13 Albert Robida, "L'Embellissement de Paris par le Métropolitain" *La Caricature*, June 19, 1896


L'Embellissement de Paris par le Métropolitain (Suite et fin), - par A. ROBIDA

Figure 1.14 Albert Robida, "L'Embellissement de Paris par le Métropolitain" *La Caricature*, June 19, 1896

Figure 1.15 Juste Lische, Gare des Invalides (project) 1893-1894

Figure 1.16 Le Corbusier, 1929

Figure 1.17 Le Corbusier, 1929



Figure 2.1 "Decoration, *peinte* par M. Charles Toché d'un magasin de la Rue de la monnaie" extract from Frantz Jourdain, "L'Art de la Rue," *Revue des Arts Decoratifs*, 1891

Figure 3.1 Hokusai, *Thirty-Six Views of Mount Fuji,* early 1830s Great Wave Off Kanagawa

Figure 3.2 Henri Rivière, *Thirty-Six Views of the Eiffel Tower*, 1898-1902 Plate 5

Figure 3.3 Henri Rivière, *Thirty-Six Views of the Eiffel Tower*, 1898-1902 Plate 34

Figure 3.4 Henri Rivière, *Thirty-Six Views of the Eiffel Tower*, 1898-1902 Frontispiece



Figure 3.5 Sautereau, n.d. schoolhouse design



ÉCOLE DE VILLAGE POUR GARÇONS ET FILLES AVEC LOGEMENT DE L'INSTITUTEUR.

> **Figure 3.6** Henri Sauvage and Charles Sazarin, n.d. schoolhouse design



Figure 3.7 Henri Sauvage and Charles Sazarin, n.d. school furniture design



Figure 3.8 Georges Moreau, n.d. *Tableaux intuitifs* LIBRAIRIE LAROUSSE, rue Montparnasse, 17, PARIS

ENSEIGNEMENT PAR LES YEUX

Tableaux intuitifs

pour l'éducation intellectuelle et l'éducation esthétique

PUBLIÈS SOUS LA DIRECTION DE M. GEORGES MOREAU

Ces tableaux ont pour objet la formation méthodique du vocabulaire de l'enfant, si imprécis toujours, et l'éveil des idées générales par des comparaisons incessantes et des groupements naturels. Ainsi. par l'heureux rapprochement des figures géométriques et des formes naturelles dont elles sont le schéma. la synthèse (formes analogues observées dans la nature : tiges, feuilles, fleurs, fruits, organismes rudimentaires), l'auteur crée un véritable alphabet de la forme, et par conséquent un alphabet du dessin, la langue universelle qu'il est si important d'étudier à l'école. Chaque tableau offre un ensemble harmonieux et décoratif dont l'influence sur le goût des enfants peut être décisive.



Fase*imile réduit d'un tableau

EN VENTE :

- L'HOMME, reproduction du « David au repos » du sculp-teur MERCIÉ.
- 11. LES CING SENS, représentation simplifiée avec nomenclature.
- simplifiée avec nomenclature.
 III. LA FORME, alphabet du dessin, avec un charmant paysage composé spécialement par Henri RIVIERE.
 IV. LA COULEUR (1^{er} degré). Les sept couleurs de l'arc-en-ciel caractérisées par des fleurs (dessin de George AURIOL).
 V. LA COULEUR (2^e degré). Alpha-
- V. LA COULEUR (2º degré). Alpha-bet de la couleur. Les sept couleurs du spectre et leurs melanges (rose des couleurs).
- Les cinq tableaux, en feuilles for-matjés. (larg. 0=71×haut. 0=55), tirage en deux, trois et quatre con-leurs, sur papier fort... 6 fr. EN PRÉPARATION :

La Parole — Le Chant — Le Nombre La Nature — L'Art

Figure 3.9 Georges Moreau, n.d. Tableaux intuitifs





Figure 3.10 Georges Moreau, n.d. *Tableaux intuitifs*

354

•



Figure 3.11 Charlotte-Hélène Dufau *Aimons-nous mutuellement*



Figure 3.12 Étienne Moreau-Nélaton *Le Blé*

Figure 3.13 Henri Rivière *L'Hiver*
IMAGE REDEACTED

Figure 3.14 Émile Galtier-Boissière, 1900 Anti-alcoholism poster



Fig. 17. - A l'exercice 5 ans 1 2.

Fig. St. - Un Peintre (10 ans).

Sec. Sec.



Fig. 10. - Le Métropolitain (9 ans 1/2).

Figure 3.15 (top) Figure 3.16 (center) Figure 3.17 (bottom) anonymous, n.d. children's drawings **IMAGE REDEACTED**

Figure 3.18 Charles Blanc, 1867 chromatic rose, from *Grammaire des arts du dessin*



Figure 3.19 anonymous, 1876 "Théorie" from *Revue générale de l'architecture et des travaux publics*



Figure 3.20 anonymous, 1840 "Théorie" from *Revue générale de l'architecture et des travaux publics*



Fig. 5. - Feuille de lierre.

Figure 3.21 (left) Figure 3.22 (right) Eugène-Emmanuel Viollet-le-Duc, 1879 from *Histoire d'un dessinateur*



Fig. 24. -- L'horizon, toujours à la hauteur de l'œil.



Fig. 27. — Comment procède la lumière d'une lampe et comment elle détermine les ombres.



g. 25. — Comment, au coucher du soleil, les mages sont éclairés par-des-ous.

Figure 3.23 (top) Figure 3.24 (middle) Figure 3.25 (bottom) Eugène-Emmanuel Viollet-le-Duc, 1879 from *Histoire d'un dessinateur*



Fig. 42. - Deformations perspectives.





Fig. 59. - Application des jointures des os à la mécanique.



Fig. 60. — Application du jeu des muscles et tendons à la mécanique.

Figure 3.28 (left) Figure 3.29 (right) Eugène-Emmanuel Viollet-le-Duc, 1879 from *Histoire d'un dessinateur*



Figure 3.30 (left) Figure 3.31 (right) Louis Charvet and Jules Pillet, 1883 from *Enseignement primaire du dessin*



Figure 3.32 (left) Figure 3.33 (right) Louis Charvet and Jules Pillet, 1883 from *Enseignement primaire du dessin*



Figure 3.34 (left) Figure 3.35 (right) Eugène-Emmanuel Viollet-le-Duc, 1879 from *Histoire d'un dessinateur*



Fig. 7. - Feuille de vigne.

Fig. 8. - Feuille de figuier.

Figure 3.36 (left) Figure 3.37 (right) Eugène-Emmanuel Viollet-le-Duc, 1879 from *Histoire d'un dessinateur*



Frg. 55. - Dessin aux crayons de couleurs, (Reduction aux deux tiers de l'original.)



Fig. 67. - Dessin aux crayons de couleurs. (Reduction d'un cinquième.)

Figure 3.38 (top) Figure 3.39 (bottom)

anonymous, n.d. from Gaston Quénioux, Manuel de dessin à l'usage de l'ensignement primaire



Figure 3.40 anonymous, n.d. from Gaston Quénioux, *Manuel de dessin à l'usage de l'ensignement primaire*



FIG. 53. - Dessin aux crayons de couleurs (Réduction à moitié de l'original.)

Figure 3.41 anonymous, n.d. from Gaston Quénioux, *Manuel de dessin à l'usage de l'ensignement primaire* **IMAGE REDEACTED**

Figure 3.42 anonymous, n.d. fortifications of Paris



Figure 3.43 Eugène Hénard, 1908 comparison on open spaces in Paris, 1789 and 1900


Figure 3.44 Henri Rivière, 1905 Société pour la protection des payages, Diplome d'honneur

IMAGE REDEACTED

Figure 3.45 Eugène Hénard, 1903 Boulevard Redans



Figure 3.46 Eugène Hénard, 1908 Plan for Parks of Paris