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ART AND THE EARLY THIRD REPUBLIC
DESIGNS FOR SOCIAL ENGINEERING IN FRANCE (1876-1890)

A Dissertation Presented

By

Miriam Grundstein Levin

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 1980

History Department

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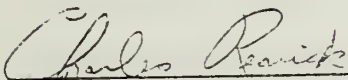
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Approved as to style and content by:



Charles Rearick, Chairperson of Committee



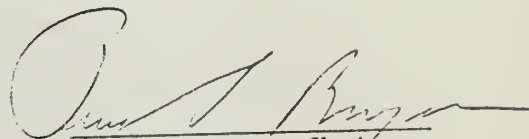
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FOREWORD

When I began this project my intention was to examine the relationship between official and avant-garde art doctrine during the crucial years 1876-1890. I was attracted to the subject by the striking similarities which existed between the artistic ideals supported by Republican policy makers and those advocated by artists and critics such as Georges Seurat and Félix Fénéon. Equally intriguing to me was the fact that often the younger generation used these ideals as a vehicle for mocking society as it existed under the Republic. Added to such ambivalence was the fact that even while criticizing the system, they sought acceptance by its leaders and its institutions. In short, there was a great deal about French avant-garde psychology and creative expression during this period which could not be explained except as a complex response to a larger, more broadly formulated governmental program for the arts, and I realized that before I tackled my initial subject, I first had to explore the theory and objectives behind governmental policy involving the arts. I, therefore, elected to devote the dissertation to examining the ideas of five major Republican figures active in French government circles during this period. It turned out that this research shows Jules Ferry, Victor Hugo, Antonin Proust, Jules Simon, and Edouard Lockroy not only shared a well-developed art theory, but were actively engaged in applying that theory to keep liberal democracy functioning. Built into their proposals were the elements that could make artists who

adopted them frustrated and ambivalent, as well as tremendously assured about their creative powers.

The study also yielded some unexpected results. Using art as a window onto public policy allowed me to avoid the bias of many historians of this period who see Republican conservatism as a disastrous and even immoral attempt to alter the course of social change. Their view ignores the degree to which the Republicans tailored their solutions to the circumstances of the majority of the electorate. Rather than allow industrialization to progress freely, these Republicans wished to check the psychological and economic dislocation it caused by developing a material culture in which technology enhanced the integrity of the producer and cemented his relationship with the consumer. In their choice of art as the medium and the open market place as the context for purveying liberal democratic ideals, they legitimated aspirations and mores of their constituents and sought to keep these ideals viable in the face of encroaching industrial concentration.

In this small space I can never sufficiently thank all those who have aided me in the conception, research, and composition of this dissertation. I am especially grateful to my husband, Bruce, who not only did all the photographs, but offered advice and encouragement. No less important, is the help he and my two children, Petra and Simon, often lent me with the household chores. My advisor, Charles Rearich, and Professors Mark Roskill and Louis Greenbaum encouraged me to pursue this study and not to relent in my effort to bridge the gap between art history and intellectual history. Prof. William M. Johnston saw me

through the early stages of my research. I was particularly lucky to have been able to discuss my ideas with a number of people whose questions and suggestions helped me clarify and deepen my understanding of the relationship between Republican aesthetic values, social aims, and stylistic change. Conversations with Professors Jean Gaudon, Stephen Nissenbaum, Gabriel Weisberg, and Thomas Meakin, and with my friends Rosalind Williams and Arlyn Diamond were stimulating and productive. I also owe a debt of gratitude to the History Department of the University of Massachusetts for the Service Fund awards which helped cover some of the costs involved in my research.

ABSTRACT

ART AND THE EARLY THIRD REPUBLIC

DESIGNS FOR SOCIAL ENGINEERING IN FRANCE (1876-1890)

May 1980

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Directed by: Professor Charles Rearick

This study examines the art policy of the French government during the crucial fifteen year period following the demission of General MacMahon. It concentrates on five Republicans active in artistic and political circles at the time: Jules Ferry, Jules Simon, Victor Hugo, Edouard Lockroy, and Antonin Proust.

The dissertation is divided into two parts. The first chapters provide a discussion of the art theory and the circumstances to which it was applied. The last chapters concentrate on analyzing the policy and its consequences.

Behind their policy lay the theory that art could create a progressive liberal democratic society through its power to alter patterns of thinking and feeling and of behaviour. Their concept of art as a commodity and a symbol allowed them to forge a connection between artists, workers and consumers. Art could serve as a model for producers, providing them with a way to use technology that did not alienate them from society or themselves. At the same time they felt designs in which middle-class values were translated into aesthetic

terms could shape the consciousness of the consumer to integrate technology into his way of life and bind him to the producer.

Using this theory as a guide, these five men sought to counteract the tendency of industrialization to undermine the productive relationships on which the political foundations of liberal democracy rested. Their plan was to modernize traditional values and modes of production, creating products attractive enough to commit the general public to see in them a means of preserving their sense of identity.

In order to implement their theory, the Republicans created a broad art education program. They mounted exhibitions, commissioned works, and awarded prizes. They also wrote articles, gave speeches, and in Hugo's case used their art for didactic purposes. Their plan involved, first, developing in the citizenry a taste for products which stimulated their desire for a sense of independence; and, second, encouraging the creation of a new style which could arouse individual self-consciousness and give form to its expression.

The cooperation of artists and skilled craftsmen was essential to the success of their plan. Yet this group was the one most demoralized by mass production methods and new techniques of mechanical reproduction. The Republicans used the challenge of saving the Republic by creating a new culture based on their own traditional values to induce them to modernize their working procedures. The most notable effort to engage artists, skilled craftsmen, and engineers in this struggle was the building of the Eiffel Tower. Two others were the design and construction of the universal expositions of 1878 and 1889.

Much of the Republicans' theory and their policy drew on concepts and attitudes cherished by the Compagnonnages and the Masons. The similarities and differences are explored, as well as the Republicans' personal attachment to the way of life still nurtured in the craft traditions in France. Their attempt to exploit the symbols and values of the petit-bourgeois artisans, professional and businessmen are shown to have been to a great extent motivated by personal identification with this group and by a desire to make their common ways those of the Republic.

Also in the last chapters an assessment of the success of their efforts is made. The major tangible result was the art and architecture that laid the foundation for twentieth century art. Yet, the nature of the style was such that it did not restrain the increasing concentration of capital and political power; it simply helped individuals to maintain the illusion that they could be independent of them.

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CHAPTER I

INTRODUCTION

Mortified by the defeat of 1870 and suffering from the class antagonisms aggravated by the Commune, Frenchmen during the late '70s and early '80s also experienced the painful effects of industrialization. The long depression which followed the boom period of the Second Empire struck most heavily the peasants, skilled workers, and commercial classes who were the major supporters of liberal democratic Republic. Reduced demand for the goods and services they produced aggravated their sense of insecurity and confusion in the face of technological change. Certain Republican politicians were highly sensitive to the problem. Jules Ferry (1822-1893), Victor Hugo (1802-1885), Edouard Lockroy (1840-1913), Antonin Proust (1832-1905), and Jules Simon (1814-1896), realizing that the security of the Republic depended on the security of their constituency, felt the art could help these individuals deal with the challenges of Modernization.¹

There was by 1876 nothing new about a plan to use the arts for political ends--this had been done during the First and Second Republics. Nor was an interest in art peculiar to Republican governments--after all, Napoleon had been a master of manipulating art for propagandistic purposes. The novelty lay in the clarity and consistency of the art theory and the aims it was to serve. The thesis of this study is that the Republicans' art theory was intended to

influence public values and economic behavior in favor of the lifestyle of the small producer and entrepreneur. Because art possessed certain physical characteristics they felt made it capable of preserving values of liberal democratic society while adapting the infrastructure to new technological circumstances. Their definition of art made it seem the perfect means of carrying out such a task. As both a symbol of liberal democratic system and as a manufactured commodity which transmitted this system from producer to consumer, art appeared capable of integrating technology and using it to transform human consciousness and behaviour through its impact on human sensibilities. In this way heavy industry would be made to serve a community of small-producers and consumers of moderate income, thereby reinforcing their ability to function as the center of gravity for the Republic. The Republicans' call for a new style and their efforts to cultivate it were a means of rallying the working classes to participate in their own salvation.²

To approach the study of Republican art policy in this way is to consider it from the point of view of its relationship and possible influence on real problems in French society at the time. So although the antecedents of the theory and the proposals for reform can be traced to the writings of Diderot, Dubos, and d'Alembert, to speeches of J. L. David and Boissy d'Anglas, and to the Saint-Simonians of the Second Empire, it is the particular formulation given to these ideas by certain Republicans during the 1870s and 1880s that is at issue in this study.³ Jules Ferry and the four others who helped to make art

policy were attempting to resolve problems which their predecessors had not anticipated when they advocated that science and technology be made the foundation stone of a production-oriented, liberal society. The men of the Third Republic represented a community of individuals who were psychologically and economically on the defensive. Moreover, the Republicans' own political position within the *Chambre* was insecure, for they had to contend with a strong Bonapartist contingent as well as with the Legitimists, many of whom at this point were allied with large industrial interests in France wishing to expand the scope of their operations. Unlike their predecessors, who if anything, wanted to divert the tide of liberal democracy into economically productive outlets, the men of the 1880s had to fight to keep liberal Republicanism viable by artificially stimulating the wellsprings of middle class psychological and economic drive. Jules Simon's remark that "*la révolution de la science a commencé après la révolution sociale, et l'a terriblement compliquée,*" expresses something of the uphill fight the Republicans recognized they had on their hands.⁴

As will be seen in the following chapters, the decision to turn to art to combat these forces entailed clarifying the ideological values it purveyed and stressing the progressive elements in it. The idea was to get the public to see that middle class values and way of life could be secured through the proper integration of science and technology into ordinary working and leisure activities. Emphasis was on having art transform patterns of ethical and economic behavior so as to check the development of the factory system while strengthening

the community of small producers. Some of the results of this effort will also be considered, particularly its role in creating an art education program and in laying the foundation for a new style.

The study concentrates on five figures who were unique among the "Opportunists," in great part because of their interest in art. The men in question had a special feeling for the arts which grew out of their own personal lives, their family heritage, and their experience as members of a social group engaged in commerce and manufacturing.

Credit for the coherent formulation of the theory and the policy must be given to Hugo, Simon, Ferry, Proust, and Lockroy. Others before them had nurtured these ideas, but it was they who had the opportunity to fully articulate and institute the art policy. Excluded is Léon Gambetta (1838-1882), who was Prime Minister from November 1881 to January 1882. Although he counted artists and art critics among his friends, he does not seem to have had any clear theory of art, nor to have been personally interested in the visual arts--despite his sensuous nature. After his death an attempt was made by several people to purvey an image of him as a devotee of the arts; but the reforms affecting the art world that were made during his short administration were probably designed by Antonin Proust.⁵

The artistic interests of the five others was anything but perfunctory. All had strong ties to the arts in France, being involved in the artistic life of the country in a multitude of ways during the first decade of the Third Republic. Their tendency to gravitate to positions in government in which the arts figured prominently, the

time they devoted to the arts in their personal and public lives, and the prevalent use of aesthetic terms in their discussions concerning the state of society, all manifest their deep-seated belief that art was an integral part of their daily existence. Their familiarity with the arts gave them insights into the problems which industrialization caused small producers, while their highly developed aesthetic sensibilities lend warmth and color to their political rhetoric.

Each of these men had had long standing, personal attachments to the arts and, it seems, had found in them a source of solace for a life that was filled with psychological and professional insecurity. Victor Hugo's position as poet laureat of the Republic needs little comment. His interest in the visual arts is less well-known among historians, yet he was addicted to drawing from the 1820s on and his graphic works were exhibited and reproduced during his lifetime. He used these drawings, as well as the frequent references to architecture in his writings, as part of a process of thinking in which the process of thought was recorded in the visual images and the poetic act became identified with that of the architect and skilled laborer. This professional identification with the worker was accompanied by Hugo's increasing tendency after 1848 to address his works to the artisans, small manufacturers, and tradespeople of France, especially of Paris. Although generally overlooked, this dimension of Hugo's work and life were his real legacy to the generation of artists who came of age about 1880.

Simon, whose writings reveal a high idealism interlaced with surprising flights of sarcasm, was a protégé of Victor Cousin. An

educator and philosopher, he brought to the official positions he held during this period the zeal of a man with a calling and the common sense of one able to assess a situation realistically. He was a member of both the Académie des Sciences morales et politiques and the Académie Française. As a senator for life, he held the position of Minister of Public Instruction, Cults, and Fine Arts from 1871-73 and 1875-77. In 1877 he headed the organization of the 1878 Exposition Universelle and in 1889 the section on labor at the Paris Centennial Exposition. His writings reveal a deep understanding of the nature of art and an attempt to reconcile Plato's aesthetic ideas with the exigencies of modern industrial production.

Ferry's personal feelings for the arts were apparently deep seated. By his own admission, he found in them a respite from daily routine and a source of spiritual refreshment. Within his circle of friends were a number of artists and architects whom he had known since his early days in Paris when he had studied painting. These included the painter Jean-Jacques Henner and the architect Emile Trélat, as well as the sculptor Antoine Mercié, whom he met later during a trip to Italy. As Minister of Public Instruction and Fine Arts and Prime Minister, he was able to directly influence the arts in a decisive manner for a period of nearly six years.

Proust was a figure who successfully combined a career in politics with one devoted to journalism and art. A dapperly dressed man, a bit of a dandy, his desire for a pleasingly ordered milieu found an outlet in a devotion to cultivating the decorative arts. His interest

in their development dated back to the late 1860s, a time when he also became acquainted with the artists Puvis de Chavannes, Fantin- Latour, and with Ferry and Gambetta. Proust served as the latter's secretary during the Franco-Prussian war and also as correspondent for Le Temps, helping to establish the République Française in 1871. Manet and Proust had met in the studio of Thomas Couture in the 1850s where both were studying painting. In 1876 he was elected deputy from his home town Niort (Deux-Sevres). From 1879 on he helped draw up the Beaux-arts bureau's budget and served as Minister of Art in Gambetta's cabinet. He sat on various commissions associated with the arts and was made President of the Commission d'organisation de l'Exposition universelle de 1889, and was also President of the Union Centrale des arts décoratifs. He used his position in government to organize a number of exhibitions, including the posthumous show of Edouard Manet's work and the Centennial of Modern French Art at the 1889 Exposition. He wrote and edited a number of works on the arts most of which were aimed at giving artists and artisans gain a solid economic footing and professional status.

Lockroy is an interesting figure, who, like Proust, deserves greater attention from historians, both because of his relationship with Victor Hugo and of his support for legislation affecting French manufacturers and workers. He is an interesting personality in his own right. Son of an actor and playwright, Lockroy attended the Ecole des Beaux-arts for a short time before entering politics. His writings and speeches reveal an ideologue with a highly ascerbic wit. As the

second husband of Victor Hugo's daughter-in-law, he was not above using this affiliation for his own ends. In effect, he presented himself as the person who would bring Hugo's fictional republic into being. His record shows a continuing interest in the decorative and design-related arts, particularly in the economic and social welfare of those who produced them and who constituted the majority of his constituency. It was primarily due to his efforts that the Eiffel Tower was built as the centerpiece of the 1889 Exposition, and in his reply to the famous petition against the Tower and in his other statements supporting the Tower, he reveals a remarkable penchant for grasping socio-economic circumstances and translating them into aesthetic and political terms. These statements provide an access into the mentality of the Republicans and into the aims of their art policy, for the Tower was conceived as a major step towards achieving social and economic equilibrium among the middle classes.

To my knowledge, no one has investigated the relationship between art and politics during this period from this perspective, probably because of a misconception about the Republicans' view of art and about the aims of their political activity in general. It is true that Theodore Zeldin's two volumes on the intellectual history of France contain long sections on the arts, but he has overlooked the connection by separating the general fascination with good taste from the Republican interest in establishing a balance of power in the state. Claiming that the Republicans directed political policy and theory into legal rights spheres, Zeldin ignored the relationship between political

economy and taste--which was thought to influence economic and political behavior. Sanford Elwitt's recently published study of the Republican's policy paints a picture of Republican liberalism as motivated by economic interest; yet, he does not mention their interest in using the arts for presumably he, like Zeldin, fails to take French concerns with taste as tied to political values.⁶

To approach the official art policy from the proposed point of view would provide useful insights into developments in the art world at this time. While scholars writing on avant-garde movements and the origins of modernist styles have noted a connection between art, politics, and economics during the period, they have tended to conduct their investigations on the artists and their work as if the artists were separated from the political mainstream.⁷ Yet certain similarities between Republican policy and artistic concerns do exist. Sven Lovgren has recognized that stylistic change in late 19th century France reflected an attempt by individuals to deal with the effects of the general depression on the art market, an effort which it will be shown, was urged on artists and skilled workers by the Republicans.⁸ Meyer Schapiro has noted that Georges Seurat, the leader of the Neo-Impressionist avant-garde, identified with the new technocracy of the age through his painting of the Eiffel Tower, the symbolic structure used by the Republicans as a centerpiece for the 1889 Paris Exposition honouring the centennial of the French Revolution.⁹ Moreover, some avant-garde artists and their supporters appear to have been sympathetic to Republican aesthetic and social values, if we are to believe the

comments of the young artist and critic Emile Bernard in his review of the centennial exhibition of French painting at the 1889 Paris World Fair.¹⁰ As for the artists who frequented Republican salons and received state commissions and prizes, they were clearly in a position to be influenced by the politicians, and the nature of that influence needs to be ascertained in order to understand the transformation between about 1850 and 1890 of Realist tendencies in painting and eclecticism in architecture into symbolistic and functionalist tendencies.

Some sort of relationship did exist between politicians and artists, but it was more complex than the simple acceptance or rejection of the Republicans' proposals. It was probably closer in character to that described by Renato Poggioli and Clement Greenberg in their theoretical presentations of avant-garde art and psychology.¹¹ Before one can determine the position artists of the period assumed vis-à-vis the Republicans, however, it is necessary to identify the ideas which the politicians attempted to put into effect and the means they proposed to use, for it was they who were ostensibly able to translate proposals into policy, thereby affecting the world of art.

The dissertation is divided into four large chapters, arranged so that the argument moves from the more abstract realm of the Republicans' art theory, through the historical circumstances to which it was addressed, to the proposals for its application--primarily in the context of public education. It ends with a description and critical analysis of the character of the new style which was to be the vehicle

through which the public would come to participate in the progress of liberal democracy.

My information has been drawn from a wide variety of materials that fall into one of three general categories. The first includes primary sources such as published speeches, correspondence, and articles--and in the case of Hugo, poetry and drawings, some of which have not generally been considered in discussion of the Republicans' ideas. Among such sources are a number of speeches published in the Journal officiel, Le Temps, and other periodicals, as well as documents concerned with the Salons and universal expositions of the period. The second category is comprised of primary materials written about the Republicans or by members of their entourage in support of official views. It also includes works of art, primarily architecture and painting, which enjoyed the Republicans' favor or expressed their values in varying degrees. Finally, as would be expected in a study that is concerned with ideology and art, I have also utilized a number of secondary studies and theoretical writings dealing with political philosophy, economics, aesthetics, art history, structural and symbolic anthropology, and history of science.

FOOTNOTES

¹Ferry (Deputy, 1869-1880; Senator, 1891-93; Minister of Public Instruction and Fine arts, February 1879-November 1881, January-August 1882, February-November 1883; Prime Minister, 1880-1881, 1883-1885) was able to influence the arts in a decisive manner. His personal feelings for art were apparently deep seated, despite the declaration to the contrary by Jean Dietz, "Jules Ferry et les traditions républicaines," Revue politique et parlementaire 160 (July 1934):101. For more recent discussions of the place of art in Ferry's personal life see Zeldin, France, 1848-1945, 2 vols. (Oxford: Oxford University Press, 1977), 1:622, and Maurice Reclus, Jules Ferry: 1832-1893 (Paris: Flammarion, 1947), pp. 25-26.

Victor Hugo's position needs little comment. On him see Sheila Gaudon, "Prophétisme et utopie: Le Problème du destinataire dans les Chatiments," Saggi e ricerche di letteratura francese 16 (1977):403- 426. As Senator from Paris (1876-1885) Hugo's efforts included raising funds for artisans to attend the Philadelphia Centennial Exposition, a series of lectures at the 1878 International Congress on Literature on copywrite laws and inheritance rights, and an outspoken plea for amnesty for the Communards, many of whom were artisans, skilled laborers, and artists. See "Nouvelles du jour," Le Temps (Paris 18, 1876; "Nouvelles du jour," Le Temps, March 27, 1877; "Le Domaine public payant" in Oeuvres complètes, 35 vols. (Paris: Andre Martel, 1948-1955), vol. 25 (1954): Actes et paroles (1864-1885): Mes fils Testament littéraire, pp. 500-509; and "Nouvelles du jour," Le Temps, August 5, 1879. Hugo's political activities during the last phase of his life deserve a thorough study. His real importance, particularly to the skilled laborers and entrepreneurs and intellectuals who identified themselves with the labor movement in France has been obscured by the hagiography which the Republican press, the Masons, and Hugo himself helped to create. The most complete contemporary account of his ideas on art and the role of the artist in society is contained in Alfred Barbou, Victor Hugo et son temps (Paris: Charpentier, 1881). Léon Daudet, Ecrivains et artistes, 8 vols. (Paris: Capitoile, 1929) 5:23-24, describes popular enthusiasm for Hugo and alludes to the fact that Hugo's associates exploited him. Joanna Richardson, Victor Hugo (New York: St. Martins, 1976), Sec. III ("The Legend"), presents the most recent thorough summary of Hugo's activities and the response of his relatives, friends, and associates to his success during the last period of his life. I am most grateful to Prof. Jean Gaudon for pointing out that a discrepancy existed between the image of Hugo created through the Republican media and the content of Hugo's ideas (Personal Interview, New Haven, Conn., January 1978).

Lockroy was a Deputy from Bûches du Rhone (1873-1881) and from Paris' XI^e arrondissement (1881-1899(?)). He served as Minister of

Commerce and Industry (1886-1889). His record shows a continuing interest in the decorative and design-related arts, particularly in the economic and social welfare of those who produced them and who constituted the majority of his constituency. His ideas on the importance of the arts in French economic and social life can be found in the Journal officiel de la République française, 3334-3349 (1876) (Discussion générale des propositions d'amnestie," remarks of Deputy Edouard Lockroy); Edouard Lockroy, La Question sociale: Réponse à M. de Mun. Discours sur les syndicats professionnels séances de 13 et 16 juin, 1883) par Edouard Lockroy, député du XI^e arrondissement, (Paris: Balitout, Questroy et Cie., 1883); Edouard Lockroy, Letter concerning the Eiffel Tower, February 14, 1887, reprinted in "Les Artistes contre la Tour Eiffel," Moniteur de l'Exposition de 1889 (Paris), February 20, 1887, p. 514; Edouard Lockroy, Preface to L'Exposition universelle de 1889 grand ouvrage illustré, historique, encyclopédique, descriptif by Emile Monod, 3 vols. (Paris: E. Dentu, 1890), 1: i-xxx. Lockroy was the major figure in the decision to make the Eiffel Tower the center piece of the 1889 Exposition. His role in this effort is described by Joseph Harriss, The Tallest Tower: Eiffel and the Belle Epoque (Boston, Houghton Mifflin, 1975), pp. 8-9.

Proust's published works include editing the Archives de l'oeust comprising a number of cahiers of 1789; L'Art français depuis 1789 (Paris: n.d.); L'Art sous la République (Paris: Bibliotheque Charpentier, 1892); "Le Ministère des arts." Revue bleu, February 4 and 25, 1882, pp. 196-200 and 231-299; "Le Salon de 1882," Gazette des Beaux-arts June 1, 1882, pp. 533-554; "Les Travaux des commissions de la société de l'Union centrale des Arts decoratifs. Rapport de M. Antonin Proust, etc.," Revue des arts decoratifs 10 (1889-90):192-197; "Lettre a M. Alfred Darcel, Directeur du Musée des Thermes et de l'Hotel de Cluny, Delégué du Commissariat spécial des Beaux-arts a l'Exposition universelle de 1889," in Monod, Exposition illustré, I:6-9. Simon's writings relevant to the present discussion are "Une Academie sous le Directoire, (Paris: Calmann Levy, 1885); Victor Cousin (Paris: Hachette et Cie, 1887); Dieu, Patrie, Liberté (Paris, Calmann Levy, 1883); Introduction: Rapports du jury international. Exposition universelle internationale de 1878 a Paris (Paris: Imprimerie nationale, 1880); Nos Hommes d'état (Paris: Levy, 1887); Le Travail (Paris: A. Lacroix, Verboeckhoven & Cie., 1866). For a contemporary biography of Simon containing information on his family background and early education, see Léon Seché, Jules Simon, sa vie et son oeuvre (Paris: A. Dupret, 1887).

²To my knowledge there are no other studies of Republican art theory during the Third Republic. Pierre Sorlin, Waldeck-Rousseau (Paris: Colin, 1966), p. 259, mentions the subject as worth investigation. Theodore Zeldin, France: 1848-1945, 2 vols. (Oxford: Oxford University Press at Clarendon, 1973-1977), overlooks the interest of these men in the arts and also their personal desire to use art education to indoctrinate the populace into Republican moral and social

values. His discussion of the arts suffers in part because he separates the fine arts from the applied arts, a factor that may have led him to miss the connection the Republicans made between them. See his chapter on fashion, vol. 2:170-192 and 447-451.

³Very little of their precursors' art theory has been thoroughly studied, especially not from the perspective of social and economic values attributed to art. Of the articles and books which do touch on these aspects of progressive art theory, the following are perhaps most useful: Michael Fried, "Absorption: A Master Theme in Eighteenth Century French Painting and Criticism," Eighteenth Century Studies 9 (Winter 1975-76):139-177; *idem*, "Manet's Sources: A Study of an Aspect of His Art," The Artforum (May 1969); Remy G. Saisselin, Taste in Eighteenth Century France (Syracuse, N.Y.: Syracuse University Press, 1965); *idem*, "The Transformation of Art into Culture: From Pascal to Diderot," Studies on Voltaire and the Eighteenth Century 70 (1970):193-218; James Leith, The Idea of Art as Propaganda in France, 1750-1799, Univ. of Toronto Romance Series, no. 8 (Toronto: Univ. of Toronto Press, 1965); Miriam R. Levin, "David, de Stael, and Fontanes: The 'Leonidas at Thermopylae' and Some Intellectual Controversies of the Napoleonic Era," Gazette des Beaux-arts, (forthcoming); *idem*, "The Definition of French Republican Character in Art in the Aftermath of the Revolution," Revue de l'institut napoléon, forthcoming; Linda Nochlin, Realism and Tradition in Art, 1848-1900, Sources and Documents in the History of Art (Englewood Cliffs: Prentice Hall, 1966); *idem*, Impressionism and Post-Impressionism, 1874-1904, Sources and Documents in the History of Art (Englewood Cliffs: Prentice Hall, 1966); Albert Boime, The Academy and French Painting in the Nineteenth Century (London: Phaidon, 1971); Timothy J. Clark, The Absolute Bourgeois: Artists and Politics in France, 1848-1851 (London: Thames and Hudson, 1973).

⁴Introduction, p. 264.

⁵I have not included Léon Gambetta (1838-1882), who was prime minister from November 1881 to January 1882, because although he had friends who were artists and art critics, he does not seem to have formulated a clear theory of art, not to have been personally interested in the visual arts. After his death an attempt was made by several people to create an image of him as an art lover, but the reforms affecting the arts in France which were made under his administration were probably designed by Antonin Proust. For contemporary accounts written after Gambetta's death asserting his devotion to art, see "Gambetta artiste," Le Voltaire (Paris), Saturday, April 8, 1882, n.p. written by an anonymous author who may have been Alfred Barbou, a young publicist who had done a book on Gambetta and who was financed by him in a short-lived journal called Le Livre universel; A Kempis, "Il faut lutter," Le Chat noir, Saturday, April 8, 1882, n.p., probably apocryphal is a satirical account of a meeting between Gambetta, Jules Grévy, Theloherian Rodolphe Salis, the owner of the Chat noir

cabaret and some of his artistic patrons; Jules Clarétie, "Léon Gambetta, Amateur d'art," Gazette des beaux-arts 27 (February 1, 1882): Gambetta, Amateur 123-216; Antonin Proust, "Le Ministère des arts," Revue bleu: La Revue politique et littéraire ser. 3, 1882, 2 prts.: February 4, 1882, pp. 196-200, and February 25, 1882, pp. 231-239; Joseph Reinach, Le Ministère Gambetta: Histoire et Doctrine (Paris: G. Charpentier, 1884), pp. 183-190. For a recent discussion of Gambetta's ideology see Theodore Zeldin, 1:610-621, in which the historical literature on Gambetta's character and intellectual milieu are summarized.

⁶Zeldin, France. The distinction between the two for Zeldin is confirmed by the fact that he treats politics, along with ambition and love, in one volume and taste, intellect, and anxiety in the second volume. Moreover, he discusses art education from the point of view of vocational training and the inculcation of standards of taste--a tactic which allows him to point out the gap between theory and practice in the schools, but prevents him from discussing the link in theory between a taste for order and social and economic order. See on this point, especially 2:444-455. Perhaps this separation occurs because Zeldin adheres to the Anglo-American model in this instance, where he has understood the French model in others. Sanford K. Elwitt, The Making of the Third Republic (1868-1884) (Baton Rouge, La.: Univ. of Louisiana Press, 1975).

⁷I refer here particularly to Robert L. Herbert's work on the Neo-Impressionists. See idem, "Les artistes et l'anarchisme," Le Mouvement sociale 36 (July-Sept. 1961):2-19, in which Herbert puts forth the view of their alienated status and psychology which has colored his later interpretations of their work. There is some truth in Herbert's interpretation, but it is too simplified an explanation. See also John Rewald, Post-Impressionism from Van Gogh to Gauguin (New York: Museum of Modern Art, 1959), Introduction; Eugenia Herbert, The Artist and Social Reform: France and Belgium, 1885-1898 (New Haven: Yale Univ. Press, 1961).

⁸Sven Lovgren, The Genesis of Modernism: Seurat, Gauguin, Van Gogh, and French Symbolism of the 1880's (Bloomington: Univ. of Indiana Press, 1971).

⁹Meyer Schapiro, "New Light on Seurat," Art News, 57 (April 1958):22-4; idem, "Seurat and La Grande Jatte," The Columbia Review, 17 (November 1935):9-16.

¹⁰Emile Bernard, "La Peinture à l'Exposition," Le Moderniste illustré (1889), n.p.

¹¹Renato Poggioli, The Theory of the Avant-Garde, trans. Gerald Fitzgerald (New York, Evanston, San Francisco, London: Harper & Row, Icon Editions, 1971); Clement Greenberg, Art and Culture (Boston: Beacon Press, 1965).

C H A P T E R I I

REPUBLICAN IDEOLOGY AND AESTHETICS:

ART AS COMMODITY AND SYMBOL

Introduction

My purpose in this chapter is to define the framework that the Republicans' art theory provided for their social reform proposals by considering the theory from an anthropological and historical perspective.¹ In so doing it will, hopefully, become clear that an analysis of their concept of art opens the way to a new and more profound understanding of their ideology, as well as of the significance of art within the liberal democratic tradition.

I will begin by analyzing the general relationship the Republicans posited between art and society. Then, their own particular social and aesthetic ideal will be closely examined. This measured approach to the subject allows one to evaluate their general theory of art, to move logically to their particular ideal of art and society, and ultimately, to their programme.

Aesthetic Harmony and Social Order

Central to the art theory of the five Republicans is their belief that art was an integral part of every human being's existence. They felt it could be used to enhance each individual's experience, while benefitting the society in which the individual functioned.² Such a humanistic view of art was not simply an expression of personal preferences, but one aspect of a well-developed art theory whose highly

abstract and consistent character attests to the importance the Republicans attributed to the relationship between art and society. The basic premise of their theory was the concept of art as a social object, what Roland Barthes terms a sign or system of signifiers denoting a social system, which was itself aesthetic in character.³ Thus, they spoke of harmony in art and social harmony referring, essentially, to the same quality in both instances--and they applied to society the same criteria they used to evaluate works of art. One finds, for example, that Simon's definition of an ideal social order in which

Toute est harmonie et mesure. Quand unité disparaît nous avons le chaos; quand la différence s'évanouit nous avons l'immobilité,⁴

is the same one Proust used as a standard by which to judge artistic design and taste. Lack of a unifying principle made works of art into "des mosaïques dont l'aspect heurte l'oeil," "des oeuvres incohérentes."⁵

The work of art, in their view, could not only be a substitute for the larger, more intangible system, but its imagery characterized the state of the collective imagination of the society's population.⁶ Art, the Republicans felt, represented human beings "tels que nous sommes" (Proust).⁷

Realism in art consisted in what artists conveyed about how people thought and how they perceived the environment that constituted their social milieu. A disorganized, disproportionate design filled with anachronisms bespoke a similar state of consciousness and of civilization. On the other hand, well-integrated works, coherent in

imagery and formal organization, were expressions of well-ordered psyches and societies.

The Republicans saw nothing mystical or arbitrary about this intimate relationship. The factor that joined art and society was labor. Art was the product of organized human effort, being the most perfect and exalted form products could attain. In Simon's opinion, it was "l'art qui . . . anoblit [labor] et la couronne."⁸ Integrated design ("cohérent," Proust) in a work of art was simply the result of the artists' having a clear understanding of the procedures used in making it and a preconceived notion of the unified character it was to have ("la notion de son ensemble," Proust).⁹

Defining society as did Marx and their own intellectual predecessors, St.-Simon and Comte--in terms of a system of production, that is in economic terms, the Republicans felt works of art derived their aesthetic character, including their formal organization and the referents of their imagery, from the process of production sanctioned by society and, ultimately, from the ends which the production system served.¹⁰ Since the patrons of the arts and those who determined the social ideal were synonymous in the Republicans' minds, standing at either end of the production process, art derived its ultimate meaning from the system of production in which the values and needs of those who controlled the economic and political system found their active expression and fulfillment. The Republicans were well aware that works of art signified the ideology of the group for whom they were made, rather than that of a total society, and were a means of perpetrating

his design the mutually agreeable terms of communication between himself, his collaborators, and the patron, the fabrication of art was a process of socialization for all concerned, including the consumer. In being "faite en vue d'une destination précise, works of art could serve a purpose, or several purposes, either as shelter (architecture), furnishing, utensil, or decoration (carpets, paintings, wall paper, fabric, vases, etc.). As such, art created an environment, it became part of an ideal ensemble ("un ensemble décoratif," Proust) with which the patron interacted.¹⁶ As he consumed it, that is lived with it, used it, art shaped and refined his behavior patterns and through them formed his perception of the world. A dialectical relationship existed then between the artist and the patron, mediated by the work of art. Art could be a means of encouraging acceptance of an ideological system, while at the same time its reliance on the imagination of the maker allowed for change and variation within the common mental construct.

There is, however, a duality which exists in the Republicans' conception of art as a social sign. They viewed it as a kind of symbol or emblem ("quelque chose de symbolique," Lockroy; "témoignage sincère de notre époque," Proust) of the system of values embodied in the social, political, and economic system.¹⁷ In this case art possessed the character of the ideal ("l'idéal entrevue," Ferry), but an ideal whose harmony and order were expressions of a concept of nature and natural law. "La variété est, comme unité, dans le plan de l'univers . . . De même dans la société humaine,"

declared Simon.¹⁸ They also considered art as an active force engaging individuals in the process of externalizing and clarifying the latent system of values, bringing them to the level of human consciousness, and keeping them there through the creation of a man-made environment suited to human needs ("le travail créant le bien être," Hugo).¹⁹ In this case art had the character of a manufacturing procedure, of an activity associated with the state of becoming, of change being effected in an orderly fashion. These sequences constituted in themselves another kind of ideal, one that was dynamic, in motion, tending towards a stable resolution ("... la variété en fait la vie; elle en fait le mouvement et le charme" (Simon).²⁰

The Republicans, in identifying the two stages of production and giving to both an ideal, i.e., regular and rational basis, made it possible in theory to join what seemed currently separated in fact. Thus, their art theory held out hope for economic and social change through the agency of art. To state it another way: rather than seeing this duality as a threat to the consistency of their theory, the Republicans reconciled the stable with the dynamic ideal by making each a means of attaining the other. The stable ideal served them as a vision of the distant goal to be attained and as the stimulus to reach for it; while the dynamic process provided the means individuals could use to bridge the gap between impulse and attainment of the vision. In combining the emblematic and procedural in one object, the work of art became a kind of perpetual motion machine engaged in creating and sustaining itself

as part of a natural system apart from its maker or user, yet art could also catch both of them up in its mechanism, uniting them with each other and with the forces of the universe through its emotional, physical, and intellectual appeal.

They were not troubled by the circularity of the theory, nor by its ideological dimensions. Quite the contrary. These features of the theory turned art from a neutral sign into a sociological and anthropological tool which they were anxious to exploit for moral and social ends. In addition to allowing them to fabricate art for any ideological system, their theory suggested one could manipulate human psychology and social behavior simply by altering the production process and the character of the finished work of art. It also provided them with a key to unlock the mystery of past societies and to allocate them a place in the historical development of liberal democracy. It was to this last application of the theory that the Republicans first turned. By allowing them to approach the accumulation of artifacts left in the wake of history as so many insights into the sensibilities and production systems of older societies, the theory helped them turn the past into a point of reference for determining the character which their own society and products ought to have.

As might be expected, they began by looking at art to see what people of the past had valued and how these values were authenticated by artists. Their analysis were conducted on a very sophisticated level, although their conclusions were by no means unbiased.

Les artistes du passé n'ont jamais méconnu la réalité. Ils s'en sont constamment inspirés; au point même de sacrifier la probabilité historique, en donnant délibérément à leurs héros les traits et les vêtements des hommes de leur époque. (Proust)²¹

This reality could be defined from a number of related points of view and on a number of levels, including that of personality or moral character. Here, the Republicans' own political aesthetic prejudices begin to reveal themselves. The people of ancient Cambodia, for example, had a "génie bizarre et puissant," Simon concluded from his analysis of their architectural remains. In economic and political terms the complexity, luxuriousness, and vast scale of ancient temples and palaces were evidence, Simon found, of wealthy, technologically advanced, and authoritarian societies whose artists were master craftsmen skilled in organizing and directing the labor force:

. . . les artistes qui ont élevé, il y a des milliers d'années, le temple d'Ancor, le palais de Bélus, les pyramides d'Egypte, connaissaient toutes les ressources de l'art de bâtir. Ils disposaient de richesses incalculables; ils avaient à leurs ordres tout un peuple d'ouvriers; ils employaient les bois les plus incorruptibles, les métaux les plus précieux ... Nous connaissons surtout les anciens par leurs dieux et leurs rois.²²

Perhaps the best and most complete example of the way in which the Republicans' art theory could open up the past is Hugo's description of a medieval dining room in the section of his epic poem La Légende des siècles, entitled "Eviradnus." Through the aesthetic character of this enclosed and totally artificial environment Hugo developed a vivid and rich image of the economic system and the moral character of the era. At the very outset of the verse, Hugo established the psychology of the society through its physical

environment. The room ("cette antre obscure des vieux temps") with its crude construction (la salle à pour plafond les charpentes du toit") sets the scene in a pre-industrial milieu which is technologically primitive and physically crude.²³

Hugo carried the image further by associating it with a particular economy based on agriculture and war. He tells the reader that the fabricators of the room and its contents are peasant artisans ("Les pâtres de la Murg ont sculpté les sébiles; Ces orfèvres du bois sont des rustres habiles") and their patrons were warrior knights. The political structure was feudal, controlled by military force allied with the Church:

Chacune, avec son timbre en forme de delta,
Semble la vision du
chêf qui la porta;
Là sont les ducs sanglants et les marquis sauvages
qui portaient popur pennons au milieu des ravages
Des saints dorés et peints sur des peux de poissons.

Hugo indicated his disapproval of this system through his characterization of the crude architecture, the dim light, and the cold temperature of the room. There was no concern for human comfort or intellect, only for self-indulgent, sensuous pleasures and physical passions. The peasant-artisans' productive efforts have been directed to enriching the objects in the room with detailed scenes that are irrelevant to their function as eating utensils, for example. Contrasts between the rough (the architecture), the exotic ("Les tapis d'Ispahan"), the luxurious ("des buffets chargés de cuivre et de faience"), the refined ("les plats bordés de fleurs sont en

vermeil"), and between beauty and moral ugliness (De beaux faisans tués par les trâitres faucons"), bespeak the unbridled, sensuous personalities, untamed physical passions, and lack of moral and intellectual integrity of the ruling classes for whom the room was designed. This "livide et froid rez-de-chaussée" seemed to be "un grand linéament d'abîme."²⁴

Hugo distilled the character of this mentality in the image of the armored figures of men who stood guard along either side of the room. No humans or beasts are within the armour ("des armures vides"); rather it has a perverse life of its own arising from the corruption of the material out of which it is made, and ultimately from the corrupt values of the system itself:

Le casque semble un crâne, et, de squames couverts,
 Les doigts des gantelets luisent comme des vers;

 L'armure du cheval sous l'armure de l'homme
 Vie d'une vie horrible, et guerrier et coursier
 Ne font qu'une seule hydre aux écailles d'acier.

The result is a perversion of nature, in the sense that the integrity of man, beast, and matter (iron) are denied. Hugo condemns the aesthetic sensibility which finds pleasure in turning this primitive material to military ends and having it simulate biological forms. It is for him an indication of moral corruption of the political leaders, their economy, and their system of production. The iron knights and their mounts are

. l'écorce

De l'orgueil, du défi, du meutre et de la force;

Hugo uses these iron figures as emblems of a social system based on exploitation of the labor of the masses which Eviradnus destroys from within by donning one of the armored suits and confronting the two tyrants who have just dined in the room ("Sigismond l'assassin, Ladislas le forban"). In so doing Hugo has him end an era ("L'heure ou vous existiez est une heure sonnée"). The vehicle of the armor enables Hugo to explain historical change as the result of an infusion of new meaning into old forms and of a process of putting those forms in the service of more humane ends. The new enlightened character Eviradnus brings to society is announced when he reveals his true identity to the kings by lifting the visor of the helmet.

Comme sort de la brume
Un sévère sapin, vieilli dans l'Appenzell,
A l'heure ou le matin au souffle universel
Passe, des bois profonds balayant la lisière,
Le preux ouvre son casque, et hors de la visièr
Sa longue barbe blanche et tranquille apparaît.

In "Eviradnus" Hugo moves through the various interrelated layers of meaning the Republicans attached to artistic imagery, ending with the most important message, the insight into the nature and mechanism or positive change.

The Aesthetic of Republicanism

As the foregoing analysis of the Republicans' art theory suggests, these five men assumed a certain judgmental distance towards the

the art of the past. The positive attachment they still felt for the Western cultural tradition rested on their view of it as essentially rational. They saw the beauty of Greek, medieval, and eighteenth century painting, sculpture, and decorative art and architecture as the result of a harmonious integration of forms and a consistency in handling and organizing materials. They admired such art most because of what Proust referred to as "ces anciennes et grandes ordonnances décoratives," and they made themselves the heirs of this tradition by proclaiming that the "sentiment du décoratif . . . est le caractère propre de notre art national . . ." (Proust).²⁵

Nevertheless, they were aware that their own aesthetic sensibility, their ideology, and the political and economic realities which confronted them differed from those of the past. Although they placed themselves in the general category of rationalists, they recognized that the Greeks had not been utilitarians, that late (Gothic) medieval society focused its aspirations and its productive energies on the next world, and that the eighteenth century had not really felt the full impact of science, technology and the social revolution.²⁶ Then, a change had occurred in man's perception of reality related to "l'état changé des âmes" brought about by the onset of the scientific and social revolutions.²⁷ "[L]a révolution de la science a commencé après la révolution sociale, et l'a terriblement compliqué," (Simon).²⁸ The difference between their own aesthetic sensibility and those of past societies rested on the way in which they had

and those of past societies rested on the way in which they had combined science and technology, democracy and economic liberty to form a vision of society and of society as a dynamic equilibrium.²⁹

The controversy in 1886-1887 over the selection of the Eiffel Tower as the symbol of the 1889 universal exposition provides a dramatic instance in which the characteristics of the Republicans' aesthetic and their ideology were cast in strong relief.³⁰ Protest against the Republican project came from a group of men prominent in the French art and literary world, among whom were a number of well-known Salon artists including Charles Garnier, architect of the Paris Opera; the painters Ernest Meissonier (1815-1819) and William Bouguereau (1825-1905); and the sculptor Antonin Mercié, who had once been in the Republicans' camp. Their letter of protest began by denouncing the aesthetic imagination of Eiffel and his supporters, as well as the social values which the Tower symbolized.

La ville de Paris va-t-elle donc s'associer plus longtemps aux baroques, aux merchantiles imaginations d'un constructeur de machines, pour s'enlaidir irréparablement et se déshonorer? Car la tour Eiffel, dont la commerciale Amérique elle-même ne voudrait pas, c'est, n'en doutez point, le deshonneur de Paris.³¹

Clearly, the society for which the Tower stood was to their minds industrial, commercial, and scientifically and technologically oriented. They reiterated this point further on in the letter when the industrial form and materials of the Tower ("gigantesque cheminée de l'usine, l'odieuse colonne de tôle boulonnée") were contrasted with the stone monuments in Paris which they felt were of real beauty: the towers of Notre Dame, the facade of the Louvre, the dome of the Invalides, the work of Goujon, Rude and Barye. The latter were examples

. . . de ce qui est beau, de ce qui est grand, de ce qui est juste . . . une floraison auguste de pierres parmi lesquelles resplendit l'âme de la France.³²

In his reply to this letter Lockroy met the protestors on their own terms. Recognizing that the signatories wished to differentiate between his economic values and their own, the Minister of Commerce used his reply to emphasize the peaceful aims of the Republican system. The Tower was

. . . une oeuvre pacifique à laquelle la France s'attache avec d'autant plus d'ardeur, à l'heure présente, qu'elle se voit plus injustement suspectée au dehors.

It was a symbol of the Republic's commitment to domestic "progress" and of its renouncement of bellicose aggradizement. Lockroy went on to imply that that style of the protest letter with "l'ampleur des périodes," "la beauté des métaphores, "l'atticisme d'un style délicat et précis" was the expression of an outmoded and rigid social system that thrived on conflict. In a final thrust at his opponents' politics via their sensibilities, he proposed that the letter be posted at the entry to the exposition to heighten the contrast between the impotent old and the energetic new order.³³

Although the public generally recognized that the Eiffel Tower symbolized in aesthetic terms the socio-economic values of the Republicans, the ideology had already been formulated into an aesthetic system by the beginning of the period in question. Simon's remarks on the 1878 exposition cited earlier in the first section of this chapter provide ample testimony to support this. Like their ideology, their aesthetic was composed of a set of independent values or categories united by a common underlying conceptual framework. Democracy, economic

liberty, labor, and utility constituted the elements of this "ensemble d'idées et d'aspirations" which Ferry called "une patrie morale."³⁴ Commerce provided a socially relevant conceptual framework into which these values were fit to form an interlocking pattern, like so many different colored tiles in a floor. Marketability assured them a functional purpose; at the same time the individual values retained their separate identities and cooperated as independent units in making the metaphorical floor a reality. For the Republicans, commerce was both a human necessity and a goal they hoped to attain for it provided the impulse and the ultimate aim of a democratic society.

Science and technology stood in a special relationship to this ensemble. They confirmed the character attributed to each value, and they offered working models grounded in the real world to be used to bring the Republicans' ideal system into being. In the discussion which follows, each of the values and its aesthetic equivalent will be examined in its turn. There will then be a discussion of the ways in which science and technology were integrated into this system, making possible the implementation of the Republicans' ideology to achieve social unity.

Democracy. Democracy for the Republicans was a social system in which each individual was legally the equal of any other and acted according to the same rational principles as all the others.³⁵ Ideally, the individual would have moral integrity ("cohérence," Proust; "unité," Ferry) and the capacity to be self-sufficient.³⁶ At the same time the rational character of each individual's thinking and

and behavior provided the common denominator on which social unity was founded. Simon could complain that Ferry's policies tended to extreme conformity ("De quelle unité parle-t-on? Es-ce par hasard, de l'identité"); but he too believed that social unity stemmed from the citizen's integrity and that of society mirroring one another.³⁷

They granted the individual a certain amount of uniqueness arising from the nature of his personality, expressed as differences in physical appearance. Such uniqueness gave his behavior and his thoughts a special flavor, an individuality which enlivened his personality and, therefore, the character of society, turning them both into active, vibrant entities. This view of individualism was held even by Ferry, although he is not generally pictured as one who respected individual differences; but he, like his fellow Republicans, wished to restrict the field and modes in which these differences could express themselves to the realm of rational social discourse.³⁸ Needham's critique of the Comtean and Staëlienne schools of social thought in his book L'Aesthétique sociologique is equally applicable to their Republican heirs, provided one gives first place to a concern for order:

. . . ils ne permettent ni à leur idéalisme, ni à leur desir de systématiser, de leur faire perdre de vue la réalité de l'organisme vivant que nous appelons "société," ou de cette autre société que constitue l'esprit humain.³⁹

It was through what Proust termed the individual's physiognomy, that is physical appearance, that the similarities and variations in personality were expressed most clearly. Society as a collectivity of individuals also had its physiognomy expressed in the material culture

which its individual citizens created in their own image. On a superficial level the democratic ideal could find its aesthetic realization in the official portraits of the Republicans. The very marked similarity in sober dress, restrained demeanor, and simple backgrounds, that is apparent in the multitude of portraits depicting these men of the Third Republic as pragmatic and restrained individuals offers a testimony to the extent to which the ordered presentation of individuals' physical appearance was equated with rational moral character.⁴⁰ Yet even a casual scrutiny of the works reveals differences not only in the length of a nose, the slant of an eyebrow, but in the slight deference to fashion such as Ferry's mutton chops or Proust's white gloves and elegantly tailored coat (Fig. 40). Such variations become telling indications of variations in personality within a basically egalitarian and stereotyped format.⁴¹

On a more profound level their democratic ideal was expressed in terms of a special kind of compositional ordering and of an appreciation for the physical properties of the materials out of which art was made. They frequently referred to architecture as a visual equivalent or materialization of the ideal democratic social order.⁴² Architecture was conceived as a complex combination of individual units united by a common principle. It was also a self-contained, over-arching structure establishing the principle of rational integration as the keynote for the design of all the objects associated with a democratic environment. Their wish for a coherent organization of the institutions of democracy and of each citizen's mind found its aesthetic expression in Proust's concept of "l'unité de l'art":

. . . tout oeuvre d'art est fait pour concourir à une ensemble, pour faire corps avec lui.

To which he added a moral sanction, excluding as "faux" and "abusives" any elements whose shapes were not integratable into the total decorative scheme in this way.⁴³ Each object was an independent unit which could be fit into a larger unit because both shared the same structural characteristic.

The other major factor in the aesthetic of democracy was an appreciation for the physical properties of matter. Democracy as a system meant to address itself to the realities of human existence necessitated a strong attachment to the material character of the world.⁴⁴ Just as the physical appearance of an individual was the means of apprehending his integrated personality, so each object produced derived its integrity from the equilibration of the unique and the universal physical properties inherent in the materials out of which it was made. For example, in the case of painting, Ferry pointed out that it was not the subject which mattered, but the ideal psychological state ("le rêve, le mystère, l'idéal entrevue") conveyed by the overt manipulation of the pigments ("l'abstraction et la beauté dans la couleur").⁴⁵ The manner in which the materials were handled provided the means of apprehending the aesthetic and moral character of the object and, through the artist's medium, of the individual producer. It also made possible the association of the character of one object or individual with another without denying each unit its independent status.⁴⁶

Certain materials were favored above others because they were used in architecture and decorative objects, were relatively inexpensive, and were, therefore, familiar to a large segment of the population. These materials included glass, iron, ceramics, and paper; but the principle of the integrity of materials was a general one which the Republicans applied in evaluating any work of art.

The Republicans were delighted when confronted by a work in which each element had been allowed the full play of its physical nature within the constraints of a rational framework. Jules Simon's response to the entryway for the 1878 exposition (Fig. 1) was typical of their generally frank appreciation for overtly rational use of materials:

Il serait souverainement injuste de méconnaître la beauté de ces grandes cages de verre, surtout quand, à cette lumière et à cette légèreté, on donne habilement le support de quelques massifs qui reposent et arrêtent la vue. Les verrières nouvelles n'ont rien de commun avec les vitraux du moyen âge, qui sont des bijoux magnifiques; mais celà est hardi, nouveau, plein de soleil . . . d'ou la vue était admirable, et qui était lui-même un admirable point de vue pour la terrasse du Trocadéro [en face].⁴⁷

Simon's enthusiasm for the use of glass carried him into a lyrical exposition of its virtues. He played on the words "lumière" and "vue" in an effort to express the total character of the material and the impression these independent units of glass created when combined within a rational framework. This punning was more than mere playfulness for literary effect. Simon meant it to be a serious means of conveying the idea that the physical character of the matter when so utilized became capable of communicating abstract moral and intellectual qualities to the viewer. Thus, the entryway which possessed the physical properties of lightness and transparency, or clarity, was the

aesthetic equivalent of the physically liberated and intellectually enlightened individual, and by extension, of modern democratic society.

Achieving this union of abstract order and material substance was especially problematical in the visual arts and in literature where the Republicans felt a balance had to be struck between the artist's characterization of the democratic system through the handling of the media and the need for verisimilitude. Without the rational structure, the physical properties of objects depicted tended to be isolated and, therefore, meaningless. For this reason the Republicans disliked the most radical and unsentimental expressions of Realism, although they were in sympathy with the liberal impulses behind it. In their view, its social and moral neutrality, that is in their terms, its lack of idealism, encouraged egotism and gross materialism. The "plein air" painting of the Impressionists and their epigones fixed attention exclusively on the transitory details of the external world, or on the physical appearance of matter alone (paint being analgous to stone, or water, or the ether). These artists encouraged plesure in matter and material things for their own sake, isolating them from the more enduring realm of moral and social relationships by not having these elements contribute to a well-intergrated compositional order.⁴⁸

The Republicans denounced illusionism in art because it fixed attention on the superficial aspects of reality, creating a taste for "faux luxe" (Simon). The confusion of what was inherently material with appearance in a work of art (as in paper wallcovering printed to resemble a tapestry) was equated with the individual's confusion of what he was with what he could appear to be. The Republicans

considered such duplicity a threat to the democratic principle of the integrity of the individual ("It faut être ce qu'on est." Simon).⁴⁹

Naturalism of the sort practiced by Zola in literature was to them even worse than Impressionism or "trompe-l'oeil," for it exalted a rational system that allowed the aberrant elements in human psychology, expressed through detailed descriptions of physiognomy, to dictate the development of personalities. By denying individuals the internalized system of rational self-control on which democracy was premised, Naturalism encouraged people to take a perverse pleasure in the process of physical and moral decay. It was particularly dangerous because it presented the degradation of social misfits and the poor as part of the natural order of society, albeit one Zola had designated as the society of the Second Empire.⁵⁰ Hugo felt that Zola had actually heightened anti-democratic feelings in his attempt to use reverse psychology as a social reform strategy in L'Assommoir.

Il montre comme à plaisir les hideuses plaies de la misère,
et l'abjection à laquelle le pauvre se trouve réduit.

And thus his art worked against the unity so necessary to Democratic society. "Voilà, comme ils-sont tous, disent - [les bourgeois]."⁵¹

Economic liberty. Economic liberty was the most radical element in their ideology. It ran counter to the long and deeply ingrained tradition in France of strong centralized control over economic matters which encouraged the population to rely on vested authority for economic security.⁵² With great perspicuity, Ferry outlined the political history of this plank in their platform. Before the

Revolution the state and the corporations had regulated production. After the abolition of the corporations, he noted, the state and the wealthy propertied classes which controlled it (whether republican or monarchical) assumed the responsibility of directly regulating workers' activities and standards of production for ill or for good.⁵³ In 1848 the national workshops only more firmly entrenched the principle of governmental responsibility for the economic security of the population. In the late 1870s and 1880s the Republicans attempted to divest themselves of this role, feeling that no government was capable of dealing directly with the inequities and uncertainties of a world-wide economic system in which "le régime commercial" increasingly undermined the old rentier-based economy (Ferry). Ferry warned that the government should be extremely cautious about meddling with the "grand inconnu qui pèse sur les destinées industrielles du monde."⁵⁴

The economic system they valued was one in which individual producers were free to compete in an open market. Private initiative, rather than government patronage, was the hallmark of this system. It was meant to complement the social ideal of politically equal but independent individuals. A special version of social darwinism colored the thinking of this group. Through they did not believe in the concept of the survival of the fittest (at least not within a society, for competition between individuals worked against social harmony); they conceived of the individual's chosen métier as a private field in which each struggled to reap his material welfare and moral growth.⁵⁵

Through his métier the individual also, by extension, contributed to the material and moral improvement of society.

A good example of their self-help philosophy is contained in Ferry's 1884 address to the Chambre refusing government aid to Parisian workers in the depressed building industries. As an alternative he pointed to the example of

. . . la grande industrie lyonnaise, qui a eu à traverser de si redoutables événements . . . il y a quelques années . . .

which had overcome its difficulties through the independent initiative of the individuals affected by the depression.

. . . à force d'énergie, et sans rien demander à l'Etat, l'industrie lyonnaise s'est relevée et est rentrée aujourd'hui dans les voies plus prospères . . . ⁵⁶

As an alternative to the old patronage-corporate-rentier system the Republicans proposed an institutional framework for production based on

. . . des associations libres, des associations qui donnent des droits égaux aux patrons et aux ouvriers. (Simon)⁵⁷

Ideally the individual producer was part of an equitable system of production in that he had equal access to the market place, produced according to the same rational principles, and was judged according to the same standards as everyone else.⁵⁸ Their model producer was the entrepreneur, whether artist, skilled artisan, business, or professional man--not always mutually exclusive categories in France at this time.⁵⁹ These workers whom Lockroy called "ouvriers, travailleurs, hommes professionnels," when allowed to work in an atmosphere free of any legal and social constraints on productive activity could perfect

their own métiers and at the same time contribute to the economic growth of their society.⁶⁰

Economic liberty had another connotation for the Republicans, that of frugality as a conservative rational principle regulating productive energy. They believed that human beings when free to produce on their own initiative had a natural inclination to place rational constraints on their productive activity. In this way supply and demand were equilibrated and the cost of production kept to a minimum without sacrificing quality.⁶¹

By the term economic liberty, then, the Republicans actually understood two separate but related things: first, that freely pursued productive activity was progressive and expansive, being a source of moral and monetary profit for the individual and the society; secondly, that economic liberty released certain conservative impulses which were also of value to the individual and the community in that they regulated the expenditure of productive energy and materials, so that maximum value was obtained from minimum effort and means. In both cases moral and social value was attached to economic value and were felt to be mutually reinforcing.

Their ideal economic system in which liberated individuals freely cooperated for their mutual benefit found expression in a concept of order in which autonomous energized elements worked together to produce a sense of harmony that was restrained without being static.

Nous pensons que de cette égalité doit naître, doit surgir plus tard la conciliation, et peut-être la signature tant désirée d'un traité de paix. (Lockroy)⁶²

In the aesthetic sense, democracy and economic liberty were compatible concepts. The latter simply added an element of energy and tension to harmonious relationships. The sense of order arose from the resolution of the opposing forces, of equilibrated profits and losses, of energy units which were added up in the mind, to be experienced as mentally registered physical sensations of what Hugo described as an "équilibre vertigineux de la création."⁶³

Frugality was equated with rational simplicity. Economy of means and ends as an economic principle became an aesthetic principle as well. As Proust wrote of the painter Cazin:

Il met certaines notes en lumière aux dépense de la gamme entière.

They adopted not only an appreciation for restraint in the selection and use of materials, but also appropriated the language of the economist when expressing their evaluations of works of art. "Puvis," said Proust,

. . . ne lui [nature] empruntait qu'une note à la fois, exagérant la valeur de cette note de telle sorte qu'il transmettait l'impression reçue avec une puissance d'autant plus grande qu'il sacrifiait tout ce qui pouvait lui empêcher de le faire.⁶⁴

Thus, the traditional aesthetic values of rational harmony and order, clarity and simplicity, were given a certain tension and emphasis which gave them a democratic and economically liberal connotation.

They viewed the achievement of such a satisfying economy of expression as the direct result of the artist's working independently of paternalistic institutions and the old patronage system, (not, however, independent of values which gave the work a universal appeal).

That is, the artist worked within a certain social context, one that was very similar to that of the skilled laborer and artisan working outside a corporate structure. In essence, these are not simply parallels, but expressions of the fact that the Republicans placed artists and artisans within the same commercial framework. Whether Puvis de Chavannes or a Parisian lithographer, they were seen as functioning within an open market.⁶⁵

Self-reliance in both cases required the individual to place moral restraints on himself in the form of making economies in his habits and especially in his productive activity (" . . . vous êtes un caractère, une volonté," Ferry; ". . . les sacrifices voulus dans le dessin et dans la couleur," Proust). To follow this path of economic liberty was to follow the path of hardship to eventual public and personal success on one's own inherently moral terms.

. . . nous vous admirons, mon cher Henner, parce que vous n'êtes pas de ceux qui flattent le public, qui le courtisent et qui le suivent. Le public, vous l'avez conquis par la force de votre volonté . . . (Ferry).⁶⁶

The "effet obtenu" in the work was taken as a sign of the moral stature of the producer and considered a contribution to the well-being, prestige, and wealth of the social system in which he worked.⁶⁷

Work. Work had a special significance for the Republicans. "Le travail est une action suivie à laquelle on se livre pour produire un résultat utile."⁶⁸ Simon in this short statement pinpointed the two important characteristics the Republicans associated with work.

First, it was a rational process effected by a self-motivated individual. It was also a confrontation and mastering of what Lockroy termed "ces grandes réalités économiques, internationales et sociales," signified by the transformation of raw materials into useful objects.⁶⁹ Their definition was fairly broad in its scope, making it possible to include most members of society in the category of worker. Thinking, if it involved the mental struggle of bringing order to a set of facts, was a process analogous to that of the artist transforming pigment and canvas into a painting, or the artisan glass into a vase, or of the inventor wood, rope, and canvas into an aerostat. What mattered in all human activity was that raw materials be given as high a degree of organization as possible through the laboring process. In this way the difference between labor and capital, between intellectuals and manual laborers-- that is the differences keeping French society in a state of confusion, were minimized by the Republicans in favor of a society composed of individuals all directing their energies towards shaping the material world to their own ends.

In its emphasis on individualism, rationality, and the dual physical and psychological character of experience, the Republicans' concept of work was compatible with that of democracy and economic liberty. Work was, in fact, considered the means by which the energies released by economic liberty could be successfully put to the task of satisfying the desires of each individual in society. The 1878 and 1889 expositions universelles celebrated the official status of work as

the major force in democratic society by making it the central theme around which the fairs were organized.⁷⁰

Both expositions had sections devoted exclusively to "les forces productives" in which Simon had arranged demonstrations of numerous modern production processes, from the liquification of gas to shoe-making, to vivify the way in which human beings, relying on reason and a few tools, could transform matter into useful forms.

L'homme a commencé par être écrasé sous le poids des forces de la nature; puis il a lutté contre elles pour se défendre; il a fini par les transformer en instruments de ses volontés.⁷¹

Matter in its unformed state was an obstacle preventing men from satisfying their natural impulse for an ordered physical and psychological existence. Raw nature literally lay like the force of gravity on man, hindering the free exercise of his physical and intellectual powers. By associating work with the exercise of will power, the Republicans gave labor a moral as well as material function. It was a humanizing activity which engaged the individual's rational self-conscious in the task of using his energies to escape from the chaos and irrationality of existence and from the sense of anguish and irritability this aimless existence caused him: ". . . travaillez et vous aurez la conscience satisfaite," (Hugo).⁷² Through labor man removed himself from the status of being a helpless object in nature to that of an active agent comparable to the forces of nature themselves.

Work was thus the means to progress, for it actually changed the shape of material reality from disorder to order and in so doing altered the consciousness of the laborer in the direction of increasing rationality. The intuited ideal was the worker's initial starting

point which became a reality, clarified, refined, and projected into the world of real human activity. Proust speaking of a particular rational process of drawing approved of it because it was a controlled effort which

. . . permet de se dégager avec d'autant plus d'assurance les conceptions ultérieurs de l'esprit . . .⁷³

Such a union of means and ends into a logical sequence of cause and effect meant that labor served ends generated by individuals acting on their own initiative for their own self-improvement. Thus, progress was extended from the level of the individual to that of society by the fact that each worker followed the same procedure no matter what his task.

Work also provided the means for uniting individuals in this progressive effort by setting up a continuous chain of cause and effect between producer and consumer. Through the agency of the product, which actually altered the environment of the consumer and producer, the consumer's sense of order was refined, and he was inspired to emulation in his own work.

Aesthetically, the value they placed on work was expressed as a sensitivity to the signs of "how," that is to the signifiers of the willed rational process by which raw materials were transformed into finished products which satisfied needs. Because art was the most highly perfected form of work, it provided the most eloquent and clearly articulated indication of this process. Ferry's long standing interest in the procedures used by artists underscores the social and psychological significance that the Republicans attached to the

aesthetics of the creative process itself. In a letter to his brother Charles describing a visit to Frankfort, Germany, in 1869, Ferry remarked that he found the clear expression of an organizing principle used by artists to direct the application of paint to the canvas the dominant characteristic of the fourteenth and early fifteenth century Northern masters. The rational character of their facture gave the works a pleasant anonymity and also a kinship with other types of products of the same period, suggesting to him the existence of a certain social concensus and harmony among the laboring forces. Exhibited in the paintings were the same procedures used by "les confrères des maîtres-sculpteurs et maîtres-maçons dont les poèmes en pierre nous ravissent," and these works

. . . sont traitées avec la même inspiration, la même naïveté d'intention, la même perfection de détails que les clochetons de nos vieilles cathédrales.⁷⁴

The Republicans' appreciation for craftsmanship as an aesthetic virtue was most aptly captured in Simon's comments on the benefits of studying the manufacturing processes at the 1878 exposition:

Il y a dans toute exposition un bazar et un atelier. Le bazar éblouit; l'atelier instruit. Le bazar montre les richesses déjà produites; l'atelier, en expliquant les créations déjà faites, permet d'entrevoir et aide à trouver les créations à venir. C'est dans les galeries du travail qu'est la grande valeur, la grande influence des expositions. Outre l'utilité qu'on en retire, on y goûte un plaisir peut-être moins vif au premier abord, mais plus profond et plus durable, le plaisir que le poète a décrit et qu'il met avec raison au dessus de tous les autres: rerum cognoscere causas.⁷⁵

Craftsmanship was aesthetically pleasing because it revealed the logical series of steps by which the maker had brought order to his materials and in the process to his thoughts and feelings. The

visibility of artisanal procedures called attention to the process and engaged the viewer, that is the consumer, in a reenactment of creation, helping him to understand it and encouraging him to put it to new uses. The physical signs of rational labor could be called the marks of progress, and the patterns matter came to assume in the process of manufacture were the sensible expressions of this rational process of ordering the elements of one's initial idea. In the attractive power of the marks of labor lay the potential means for drawing producers and consumers into similar patterns of thinking and feeling.

Utility. The Republicans conceived of all human activity in terms of a vast system of interconnected relationships based on productive activity.⁷⁶ Within the context of their commitment to economically liberal democracy, this meant that their system was one in which all human activity was directed towards ends ultimately beneficial to both the individual and to all members of society.

Hugo and Lockroy's arguments in favor of total amnesty for the Communards stressed the value of the rebels' return in terms of the ameliorating moral and economic effects such an action would have on society. While Hugo felt it would bring social peace to the country by giving public recognition to the patriotism of the Parisian working classes, as well as psychological stability to the families of the exiles who had remained behind; Lockroy argued its economic utility for the nation. As he told the Chamber of Deputies in 1876:

. . . Je dis que beaucoup de branches de l'industrie parisienne sont aujourd'hui frappées, je dis qu'elles le seraient mortellement si vous continuez à ne pas nous accorder la

cessation des poursuites et à ne pas nous accorder l'amnestie.
 . . . je vous demande, moi, de faire de la politique d'intérêt
 et de la politique de raison.⁷⁷

If the proposals recommended themselves because they could be tied in with broader social and economic goals, their value also lay in the type of needs which they were meant to fill. The Republicans measured utility in terms of the degree of political order and economic security which the rational character of their own activities promised French voters. It is clear from statements such as Ferry's concerning the relationship between Republican policy and the character of the French that the aim was to establish a social and intellectual organization which would produce a sense of emotional stability in the population.

L'état d'esprit qui domine, dans le pays républicain comme dans la Chambre, est l'amour de l'ordre et du travail, du progrès sans secousses, des réformes sans tapage et sans prétensions, de l'autorité sans défaillance.⁷⁸

Order and security were to encourage rational productive behavior in people, which in turn was to further stabilize the democratic system through the economic and moral growth such activity generated.

Within this utilitarian system certain sectors of the population were given a special place because the Republicans recognized the social utility of their productive activity. Their goods were to provide a model and a source of encouragement for the rest of the Republic's citizens. In so far as their work contributed to the establishment and maintenance of this system, as Ferry told the assembled artisans, skilled laborers, and patrons of industry in his speech at Lyons in the summer of 1885:

. . . vous êtes les premiers parmi ceux-là [the working classes] . . . qui ont compris que, par celà seul qu'on constitue une avant-garde de nuance radicale, un groupe avancé . . . de la grand masse qui forme le corps d'armée et qui constitue la base même du gouvernement . . .⁷⁹

The government's role was to establish the rhythm and to start the social mechanism moving in accordance with this rhythm so that the productive energies of the citizens could be stimulated, channeled, and coordinated. "C'est au ministère d'entreprendre les réformes, de les choisir, de les sérier," declared Ferry.⁸⁰

Thus, utility was to be understood as a quality produced by separate individuals, or separate groups of individuals, which integrated its producers into a larger functioning organization for the mutual benefit of all. It was not only important that each individual be active, but the sequencing and quality of their activity also mattered in making positive change possible. Not only individuals, but their organizations and their produce could be united in a series of interconnected, functional relationships--all operating according to the same logical procedures and all mutually reinforcing in the increasing order and security, as well as comfort and ease which they brought to those whose energies maintained the system.

Utility also had another connotation for them: that of an established, steadily functioning organization which, they sensed, existed in the natural order with which the individual and society strove to unite themselves.⁸¹ Its character was compatible with democratic unity and economic liberty, and it was maintained by the energy expended for the purpose of serving human needs. In this case,

the government, the artists, and the entrepreneurs were given the responsibility of embodying this system in a tangible form, for it was they who best sensed the character "de l'idéal entrevue," (Ferry).⁸²

Because of the abstract nature of their utilitarianism, the Republicans focused their attention on a variety of cultural activities that satisfied human needs. They stressed architecture, the decorative and industrial arts, which together defined the physical environment in which men lived and worked for they entered directly into the individual's activity, influencing his sense of well being and directing his behavior into productive paths. Also of great importance to them were the popular theater, entertainments, and festivals, in which ritualized activity centered on certain sacerdotal images providing a formalized and controlled kind of group catharsis associated with play. The Republicans considered both types of activity and of art a means of emotional renewal invented by human beings to energize and recommit themselves to their daily tasks..⁸³

Such cultural forms were a means of one individual communicating certain values to another, and of one group of producers encouraging utilitarian activity in another. The process of constructing a building could, more than any other type of project create a sense of unity and well-being among the workers from a wide variety of trades.

On se préoccupait de l'effet décoratif à obtenir dans le cadre que l'on se proposait d'orner; tout venait concourir à cet ornement, depuis le meuble et l'utensil jusqu'à la tournure à donner aux détails de l'édifice ou du jardin qui devaient encadrer l'oeuvre du peintre ou du statuaire. Et dans cette assistance mutuelle qui faisait que les plus grands artistes

prêtaient le concours de leur génie aux plus humbles, tous avaient la notion de l'ensemble parce que tous avaient eu la volonté de ne rien ignorer de ce qui fait l'oeuvre vraiment complète (Proust).⁸⁴

The finished architectural environment could have an ameliorating effect on its inhabitants, literally bringing them into the system of utilitarian relationships. As Simon said of architecture

. . . personne ne peut plus que lui contribuer à notre bien être en nous donnant des maisons chaudes en hiver, fraîches en été, où le soleil pénètre, où le jour est favorable à la vue, où le travail est facile, le repos possible.⁸⁵

If there was pleasure to be gained from useful activities, there was also utility in strictly pleasurable ones. Proust in his 1894 volume L'Art sous la République discussed the value of popular theater. Quoting Hugo's speech of 1849 on this subject, Proust emphasized that through popular art forms infused with the humanitarian ideals of Republicanism, "la pensée social fera jour," and "le progrès de l'art" and "l'amélioration du peuple" come about.⁸⁶ He had already noted in 1882 that public festivals put to good use the ". . . laisser faire de la gaîté que nous devons à nos origines gauloises . . .".⁸⁷ Hugo himself had several times referred to the power of humor to shape public opinion and make it more critical.⁸⁸ In sum, the form popular arts took seemed to the Republicans to express a basic truth whose power could be tapped.

The Republicans were most interested in putting popular images and the theatrical techniques of mise en scène in the service of ritualized activity with a patriotic content. In this respect, the expositions of 1878 and 1889 were conceived as popular national fêtes

essentially utilitarian in character. Not only did the expositions nominally celebrate work, economic liberty, and democracy, but their content and organization were thought of in terms of a formalized modern rite in which utilitarianism was made palpable. In them work and play were wedded together into one vast, interconnected system associated with the orderly progress of French society.

Halévy, in a 1936 article on the 1878 exposition, complained that it was simply an ineffectual way of distracting the public's attention from the real issues of the day and of presenting an outmoded image of labor which was unrealistic. Yet when viewed in terms of the Republicans' ideology and their utilitarian principles, the expositions were much more than distractions.⁸⁹ That such was the case can be most clearly seen in the Republicans' constant concern with finding the proper organization for the exhibits at the expositions, so that the sequence in which the displays were presented would encapsulate the dynamism of the Republican social order ("une Exposition universelle est une totalisation," Lockroy).⁹⁰

What utility meant in aesthetic terms, then, turns out to be limited to the Republicans' understanding of design. Design was a means of making manifest the character of social relationships created by the channeling of productive energies from one individual to another. Because they idealized a system in which functional efficacy took precedence as the means of achieving the greatest good for the greatest number, the Republicans showed a preference for harmonious designs which were simple and clearly stated, and at the same time bore

within them a suggestion of the use for which the object was intended, as well as the character of the process which had been used to produce it. Functionalism, thus had two separate, but related, meanings for the Republicans. Design could make practical activities such as eating, carving wood, or cooking, easier to perform. It could also act in a purely symbolic way, associating the active system of interlocking relationships with a familiar, appropriate, and inherently attractive image.

Simon summed up the peculiar aesthetic of utilitarianism by quoting from a report on the combined display of the decorative arts and the manufacturing processes used to produce them:

La forme d'une bouteille, pour prendre un exemple de l'ordre le plus vulgaire, n'est pas chose indifférente, et il est assurément utile de déterminer cette forme de manière à lui donner un caractère qui soit de nature à lui constituer une beauté propre, en harmonie avec le côté pratique d'une fabrication dont les exigences sont nettement définies.

Not only did the logic of the manufacturing process act as a factor in determining the character of the product, but its form implied the practical and abstract ends it was meant to satisfy:

Bien des objets insignifiants . . . n'ont-ils pas une physionomie qui accuse un style original produit par l'étude et le désir de créer des formes dans lesquelles la convenance d'une destination précise vient en aide à la recherche du beau?⁹¹

In articulating the notion that form is to a great extent inspired by the two functions demanded of the object, the Republicans were not only anticipating Art Nouveau and the Bauhaus and International styles, but they were reformulating ideas already put forth in France by Viollet-le-duc, and by John Ruskin in England and Horatio

Greenough in the United States.⁹² Whatever the direct connection here, their ideas closely resembled their predecessors'. The successful achievement of a logical relationship between the process of production used to create the object and the form evoking the ends for which it was intended was in itself aesthetically pleasing, satisfying an inherent desire for both social and psychological order.⁹³

The physical organization of the 1878 exposition provides a cogent example of the first case (Fig. 39). It was intended to convey in its design the positive nature of interrelated human activities in which "les forces productives" had primary place. Explaining the rationale of the unadorned rectangular plan, Simon pointed out that it presented in a chronological sequence the entire system of orderly energy flow which characterized the utilitarian ideal. The perfect geometrical form the plan assumed was a necessary product of the relationships existing in the socio-economic system which the exposition glorified:

. . . d'un côté la matière brute, de l'autre les résultats obtenus par l'industrie humaine; pour passer de la matière brute à la matière ainsi transformée, les forces productives; et pour produire ces forces ou pour les diriger, la science . . .⁹⁴

On the other hand, the 1889 exposition combined both types of functionalist design (Fig. 43). Lockroy's plan for it was conceived as a simple inverted "u" shaped arrangement with the gallerie des machines at the top. Individual producers were grouped according to their métier and its place in a system of production that put basic technology at its center. It was . . . "une organisation nouvelle, en harmonie avec nos ressources et nos besoins, empreinte de l'esprit

démocratique . . . pratique en même temps," (Lockroy). This plan was wedded to a traditional architectural image that added a value-laden cachet to its design and to the democratic system for which it stood.

The solution was:

. . . un arc de triomphe couché sur le sol, le sommet étant formé par la Galerie des Machines, la partie centrale par les Galeries des Industries diverses, la clef de voûte par le Pavillion Central, les jambes par les Galeries des Arts libéraux et des Beaux-arts. Entre les pieds, devant le Trocadéro et formant par l'écartement de ses piles un immense portique devaient s'élever la Tour Eiffel . . . qui le complétait . . .⁹⁵

The hybrid character of the Palais du Trocadéro built as the major monument for the 1878 exposition, revealed to them the difficulty of uniting the dual strands of their utilitarianism in one aesthetically satisfying object (Fig. 6). The design of the low dome which covered the 5,000 seat concert hall was dictated by the need for good acoustics and ventilation; the two towers which bracketed the dome and the curving arcade on the river facade were meant to add a festive note to the building, to attract attention, rather than serve a practical purpose or even hint at it ("les tours ne sont ni des clochers ni des sémaphores," Simon). They gave the palace "l'aspect d'un édifice destiné à des fêtes," (Simon). Moreover all the architectural elements were treated with a uniform simplicity giving the edifice "une certaine grandeur" (Simon). The proportions, however, were not right for Simon: the towers were too slender and tall, the dome too low, so that the applied symbols and the organic form seemed tacked together rather than united in a working relationship.⁹⁶

Ideally, the two aspects of functional design would be united in a single system as a sign of the union of a democratic cultural order with an appropriate system of production. By confounding the two types of pleasure into one aesthetic response, objects of material culture not only embodied in microcosm the ideal system of social relationships which the Republicans felt necessary for progress, but presented an image of the character and the order the final system would assume. Moreover, the way in which these two strands were united created a tension between labor and pleasure which held the two in check by the very constraints of the logic which joined them together. Thus, the morality of pleasure and the pleasure of moral activity were united in a mutually reinforcing system that provided the object as well as society with an attractive and purposive order.

Commerce. As noted at the beginning of this chapter, commerce provided the context within which the other ideological values were set and from which they derived meaning.⁹⁷ Democracy, economic liberty, labor, and utility were preconditions of the individual's existence which had as its primary motivation commerce ("la liberté commerciale," Ferry). Conceiving of the world as "un seul marché" in which any change in supply or demand would be felt from one end of the world to the other ("retentisse d'un bout à l'autre du monde," Ferry), commerce meant, on an initial level, a mutually profitable exchange of products and money, but on a second, higher level, it was a highly abstract and complex system of communication between people in which the goods exchanged were the "means of communication" (Ferry's phrase).⁹⁸

Through the agency of the market place, the producer was able to transmit the material and moral benefits of his labor to others without being in direct contact with the consumer. Hugo's comment on the Statue of Liberty, intended to affirm the ideological values on which the two Republics could form a common friendship, suggests the manner in which the Republicans felt products could be a means of establishing mutually beneficial relationships between producers and consumers separated by great distances of language and geography.

. . . cette belle oeuvre tend à ce que j'ai toujours aimé,
appelé: la paix. Entre l'Amérique et la France . . .⁹⁹

Hugo's reference to "la paix" alludes in part to the power of art to strengthen international trade relations and encourage mutual understanding between the participants engaged in commercial exchange. In sum, they viewed commerce as a means of eventually establishing an orderly system of exchange which engaged and benefitted all of humanity through the spread of modern culture.¹⁰⁰

While art had the power to unite people in an economic and moral system, it did so through its power to impress the values of one group on another within the market place. Hugo's support for colonization was phrased in terms of the benefits that trade with the mother country and contact with European material culture would bring the uncivilized world. This type of communication would "refaire une Afrique nouvelle, rendre la vieille Afrique maniable à la civilisation."¹⁰¹ At the same time the monetary rewards from such an exchange would reinforce the commitment of members of the commercial system involved in designing, producing, and distributing the products.¹⁰²

The Republicans were careful to make a distinction between commerce and commercialism. Their insistence that products meet certain aesthetic standards was intended to insure that commercialism ("speculation inavouable," Lockroy) would be tempered by the morality of the producer, i.e. his sense of self-respect and responsibility to others being conveyed to the consumer via the design of the product.¹⁰³ Although they were concerned that the consumer receive full value for his money, risk taking involved in keeping or expanding the market for such products was not disallowed. Without risk, there was no impulse to improve the product, nor to increase demand or to demand improvement.¹⁰⁴ Novelty then was acceptable, even desirable, within the limits of decorum. "L'uniformité" in the design of a product "lasse . . . le publique" and it was necessary to "trouvait un moyen de raviver les curiosités par un appareil extraordinaire;" but the product had to do so while respecting "nos besoins," "l'honorabilité dans l'exécution et la sévérité dans le contrôle," (Lockroy).¹⁰⁵ That is, it had to maintain its moral effectiveness without losing the positive élan produced by the attractive character of its physical form.

Commerce was, thus, a closed system in which communication flowed in two directions. Profits gained through the sale of a product acted as a stimulus to improve the product and to produce it in greater quantities at reasonable prices. Profits for work well done were "le stimulant essentielle du progrès" (Ferry).¹⁰⁶ The logical conclusion to be drawn from this line of reasoning is that producers and consumers

would be brought into a relationship of increasing interdependency, while at the same time the moral and material benefits accruing to each from this relationship would gradually be increased. Because by the Republicans' definition, all individuals were potential laborers, the commercial system would be self-reinforcing in that in working for others, one was producing for oneself as well. The purchase of an individual's products would confirm his sense that what satisfied his needs satisfied those of others and thereby reinforce his desire to perfect the means of so doing.

From the consumption end, the product would be a stimulus to innovation and emulation within the framework of the consumers' own productive activity. It was a system of communication which in its vertical dimension began with the creative impulse of the politically and economically independent individual and flowed back to him only to begin again. Also it was aimed at uniting all individuals into a loop of exchange, a circular chain of interconnecting links whose connections were forged and maintained through the productive energies of each of its constituent parts.

It was a system through which liberal Democratic social reform could be realized. As Ferry succinctly expressed it:

. . . la seule base de la réforme sociale repose sur l'activité, sur l'initiative, sur la prévoyance individuelle.¹⁰⁷

In this way commerce acted to organize social relationships into an evermore tightly unified system. A commercial democratic society was one which had as its goal "la fraternité," but of a particular,

calculable kind in which individuals were brought into an orderly system of communication through the products of labor and through the exchange of money which acted as mediators between the individual and other members of society.¹⁰⁸

The productive energies of a society's citizens had their outlet in this system of mutual exchange and progressive development. The doctrine of free trade ("la libre échange") was inexorably tied to the logic of the Republicans' ideology and appropriate to their concept of commerce.¹⁰⁹ Free access to the market place for an individual's products gave labor meaning, offered it a potentially satisfying outlet. If free trade were not possible in the world at large during this period, it could exist within an extended French community. "Prenez l'Afrique pour le commerce," "pour l'industrie," exhorted Hugo; while Ferry in explaining the reasons for colonial expansion into South East Asia told the Lyons workers:

Ce n'est pas dans une ville comme la vôtre livrée au grand commerce de l'exportation, que j'ai besoin de reprendre les chiffres . . . je n'ai pas besoin de refaire ici la théorie des débouchés et de vous démontrer que le traité de Tien-Tsin doit ouvrir à votre industrie . . . des perspectives inespérées.¹¹⁰

The basic character of this system can be summarized as follows. It was a system energized by the productive acts of a multitude of individuals who fed their work into the system and were in turn fed by it. Ideally, goods and money circulated in an easy and free manner from person to person. In so doing the individual's moral and material level of existence was raised onto increasingly higher planes and their social relationships stabilized in a dynamic equilibrium.

The Republicans saw this commercial system as a means of attaining a favorable adaptation to the laws governing nature which were experienced in society in the form of economic laws. The commercial system within which individuals operated and the physical universe were one and the same (*C'est la loi, c'est la nature des choses*," Ferry). These same individuals could bring their activity into harmony with that of nature, so that society, like the universe, would be "*entraîné dans un mouvement infini*" to which each individual contributed. Through the rational equilibration of the process of exchange of goods and money a new ideal order or existence would be attained:

- . . . il est permis de rêver une société mieux organisée
- . . . une société plus fraternelle.¹¹¹

Commerce as a concept contained both a prescription for attaining the state of equilibrium found in nature and a vision of the character of an ideal order towards which man strove.

The recurrent use of words denoting release of energy, movement, gradual change towards perfection, in the Republicans' discussions of commerce reveal the particular pleasant physical sensation this idea aroused in them. Like the other aesthetic values they espoused, those associated with commerce were founded in the realm of sensational psychology. Ferry could refer to the "*théorie des débouchés*" evoking an image of a satisfying burst of energy released in a powerful stream; Hugo described commerce as a means of disengaging man ("*dégagée*") from the old, earth-bound economy dominated by the Church and the crown to lift him onto a new level of civilization. Lockroy approved of the

1889 exposition plan because it revived ("raviver") the curiosity of the public; Proust searched for the expression of life ("l'expression vivante") in the design of modern industrial products; while Simon spoke of "les transformations" and looked to the chronological development of material culture for the signs of an ongoing social evolution.¹¹² They were sensitive to the effect which products had on them and found pleasure in being stimulated and transported through "commerce" or discourse with the products.

In part because of their own pleasant physical response, the Republicans accepted the materiality of the product as the vehicle which could convey one to a higher state of consciousness, liberating the individual physically and mentally through its effects on the senses. Images of light, of dreaming, and of flying recur in their writings and speeches, pinning this subjective aesthetic experience of communication to specific perceptible phenomena, conflating the two. Thus, Ferry felt that Henner's works "faites accepter et admirer cette lumière . . ." which evoked "l'heure du rêve," a mental state as well as a time of day.¹¹³ In so doing the Republicans endowed natural phenomena with a symbolic significance that gave commerce a spiritual character and made it an ideal basis for a social system governed by the same principles as the rest of the natural world.

Interestingly, the most persuasive presentation of their notion of commerce occurs in a poem. Hugo, in "Plein ciel" (which forms a segment of his epic the Légende des siècles), combined these images to celebrate productive energy working towards the perfection of a system of communication. Essentially, the poet presented in condensed

form both the aesthetic and social philosophy underlying the Republicans' commercial system. On one level, he described the lone individual stimulated by a need to communicate with others for his own benefit and theirs, working out the design of the aerial balloon. The inventor's efforts are rewarded by his being physically lifted into the sky by his creation. Hugo wove together an analogy between the liberating physical experience of flying on a level above the earth and the higher planes of material and psychological existence to which such an achievement raised his inventor and mankind. Just as the balloon enabled men to communicate freely between geographic points (it is a mode of physical transportation), so Hugo suggested it also facilitated the transmission of goods and ideas and in the process stimulated the development of new ones. In using the balloon, one's mind is liberated into considering a whole new realm of possibilities associated with the better life for all which trade could make a reality.

Il porte l'homme à l'homme, et l'esprit à l'esprit.
 Il civilise, o gloire! Il ruine, il flétrit
 Tout l'affreux passé qui s'efface;
 Il abolit la loi de fer, la loi de sang,
 Les glaives, les carcans, l'esclavage, en passant
 Dans les cieux comme un fanfare.
 Où va-t-il, ce navire? Il va, de jour vêtu,
 A l'avenir divin et pur, à l'oubli génieux,
 A l'abondance, au calme, au rire, à l'homme heureux!¹¹⁴

Hugo continually connects certain physical phenomena with the aesthetic experiences the Republicans associated with commerce. The upward movement of the balloon released in flight becomes not a metaphor for progress but the process of progress itself for the inventor and for humankind: "C'est de la pesanteur délivré et volant," "Il

va . . . à la vertue . . . Il civilise." The rhythmic motion of the balloon as it passes through the air moving in unison with the rhythm of nature is equated with freedom:

Superbe il plane, avec un hymne en ses agrès;

. . .

Il se perde sous le bleu des cieux démesurés

Les esprits de l'azur contemplant effarés

Cet engloutissement splendid.¹¹⁵

He very clearly defined this liberated state as an ideal system of commerce. The balloon is a vehicle (and here it can be argued that Hugo intended such a pun to be taken as an expression of the physical and metaphysical aspects of the invention) for communicating the ordered movement of this process and the dynamic equilibrium of exchange into which the Republicans assumed humanity strove to free itself. He called it "nef magique et suprême" which "établie l'ordre vrai."

He also compared the balloon, or rather equated it, with the image of light, so that both come to be symbols of free trade.¹¹⁶ On a superficial level the analogy between the balloon and light is apparent in Hugo's reference to the balloon as "le phare" "du progrès" and his comparison of its form with that of the solar system; but his association of these images with one another and of both with the concept of commerce was not meant in the metaphorical or allegorical sense.¹¹⁷

The balloon and light are defined as physical systems which are commercial in character, using this term in the Republicans' sense of the word. They were treated literally as forms of communication in which the variety of levels of meaning associated with that concept all apply. First, both were physical means of transmitting information,

that is they both acted as agents of enlightenment; secondly, they stimulated growth and development, that is, they were agents of progress; and finally, their structural organization was based on natural laws governing motion, and as such they presented a vision of the ideal organization for a commercially oriented social system.

In the first instance, the balloon passed over the earth as a sun. It illuminated the world below by providing a comprehensive view of it and an understanding of its character ("Maintenant voilà la jour qui luit"), exposing a vast landscape marked by the remnants of past civilizations, the record of human history ("les vieux champs de bataille," "ces grands charniers de l'histoire"). The physical experience of seeing the earth from the moving balloon inspired the aeronaut to conceive a new social order based on commerce:

On voit la fin du monstre et la fin du héros
l'aube s'est levée . . . Tout s'envola dans l'homme
Le mensonge, l'idol, les brumes, les ténèbres . . .

Instead the balloon "va à l'abondance," it "porte l'homme à l'homme,

et l'esprit à l'esprit."¹¹⁸

Like light, the balloon is achieving this higher order of existence, of making the seed of an idea a reality:

Derrière lui [le ballon] . . .
Les ronces de lys sont couvertes
. . . on voit lentement sortir Beccaria
De Dracon qui se transfigure.

In short, the balloon functions in the human sphere the way light functions in nature or the product in the market place. Moreover, their characters are intertwined in that they share a common organizing principle: that of the physical laws governing the activity of matter

discovered by Isaac Newton. Hugo called the balloon "ce vaisseau, construit par le chiffre," by the "calcul de Newton." Its structure being analogous to that of light, it operated in harmonious union with it. The balloon "se perde sous le bleu des cieux démesurés" in an "engloutissement splendide." Out of their common ordering there literally arose a vision of the new social order. In the last stanza of the poem, Hugo summarized the multi-leveled way in which the balloon and light interacted to provide a means of encouraging free commercial exchange and an image of that ideal system of exchange. The balloon

. . . a cette divine et chaste fonction
 A la fois dernière et première,
 De promener l'essor dans le rayonnement,
 Et de faire planer, ivre de firmanent
 La liberté dans la lumière.¹¹⁹

When we remember that Hugo described the balloon as the rationally designed product of an humanely inspired entrepreneur, then it becomes clear that the Republicans wished to purvey the idea that the sensation of liberation was an outgrowth of the material character and structural organization of products created in a liberal democratic system. That such products engendered feelings of mental and physical well-being was interpreted by the Republicans as proof that they could be used to inspire general acceptance of these ideals among producers and consumers.

Science and technology. If perfection in the ordering of human activity was the goal of their ideology, the Republicans relied on science and technology to make progress towards perfection possible.

These were aids, helping the individual to rationalize his productive behavior and to clarify the vision of the ideal with which he struggled to unite himself through his work. In the case of the ideal, science provided a testable and clear image of nature which the individual only glimpsed through an intuited sense of harmony. First by reducing all matter to one common substance possessing certain universal characteristics, science made it possible to relate disparate phenomena in nature, in society, in works of art to one another. It offered a model that allowed variety without sacrificing the underlying structural unity which gave society and its products coherence. Secondly, by establishing links between objects, categories of knowledge, and the operations of the human mind and those of the universe, science made it possible to use the mathematical equations describing interactions in natural systems as the basis for all systems, whether social, economic, psychological, or artistic.¹²⁰

In these mathematical expressions of relationships the Republicans gained a tangible foundation for the highly metaphysical character of their commercial system. Like Hugo's balloon, modern commerce "a pour point d'appui l'air et pour moteur le vide;" but that balloon and the commercial system it symbolized maintained themselves aloft through a complex set of controlled interactions that could be described mathematically.¹²¹ The language they used indicates the extent to which the relationship between the natural and commercial orders was conceived in terms of mathematics. Scientific vocabulary describing nature was for them also the language of economics and of

art ("rapports, produits, calcul"), and art was the mechanism by which the economic and natural systems were translated in terms graspable by individuals.¹²² Artistic forms whose integrated character derived from mathematical equations could present the individual with a clear image of the integrated state of existence he desired, but only vaguely perceived.

To attain this integrated state, the Republicans realized it was necessary to have a method. As an aid in analyzing materials and developing a procedure for altering their appearance into a utilitarian form, the scientific method could lead to the creation of a successful formula for production:

. . . loin de nuire aux conceptions ultérieures de l'esprit, la méthode scientifique leur permet de se dégager avec d'autant plus d'assurance que les règles premières auraient été plus formelles, je pourrais dire plus géométriques.
(Proust)¹²³

As Proust's comment suggests, the scientific method was considered superior to other methods because it produced clear and ordered results, being derived from the objective, universal principles defined by mathematics. When applied to the process of production, it assured the progressive perfection of the product's design, the major factor on which the laborer's own moral development and that of society depended.

Technology was the means by which science entered directly into the act of production.

Ainsi d'un côté la matière brute l'autre les résultats obtenus par l'industrie humaine, pour passer de la matière ainsi transformer . . . les forces productives [men and machines]; et pour produire ces forces ou pour les découvrir et les diriger les sciences.¹²⁴

As Simon's description of the machinery exhibits at the 1878 exposition indicate, technology was a means of realizing the type of commercial ideal towards which the Republicans aspired. It was in fact the ultimate "means of communication."¹²⁵

The Republicans placed a broad range of inventions under the heading of technology, a term which they did not use in any case, preferring more active words appropriate to their dynamic concept of order, such as "utile" (Hugo), "travail mécanique" (Ferry), "forces productives" (Simon). They also referred to specific machines that helped to produce an object, as in the case of the camera, the huge forge from Le Creusot which was the marvel of the 1878 exposition, and the microscope; or indirectly, as with the steamship, the railroad, the aerial balloon, or something as prosaic as the electric light.¹²⁶ Technology was defined in terms of its function as an aid to the laborer (whether scientist, artisan, skilled laborer, or artist), helping him achieve his desired ends in the most efficient manner.

Through the vehicle of technology he might grasp the harmonious character of the infinite described by scientific equations and aspire to attain a similar state: La perfection contemplée démontre la perfectibilité (Hugo)¹²⁷. In the structural forms of technology the worker could read the shape of the social and moral reality of the future. The balloon was

Nef magique et suprême! elle a, rien qu'en marchant,
 Changé le cri terrestre en pur et joyeux chant,
 Rajeuni les races flétries,
 Etabli l'ordre vrai, montre le chemin sûr . . . (Hugo)¹²⁸

Technology revealed in its form not only the harmonious end but the logical means ("le chemin sûr") by which matter would be made to serve human ends. Through the machine the rational methodology of science was made visible in "les instruments et les utiles qui nous aident" (Simon).¹²⁹ At the same time, the machine in reaching beyond itself in its transformation of raw materials into perfected forms, provided a model for the worker to emulate in reaching beyond himself to others through his product, enabling him to become part of a commercial system.¹³⁰

These primary inventions assumed the status of aesthetic objects in which the Republicans found a satisfying expression of their ideological system. The machine was democratic in that each of its parts was an independent unit with an existence of its own ("C'est du métal, du bois, du chanvre et de la toile," Hugo); yet each of these parts contributed to the functioning of the whole and was necessary to it.¹³¹ The chaste character of each element and of the total design gave rise to a pleasing sense of easy yet controlled release ("l'élégances des machines américaines" compared with "la lourdeur des machines françaises," Proust).¹³² Its openly revealed structure made it easy to follow the rational process of production so that they found pleasure in tracing through the organization of the machines parts as they functioned together the path that rational human labor had followed.

Il n'est rien de plus utile ni de plus satisfaisant pour la raison que . . . d'étudier les procédés de culture.
(Simon)¹³³

In placing the primary forms of technology in the position of aesthetic models, the Republicans realized they had altered the traditional concept of harmony. Still rational, it was now imbued with a mechanistic character, synthetic rather than organic, and rooted in physical matter rather than in an ideal realm inaccessible to humanity.¹³⁴ There was greater precision in the delineation of the constituent parts of an harmonious structure and in the calculation of the relationships of these parts to one another.

Rather than lamenting the loss of artisanal uniqueness and deploing the rise of monotonously uniform machine-made mediocrity, the precision and uniformity of treatment which science and technology made possible was taken by Republicans as a sign of progress in the perfection of the product and of the humanization of the producer. By eliminating the idiosyncracies in the process of production, technology helped to erase irrelevant distinctions between individual producers and between producers and consumers. The degree of finish a producer gave his product was a measure of his socialization and moral integrity, and of his humanization.¹³⁵

Distinctions between products and between their producers were made on the basis of the novelty of the utilitarian object, considered to be a refinement of an existing form. This could mean either the simplification of the design of a machine or the invention of a new product which improved on an existing one, such as the electric light-bulb replacing gas light.

On dit que l'étonnement est un sentiment philosophique; et c'est en effet avoir fait quelque progrès dans la philosophie de savoir s'étonner à propos. (Simon)¹³⁶

In either case it was the quality of invention which was pleasing and was a measure of the worker's value and the essence of any claim he might make for high social standing.

The Republicans conceived of their adaptation of modern science and technology to their aesthetic system as a contribution to the system of thought first developed by Plato within the context of the Athenian Republic. Science had shown the world of forms and mathematical analogies he had intuitively sensed to exist within the real world of time and space.¹³⁷ This change had come about slowly as a result of the historical evolution of human knowledge and human society. In the middle ages this system had been altered in accordance with the state of knowledge and the corporate organization of production that existed within that society. In the mid-eighteenth century another rational aesthetic had developed, one that was an expression of the aristocratic liberalism and world view of that period.¹³⁸ The Republicans distinguished between the ideology of eighteenth century social reformers and their own primarily on the basis of the fact that for the former the system of production and the social order created by it were literally in the hands of the producers; while in their case an accommodation had to be made with the mechanization of the universe and of the production process which placed the producer at one remove from his product and from the consumer. Modern science had added a new dimension to the older social vision, as the Republicans were fully aware:

La révolution de la science à commencé après la révolution sociale [de 1789], et l'a terriblement compliquée.
(Simon)¹³⁹

They managed to integrate science and technology into their system in such a way as to maintain its fundamental democratic and economically liberal elements, the progressive élan arising from the production process, the utilitarianism of the system. The result was that these two related categories profoundly altered the tenor of the commercial system's character without changing its basic structure. The result of their perspective on cultural change was to give their ideology and their scientific aesthetic a pedigree that for all its differences from the past made it a logical outgrowth of pre-industrial and pre-democratic systems.¹⁴⁰

Hugo's balloon bears within its form the ghosts of the aesthetic systems out of which it had evolved, while at the same time it declares the arrival of a new material and spiritual order. In it can be seen reminiscences of an ideal geometric form and of a gothic structure. It is "le globe" and "le nef" and at the same time it is

. . . l'entrée altièrre et sainte du réel
 Dans l'antique idéal farouche.¹⁴¹

In sum, their art theory offered a way to bridge the gap between the preindustrial world and the industrial. It did so in a conservative way by allowing them to synthesize the various categories of their sensibilities into a vision that accommodated the old liberal structures and concepts to the new industrial reality of nineteenth century France.

The Ideological Ideal and the Eiffel Tower. The most salient characteristic of the Republicans' ideological system was the emphasis it

placed on peaceful productivity as the primary means of progress towards moral and social order. In their view, the proper attitude towards science and technology could direct human energies and aspirations away from class conflict and thoughts of revanche into a successful struggle with the material world for economic and social security and through their emotional well-being.¹⁴² From a logical point of view, their system suffered from the flaw common to all ideologies, i.e., it was self-reinforcing and self-justifying.¹⁴³ On the other hand, it offers an insight into the Republicans' mentality, throwing into relief their fixation on production as the means of uniting the organizational powers of human beings with the satisfaction of their need for emotional and economic security. Their vision was of a steady-state society, a dynamic equilibrium of productive forces; each person directing his energies into perfecting the product, in bringing order to raw matter, and in so doing benefiting himself and society. According to their theory art best articulated this vision and offered the possibility of making it a reality.

The system was recommended because it seemed to accommodate itself to the realities on French society, helping to stabilize its structure and at the same time making the self-employed individual the agent through which this stabilization would be effected.¹⁴⁴ The democratic hero was the entrepreneur who combined in one person the knowledge and skill of the craftsman and the initiative, daring, and imagination of the scientist, businessman, and artist.¹⁴⁵ His virtue lay not in the particular *métier* which he pursued, but in the fact

that he was a self-employed individual who recognized that his own self-interest was intimately tied up with that of the community. The Republicans, thus, disregarded the Marxian distinction between labor and capital, proletarian and bourgeois, and favored an economic individualism well suited to French society as they perceived it. Science and technology helped to unify this system of independent workers by providing a common vision and a common rational methodology through which people could satisfy their need for security without having to rely on others for aid. In this way, each individual in attending to his own *métier* worked in harmony with others for the same goals, motivated by the same desires. The labor of one complemented and reinforced that of the others.

The beauty of this system in theory was the manner in which the need for security and peace became the major impulse for individual initiation, removing the need to use economic coercion to introduce technology into production. Technological innovation was the individual's means of building a bridge to and stabilizing relationships with others. So as to increase his own sense of well-being, he extended and perfected the physical means he had at his disposal to communicate with others. Inventions became the ultimate symbols of democratic liberalism because through them all individuals could participate in and benefit from progress without losing their place in the social and economic order. They could even enhance their positions within their particular profession by virtue of their inventive abilities.¹⁴⁶

If we look more closely now at the Eiffel Tower, the major Republican monument of the period, we can see that to a great extent

this edifice was a conscious and programmatic expression of their ideological ideal. Historically the tower was intended to celebrate the peaceful ends to which labor could be put. It was especially meant to affirm the importance of individual initiative in achieving progressive ends. The contract drawn up between Gustave Eiffel and the state certified the government's commitment to support innovative entrepreneurs. It was a model for the new relationship the Republicans desired to establish between private enterprise and the state and between skilled laborers and their employers. The state took responsibility for paying Eiffel a fixed sum upon completion of work and for seeing that certain safety standards were met, while Eiffel was left free to design the work, hire laborers, order materials, plan construction, and operate the tower. It was Eiffel who in agreeing to assume the risks involved in building and operating the tower, was allowed to reap the profits.¹⁴⁷ Eiffel epitomized this new social ideal by the way in which he combined managerial skills with practical knowledge of engineering, creative imagination, and initiative when solving problems associated with building the thousand foot tower and with marketing the idea.¹⁴⁸

In his relationship with the workmen in his employ he maintained the principle of democratic liberalism. Almost entirely composed of skilled laborers, the work crews were hired by Eiffel on the basis of merit. Their wages were set through a process of open bargaining between the entrepreneur and the workers in which both sides made concessions in order to complete the tower on schedule. All individuals thus had to place limits on their personal desires for the

benefit of the community. During the bargaining initiated when the workers struck for higher wages, laborers used the newly legalized syndicates to help them formulate their demands. In one instance no less a figure than the Socialist Jean Juarès represented them, and it was he who pointed out the importance of fulfilling their commitment to complete the tower.¹⁴⁹ As a testimony to the important role that individual laborers played in construction, Eiffel had the names of those who worked on its last stage inscribed on the finished structure.¹⁵⁰

The tower obviously had some utility simply in bringing labor and capital together, in getting them to work peacefully and cooperatively on a project. If the tower did not serve some conventionally practical purpose, it proved useful in a number of ways. Lockroy could point to the economic benefits it brought to the French metallurgical industry and to the building trades, stimulating production. Moreover, it stimulated a demand for other iron structures, and also encouraged technological innovation by the very nature of the problems posed in erecting an edifice of this sort.¹⁵¹ Solutions were found to the problems of wind resistance, of foundation design, lighting, and mechanisms for lifting people and materials. New production procedures were developed for fitting pre-fabricated parts together at the site, and new patterns of cooperative behavior developed to aid workers in carrying out this new type of construction.¹⁵² Finally, as a symbol it served the purpose of drawing international attention to the commitment of the Republic to peaceful enterprise and of showing the French people that they were capable of achieving great things

within this system. In this latter function, the tower associated utilitarian values with the commercial system in which the Republicans believed. The viewing platforms and the restaurants were also part of this system, offering the pleasures associated with the rewards of labor.

It was a goal which could not have been achieved without the aid of modern science and technology. They both entered directly into the production of the tower, from the moment of its conception to its actual completion. The very choice of the tower's form reveals a reliance on science as the source of the design. Using the pure geometric figure of the asymptotic curve, Eiffel carefully calculated the arc of the curves so that the tower would appear to rise gracefully from the earth, when in fact the four pylons at its base actually were designed to absorb the great weight of the edifice.¹⁵³ Eiffel also used the science of statistics to measure the thrusts and counter thrusts of the structural parts and from his calculations determined their number, placement, and optimal design. He made use of his training as an engineer and bridge-builder to work out the construction procedures and sequences and to design scaffolding and lifts needed for work at great heights. Moreover, technology, in the form of his own iron bridges, provided an inspirational model for the design of the tower to the degree that the open laticework of the ironwork resembled that used on the bridges and served the same purpose of reducing wind resistance and weight without sacrificing strength.¹⁵⁴ In his decision to use iron, Eiffel remained true to the conservative integration of science and technology into an existing system of production. Rather than choose

steel which was just then being developed as a construction material, he relied on a well-established and highly refined technology with which he and his workmen were deeply acquainted. The alterations he introduced in the use of iron were offered as improvements on existing manufacturing and construction procedures which did not undermine the independent status of the skilled laborer nor alter the fundamental relationships of production in which each had his place.¹⁵⁵

Eiffel himself stressed the role the tower had played in bringing producers together. In his speech to the workmen on the occasion of its completion he repeatedly lauded

. . . les grands efforts que nous avons faits
en commun . . .¹⁵⁶

As a product of a liberal-democratic production system, the tower also fulfilled the aesthetic criteria of the Republican. The multitude of small parts, each clearly articulated and each composed of the same material, each reduced to its most efficient form and interlocked with the others to form an integrated, controlled, dynamic system, was a paradigm of liberal democratic society. The thrust and counter-thrust of the individual parts in resolving themselves into the fluid upward movement of the tower's form seem the embodiment of the progress towards a new order which rational production makes possible. The very height to which it rises and the open-latticework of its structure tend to merge it with the surrounding atmosphere, while the sense of a rational organizing principle underlying this gigantic structure, controlling and stabilizing it, suggests a harmonious relationship has been established between it and the laws controlling

nature. By coating the tower with iridescent paint which caused it to scintillate in the sunlight and glow in the electric illumination, the analogy between the man-made structure and that of natural phenomena was made more explicit. Although fixed and aggressive in character, unlike Hugo's balloon, its form subsumes the same patriotic and sacerdotal forms characteristic of the past cultures both were meant to surpass. The triumphal arch and the gothic spire are incorporated into it and transformed into the components of a new image made of iron, not stone, more precise and regular than either of its antecedents.¹⁵⁷

In the tower, form and content, matter and idea were wedded together in such a way that one is enjoined to communicate with it, to be both enlightened and inspired to emulation.¹⁵⁸ As Lockroy explained the role of the tower:

. . . il résumait la grandeur et la puissance industrielle du temps présent. Sa flèche immense, en s'enfonçant dans les nuages, avait quelque chose de symbolique; elle paraissait l'image du progrès tel que nous le concevons aujourd'hui: spirale démesurée où l'humanité gravite dans cette ascension éternelle.¹⁵⁹

It appeared to the Republicans that their art theory could help materialize the aspirations of the middle classes for the ordered activity that gave each individual a sense of independence and also integrated him into a larger community.

FOOTNOTES

¹Pertinent sources for the Republicans' concept of ideology are: Clifford Geertz, "Ideology as a Cultural System," ed. David E. Apter, Ideology and Discontent (New York: Free Press, 1964), pp. 47-76; Raymond Aron, "Société industrielle, idéologies, philosophie," Preuves, nos. 167-169 (1965), pp. 3-13; 12-24, 23-41; Francis X. Sutton, et al., The American Business Creed (Cambridge, Massachusetts: Harvard University Press, 1956); Meyer Schapiro, "The Social Basis of Art," First American Artists' Congress, 1936 (New York: n.p., 1936), pp. 31-37, reprinted in David Shapiro, ed. and intro., Social Realism: Art as a Weapon, Critical Studies in American Art (New York: Frederick Ungar, 1973), pp. 118-127; Svetlana Alpers, "Is Art History," Daedalus, Summer 1977, pp. 1-13; International Encyclopedia of Social Sciences, 1968 ed., s.v. "Ideology," by Edward Shils and Harry M. Johnson.

²See the "Introduction," note 1, above for biographical sources on these five.

³The Republicans did in fact use the terms "signe" and "symbole" in their own discussions of art and in much the same way as I use them here, as will become clear in the text. The terms signifier, sign, referrent, dialectic are ones I have selected as best suited to describing the Republicans' concept of art as an effective, living entity. In so doing I have drawn on the theory of Roland Barthes, particularly his discussion of language, style, and social structure in Elements of Semiology in Writing Degree Zero and Elements of Semiology, Preface by Susan Sontag, Trans. Annette Lavers and Colin Smith (Boston: Beacon Press, 1970) for my terminology as well as for the conceptual framework of this chapter. Barthes is particularly useful because he is essentially analyzing and criticizing the cultural concept which is being formulated during the 1880s in France. See also Lucien Goldman, Structures mentales et création culturelle (Paris: Editions Anthropos, 1970), for a more historical perspective by a structuralist on the subject of the relationship between social harmony and aesthetic ideals in French avant-garde thought. Among modern historians of France only Jean-Pierre Azéma and Michel Winock to my knowledge have alluded to the strong aesthetic character of the Republicans ideology, and only in a few scattered references to Ferry's concern for social unity and his concept of himself as an architect of the state. La Naissance et la mort: La Troisième République (1870-1940) (Paris: Calmann-Lévy, 1966 ed.), pp. 134, 146-149.

⁴Dieu, Patrie, Liberté, p. 252.

⁵"Salon de 1882," p. 54; "Ministère des arts," p. 237.

⁶See Proust, "Salon de 1882," pp. 533-534.

⁷Ibid., p. 533. He refers to art as an expression of the "propre physionomie" of a particular social milieu at a particular point in history. This idea is also implied in a speech delivered by Ferry to the Société nationale des artistes français in June 1883: J. O. Chambre des Députés, June 23, 1883, p. 3126.

⁸Introduction, p. 159.

⁹"Ministère des arts," p. 237.

¹⁰Ibid. See also Proust, L'Art sous la République, pp. 154-155; Simon, Introduction, chapt. "Les forces productives," passim. The identification of producer and consumer and the clarification of the social hierarchy will be discussed in the chapter on art education.

¹¹The Republicans would consider art as a natural language, i.e., man made in accordance with the scientific laws governing nature. The term artificial here is used to mean that art does not occur without the intervention of human beings, producing in a social context. See Barthes, Seminology, pp. 9-12, pp. 24-31, for a discussion of systems of signification.

¹²"Faire relever l'art uniquement du sentiment, c'est le rabaissé, car c'est retrancher à l'homme la plus belle part de son activité, l'étude et le travail; pas plus que le talent ne dispense d'aucun devoir moral, le sentiment en art ne saurait se passer de science." (As described by Monod, L'Exposition illustré, 1:623). This wariness of uncontrolled emotion is frequently expressed by the Republicans and lies behind their general criticism of works of art that were unstructured, formless. See for example Proust's comments on Manet's paintings in "Salon de 1882," p. 547. Opponents of this idea were in favor of a Romantic individualism which with its elitist overtones was clearly anti-democratic. See the transcription of the interpellation of Edmond Turquet, Ferry's Undersecretary of Fine Arts, by the Bonapartist Deputy Isadore-Hyacinthe Robert-Mitchell, J.O. Chambre des députés, May 19, 1880, pp. 5390-92. Also of interest for the opposing side's argument is the three volume work by Philippe de Chennevières, the Director of Fine Arts who was ousted by Ferry: Souvenirs d'un directeur des Beaux-arts, 3 vols. (Paris: Aux Bureaux de l'Artiste, 1883 et seq.), 3: chpt. 3 passim.

¹³The unity of the arts is a theme which runs through Hugo's writings, especially in the epic poem La Légende des siècles, published in its complete form only in 1883. It is also an idea propounded by Proust in all the writings cited above and by Simon in his Introduction. The idea is implied in Lockroy's writings. Ferry too professed a belief in the unity of the arts, but in a slightly different and more complex way, which is discussed in the chapter on art education.

¹⁴Introduction, p. 12.

¹⁵Ibid., p. 9.

¹⁶"Ministère des arts," pp. 237, 235, 237 respectively.

¹⁷Lockroy, "Preface," Exposition illustré, p. xxv; Proust, "Salon de 1883," p. 234.

¹⁸Ferry, "Discours au banquet d'Henner" (April 15, 1889), Discours et Opinions de Jules Ferry, Ed. Paul Robiquet, 7 vols., (Paris: A. Colin, 1892-98), 6:348. See also Ferry's comments on the analogy between universal law and the social system in "Interpolation Langlois" (January 31, 1884), Discours, 6:226-227. Simon, Introduction, p. 252.

¹⁹Correspondance, 2 vols. (Paris: Calmann Levy, 1898, 2:372. Also see his "Discours sur l'Afrique" (18 May, 1879), Actes et paroles, pp. 517-520.

²⁰Introduction, pp. 212-213.

²¹"Salon de 1882," p. 535.

²²Introduction, pp. 212-213.

²³All quotations, including the above from p. 265, are from La Légende des siècles, Ed. A. Dumas, chronology and biography Jean Gaudon (Paris: Garnier Frères, 1974). As Prof. Gaudon points out in his Introduction, pp. li-lil, the Légende in its final form (1883 edition) testified to the impossible nature of the artistic goal Hugo had intended to realize with it. It nevertheless presents his intentions in the form of a statement of his ideology, one which he began to develop in the 1850's and never abandoned as an ideal within which he characterized the human condition and discussed the means of human salvation. See Paul Berret, "La Légende des siècles:" Etude et analyse, Ed. Rene Doumic, Les Chefs-d'oeuvre de la littérature expliqués (Paris: Mellottée, n.d.), for a discussion of the ideological content of the first and last series of the Légende with a strong emphasis on Hugo's deism and spiritualism.

²⁴Légende. The quotations remaining in this section are from pp. 265-277, 268-269, 266, 266, 265, 265, 265; 266, 265; 267, 268, 269; 285, 286, 284, 287.

²⁵"Salon de 1882," pp. 542, 539. For other Republicans' references to the French national character in art see Ferry, "Henner," Discours, 6:348; and Simon, Introduction, p. 230-4 passim. There is much in this concept of decoration that derives from the philosophy of Victor Cousin and may be considered a reinterpretation and modernization of it. See Chap. IV below and also Philip Anton Bertocci, "Jules Simon, 1814-1895: A Study of Republican Religious Politics in

France," (Ph.D. dissertation, Yale University, 1970), Chap. 8 "God, Republic, Liberty." Bertocci points out that Simon in the 1880s criticized Cousin primarily because his philosophy was based on intuition and lacked a rational methodology.

²⁶See Simon, Introduction, p. 214; Proust, "Salon de 1882," p. 533. Ferry, "Interpolation Langlois," Discours 6:227; Hugo "Vingtième siècle," in La Légende des siècles, and the last third of the work from Verse XLIV, "Le Temps présent," on. Félix Pécaut, among others, has chosen the inauguration of democracy as the major criterion separating the Third Republic from previous French governments. This is not the whole difference, as this chapter and those which follow will show: L'Education publique et la vie nationale, 3rd ed., (Paris: Librairie Hachette et Cie., 1907), pp. viii, 192.

²⁷L'Art français, p. 3.

²⁸Introduction, p. 264. See also Lockroy's comments on the economic changes in France which originated with the edicts of Louis XVI's Minister Turgot and were reinstated on a permanent basis during the Revolution of 1789: La Question Sociale, pp. 4-5.

²⁹Albert Thibaudet has defined their social ideal as "une République platonicienne d'idées" held together by the comprehensive ideology of liberalism. This quotation is from his book Les Idées politiques de la France (1932) and is taken from David Thomson, Democracy in France since 1870, 5th ed. (London-Oxford-New York: Oxford University Press, 1969), p. 121, n. 1.

³⁰To my knowledge no one has made the connection between ideology and aesthetics so far as the Tower is concerned. Maurice Agulhon in two articles has set out to identify the sources of Republican emblems and the concepts for which they stood, and in the most recent one has briefly referred to the Tower as possibly being a symbol of enlightenment: "L'Allégorie civique féminine," Annales 28 (1973): 5-34.

³¹The letter was published in Le Temps (14 February, 1887) and was addressed to M. Alphand, an engineer and the general director of construction for the 1889 Exposition. Lockroy's reply was also addressed to Alphand. No other discussion of Republican aesthetics exists to my knowledge. Nor have I found any complete analysis of the Tower as an expression of their ideology, it being generally considered a apolitical symbol of industrial society. Barthes and André Martin, La Tour Eiffel, Le Génie du lieu, no. 5 (n.p.: Delpire, 1964), presents a structuralist analysis of the Tower and its aesthetic outside a historical context; although they do state on p. 38 that it has much in common with Victor Hugo and Jules Michelet's experience of seeing the earth from the heights of Notre Dame and speculate that the tower arose out of the same historical experience about which these authors wrote.

³²Moniteur, p. 514, p. 514.

³³Ibid.

³⁴Discours, 3:vi.

³⁵The most thorough modern study of the Republicans' views on democracy with a bibliography of both French and English works is Thomson, Democracy in France. Of special interest are pp. 116-134 in the chapter "The National Vision," in which he discusses the inherent contradictions between the concept of the individual and of society. Zeldin, France I:570-74, 614-615, 624-626, presents a summary of Ferry and the Gambettistes ideas on democracy which is in general agreement with the interpretation I am presenting. Both Zeldin and Thomson indicate, although they do not elaborate, that there existed differences between the character of the early leaders of the Third Republic and those who replaced them and also differences among the members of the group under discussion. See Pierre Sorlin, Waldeck-Rousseau (Paris: A. Colin, 1966) for a thorough study of the politics of the Third Republic. He refers to the animosity, bordering on contempt, of pragmatic politicians like Waldeck-Rousseau and Rouvier towards Ferry and Gambetta and their associates, p. 252. For Hugo's evolution into a democrat see Jules Garsou, L'Evolution démocratique de Victor Hugo 1848-1851 (Paris: Emile-Paul, 1904), a book I was unable to obtain. His views on democracy come through quite clearly, however, in his correspondence and his speeches and publications of the 1870s and 1880s. As for the differences over the source of authority in a democracy which divided the Republicans on whom I am focusing, these and their consequences for art will be discussed in the chapter below on Art Education. There is much that suggests the Republicans under investigation here were the intellectual precursors of Emile Durkheim, if not directly, at least through their influence on the educational system in which he was trained. They in turn perpetuated an aesthetic and an ideology which had been formulated by Mme. de Staël. For a discussion of her social aesthetic, without the political dimension, see H. A. Needham, Le Développement de l'esthétique sociologique en France et en Angleterre au XIX^e siècle, Bibliothèque de la Revue de littérature comparée, no. 28 (Paris: Librairie ancienne Honoré Champion, 1926), p. 209.

³⁶Proust, "Salon de 1882," p. 535; "Ministère des arts," part 2, p. 237; L'Art sous la République, p. 155.

³⁷Dieu, Patrie, Liberté, p. 251; see also his discussion of "variété," Introduction, p. 252.

³⁸Zeldin, France, 2:630-631.

³⁹L'Esthétique sociologique, p. 209. The concern for establishing order in an industrializing society was not limited to France, but was the major focus of attention of social reformers and politicians during the same period in America as well, according to

Robert H. Wiebe, The Search for Order: 1877-1920, from The Making of America, gen. ed. David Donald, American Century Series (New York: Hill and Wang; Farrar, Straus, and Giroux, 1967).

⁴⁰A favorite portraitist of the Republicans was Léon-Joseph Bonnat who captured the likenesses of Hugo, Thiers, Grévy, Rochefort, and Puvis de Chavannes. On Bonnat see Proust, "Salon de 1882," pp. 548-550. The works of Bastien-Lepage, Roll, and Eugène Manet were done in a similar manner, and all of them did portraits of the Republicans or of members of their coterie. This style of portrait was one which the photographer Nadar also used in his many pictures, including the photograph of Hugo on his death bed (reproduced in Richardson, Victor Hugo, fig. 18. For a recent discussion of Nadar's political aesthetic see Max Kozloff, "Nadar and the Republic of Mind," Artforum, September 1976, pp. 28-39. The development of this kind of aesthetic balance between the universal ideal and the special physical and psychological character of the individual seems to have originated in the late eighteenth century according to Jean Starobinsky, L'Invention de la liberté (Paris: Flammarion, 1973), especially pp. 89-90 where he discusses David's unfinished painting the Serment du Jeu de Paume (1791). The Republicans, as heirs of this tradition, developed it further in the context of the 1880s as will be shown in Chapter V below.

⁴¹It is these subtle physical differences which were exaggerated in the caricatures of the period, an art form which played up physiognomical peculiarities within an essentially conventional, but highly schematized, compositional format. See Reclus, Jules Ferry, pp. 104-105, for his comments on the caricatures of Ferry's famous mutton chop side-burns. A number of books on caricature appeared during the years in question, written by well-known critics and art theorists, including Champfleury's last volumes on the history of caricature. Rising interest in it as an art form was marked by the establishment of the journal La caricature by A. Robida. Hugo was fond of drawing this sort of picture which he did in the mocking and playful spirit that became popular in cartoons of the late 1870s and 1880s. See the article "Caricature," in La Grande Larousse universelle du XIX^e siècle, second supplement.

⁴²Azéma, La Troisième République, p. 137, refers to Ferry's conception of himself as an architect of the state, but does not pursue the subject further, save to allude to the Free Masons' attachment to this idea. See Chapter III below for my discussion of the relationship between Republicanism and the Masons.

⁴³"Union centrale," pp. 194, 193. This theme runs through all Proust's writings.

⁴⁴The Republicans have frequently been charged with being materialists. Save for Proust, all of them openly believed in some kind of spiritual force in the universe. Whatever character this spirit possessed, all the Republicans felt that humanity had to reconcile itself to struggling with the material world as part of its destiny.

45 "Henner," Discours, 7:348, 347.

46 The Republicans did not use the term "integrity of materials" which has often been used in twentieth century art criticism, particularly formalist criticism concerned with modernist art. It is a term whose history needs to be traced, but is generally associated with the aesthetics of modern industrial civilization, particularly in the capitalist democracies of the West. I use it here to mean the open statement of the physical properties out of which an object is fashioned and the exploitation of these properties as an integral part of the aesthetic and moral character of the finished work, and by association, of its maker and user. This is essentially the way the term is used in modern art criticism, for example, in the writings of Siegfried Gideon. His book, Space, Time, and Architecture, The Growth of a New Tradition, 3rd. ed. enl. (Cambridge, Harvard University Press, 1959), pp. 484-496, 764-65 passim, traces the formulation of the concept to the milieu of Walter Gropius' Bauhaus in the 1920s. For its place as an aesthetic value in Art Nouveau of the 1890s and first decade of the twentieth century, see S. Tschudi Madsen, Art Nouveau, trans. R. I. Christopherson, World University Library, (New York-Toronto: McGraw-Hill, 1973 reprint of 1967 ed.), pp. 88, 104-106. The figures of John Ruskin and William Morris are especially important in the nineteenth century in introducing the idea of the honest use of materials as an expression of personal honesty. This is not the only characteristic which art nouveau and modernism have in common, as this chapter will show. See also Nikolaus Pevsner, The Sources of Modern Architecture and Design, the World of Art Library (London: Thames and Hudson, 1968), pp. 9-21 passim, for a discussion of the threads which run through both artistic developments, but without the social and ideological dimension. One might also add the art criticism of Clement Greenberg to the list.

47 Introduction, p. 221.

48 See Ferry's comments on "plein air" painters in "Henner," 7:348. Also Reclus, Ferry, p. 108, refers to a letter of 1891 which Ferry sent his wife stating his dislike of Impressionism. See also Proust, "Salon de 1882," p. 547, for his comments on Manet as an artist whose work is limited to studies which he does not go back over and bring to perfection ("des études parfois incomplètes . . . il en est qui resteront comme des accents sans pareil, comme des notes d'impression . . .").

49 Introduction, p. 252.

50 See Barbou, Victor Hugo, p. 203, and the "Interpellation Turquet," J.O. Chambre des députés, pp. 5390-5393.

⁵¹Quoted in Barbou, p. 203. The same sort of criticism was being launched against Taine at this time by a member of the younger generation associated with the Symbolists and Neo-Impressionist avant-garde, Félix Fénéon. See his entry on the philosopher in *Petit Bottin des Lettres et des arts* (Paris: n.p., 1886), reprinted in *Félix Fénéon, Oeuvres plus que complètes*, ed.. Joan U. Halperin, 2 vols. (Geneva: Librairie Droz, 1970), 2:548.

⁵²Among the most recent exponents of self-help as the means of France's regeneration are Charles Morazé, *Les Français et la Régénération publique*, pp. 47-49 and p. 96, and a number of supporters of "autogestion," including Jacques Juillard. Morazé, like the Republicans under study here, sees a connection between paternalistic economic relationships and economic and social decadence. To see English versions, consult J. F. Harrison, "The Victorian Gospel of Success," *Victorian Studies* I (December 1957): 155-164.

⁵³Luc Benoist, *Le Compagnonnage et les métiers*, Que-sais-je? (Paris: Presses Universitaires de France, 1966), p. 35. Benoist points out that the regulation of labor was motivated both by a concern for political control of the working classes and also for quality control and consumer protection.

⁵⁴"L'Interpellation Langlois," 6:199. See Ferry's comments and criticism of the government workshops formed during the Second Republic in the same "Discours."

⁵⁵Linda Loeb Clark, "Social Darwinism and French Intellectuals: 1860-1915," (Ph.D. dissertation, The University of North Carolina at Chapel Hill, 1968), and Needham, *L'Esthétique sociologique*, pp. 233-35. Ferry is known to have read Herbert Spencer. While Hugo disliked Darwin's theory of evolution and the type of determinism found in Taine, he did believe in the higher purposes of human life and the moral and social benefits of economic liberty as it was being defined by the Republicans. See for example comments on Darwin and Taine in "Ire non ambire," *Légende*, pp. 738-747. See article "Social Darwinism" in the *International Encyclopedia of Social Sciences* by Sol Fox and Larry S. Krucoff for a history of the concept of the individual's relationship to others in the community during the nineteenth century. The authors' statement, taken from Hofstadter, on Durkheim is applicable to the Republicans and suggests they were important precursors of him: "[In the] 1890s Durkheim was especially important in clarifying the relationship of the individual to society, replacing the theory of contract, with its emphasis on property values, by theory of norms. The great questions of individual freedom and social responsibility had never been so much alive; the old laissez-faire individualism began to lose its title to morality." The Republicans' views on individual liberty were closest to those of Charles Renouvier, whom Roger Soltau credits with clarifying the principle of liberty by defining it in terms of the individual's awareness of his relationship to others. "He saw that negative freedom might

well be the perpetuation of injustice, that the true antithesis was not between liberty and order, but between justice and liberty misused in the creation of unjust relations between men," from French Political Thought in the Nineteenth Century (New York: Russell and Russell, n.d.), p. 320. Jay Rumney, ed., Herbert Spencer's Sociology, Atherling Books (New York: Atherton Press, 1965), lists a book by Renouvier on Spencer published in 1896 and one by a M. Bonnart entitled Renouvier et Révolution (1880), suggesting the extent to which such ideas had penetrated Republican circles by this time.

56 "L'Interpolation Langlois," 6:209.

57 Introduction, p. 456. See also Lockroy, La Question sociale, p. 14, in which he proposed an institutional framework for production based on "des associations libres, des associations qui donnent des droits égaux aux patrons et aux ouvriers."

58 See Chapter on Art Education for a discussion on how the individual would be fitted to participate in such a system.

59 See Ferry's description of the characters of his two favorite artists in "Henner," 7:34607; and "Discours au banquet d'Antonin Mercié," 7:349-52. Zeldin, France, II, Chap. 5, "Industrialists," presents an overview of French attitudes towards entrepreneurship in the nineteenth century which includes a survey of current literature on the subject. One model which Zeldin does not mention is the skilled artisan and the knowledgeable businessman who are independently employed, a group which is given some importance in Albert Boime's essay "Entrepreneurial Patronage in Nineteenth Century France," in Enterprise and Entrepreneurs in Nineteenth Century France, Ed. Edward C. Carter, (Baltimore-London: Johns Hopkins University Press, 1976), pp. 137-207. My point here is, however, that the Republicans were interested in examples of entrepreneurial spirit, rather than a particular industry.

60 See Lockroy, J. O., Chambre, May 17, 1876, pp. 3332-49.

61 See Lockroy, Préface, p. xxii, and Chapter II below.

62 La Question sociale, p. 14.

63 Légende, Preface, p. 5. Azéma, Troisième République, pp. 132-134, notes the Republicans' view of social order as a kind of equilibrium, harmonious in character, of social forces. The Republicans' theory of economic liberty has strong parallels with economic theory of Leon Walras (1834-1910), an economist who was a friend of Ferry's. On Walras and theories of economic equilibrium see articles in the International Encyclopedia of the Social Sciences.

⁶⁴Both quotations are from "Salon de 1882," p. 543. Ferry seems to have felt the same way about Henner's work, which does, in fact, bear a resemblance to Puvis' in the restrained use of line and color, the simplification of props, setting, and color scheme.

⁶⁵See Proust, *ibid.*; Lockroy, La Question sociale, pp. 4-12 *passim*; Ferry, J.O., Chambre, June 23, 1883, p. 3116. The two were not actually linked together in these statements, but the implication that artists, artisans, and small businessmen ought to operate within the same economic context is clear.

⁶⁶Ferry, "Henner," 7:347; Proust, "Salon de 1882," pp. 542-543; Ferry, "Henner," 7:347-348.

⁶⁷See Ferry, *ibid.*; Proust, "Ministère des arts" and Salon de 1882" *passim*; Hugo, "La Domaine de la publique payante," Actes et Paroles, pp. 500-509.

⁶⁸Simon, Le Travail, p. 3.

⁶⁹La Question sociale, p. 19.

⁷⁰See Simon, Introduction, pp. 159, 170-171; Monod, Exposition illustrée, I:7.

⁷¹Introduction, p. 358.

⁷²Hugo, "Le Déjeuner des enfants de Veules," 25 September, 1884, Actes et paroles, p. 580. See Jean Gaudon, Le Temps de la Contemplation: L'Oeuvre poétique de Victor Hugo des "Misères" au "seuil du gouffre" (1845-1856) (Paris: Flammarion, 1969).

⁷³"Ministère des arts," p. 232.

⁷⁴Quote in Reclus, Ferry, p. 28. Ferry never ceased to appreciate facture as the important intermediary of communication in art. He felt it was Henner's method of handling color that created a special psychological state in the viewer. See also Proust, "Salon de 1882," *passim*. The term facture is used more often in French than in English and American art criticism, where the term "handling" or "technique" is often substituted. The latter term, because it implies a mechanical, non-cognitive, use of artistic materials, is not really a good synonym.

⁷⁵Introduction, p. 358.

⁷⁶The utilitarian streak in the Republicans' ideology has been little noted, although their concern for it is apparent in any reading of their speeches and articles, and Ferry is known to have read and taken seriously the ideas of J. S. Mill, one of the primary advocates

of Utilitarianism in the nineteenth century. See Reclus, Ferry, p. 116. It could be said that what their critics called "opportunism" was in reality a form of utilitarianism in action. A good example of how deeply colored their way of thinking was by this concept is Proust's explanation of the purpose of the Ministry of Arts and of Gambetta's reasons for instituting it by decree rather than by vote of the Chamber, "Ministère des arts," I. The same premise forms the basis of Hugo and Lockroy's arguments in favor of amnesty for the communards.

⁷⁷J. O., 17 May, 1876, p. 3349.

⁷⁸From an article published in the Bulletin de l'association nationale républicaine, January February 1890, and reprinted in Discours, II: 179.

⁷⁹August, 1885, Discours, 7:16.

⁸⁰Discours de Bordeaux, 30 August, 1885, 7:54.

⁸¹See n. 78 above. On utilitarianism as a moral imperative and code of ethics for uniting ends and means see The Encyclopedia of Philosophy, Ed. Paul Edwards, 8 vols., s.v. "Utilitarianism," by J. J. C. Smart; and two works by R. M. Hare: The Language of Morals (Oxford: Clarendon Press, 1952; reprint ed. from corrected sheets of 1st ed., Oxford: University Press, 1961), Chap. "Good in Moral Contexts;" and Freedom and Reason (London: Oxford University Press, Amen House, 1963), Chap. "Utilitarianism." It would seem that the Republicans, like Mill, did not separate act and rule utilitarianism, but saw them as interrelated concepts. Their desire for efficiency and economy in the operation of government and in human behaviour puts them on the borderline between the technocrats and the intellectuals, since their aims combined economic with moral intentions. See Zeldin, France, II: 1042.

⁸²"Henner," 7:348.

⁸³Public festivals have a long tradition in France, and they have generally been of two sorts: those organized by the governing powers and those traditionally celebrated by ordinary people. The efforts of officials in the First Republic to continue the former, orchestrated type of festival have been documented by David Dowd, Pageant Master of the Republic: Jacques-Louis David and the Revolution (Lincoln, Nebraska: University of Nebraska, 1948); Contemporary History 6(1971): 167-182, and Daniel Halévy, "Après le seize mai une année d'exposition: 1878," La Revue universelle, November 1936, pp. 423-444, discuss Republican efforts to use festivals to tap popular energies and place them at the disposal of the Third Republic. Maurice Agulhon has begun to identify the sources of Republican symbolism, finding it in popular religious and masonic iconography: "Esquisse

pour une archaéologie de la République: L'Allégorie civique féminine, Annales 28(1973): 5-34, and "Bartholdi et le soleil, Gazette des beaux-arts, May-June 1977, pp. 187-191. The character of the popular mentality in which politics and play mingled together in spontaneous outbursts which decline with the advent of modernization is examined by Yves-Marie Bercé, Fêtes et révoltes: Des mentalités populaires du XVI^e au XVIII^e siècle. Essaie, Le Temps et les hommes, Ed. Jean Delumeau (Paris: Hachette, 1976). He also identified certain forms of expression which this behaviour took, including the wearing of costumes and men masquerading as women. Michelle Perrot, Les Ouvriers en grève, 2 vols. (Paris-The Hague: Moulton, 1974), vol. 1, pp. 548-549, points out the persistence of this behaviour and attitude in the strikes of the late nineteenth century in France.

Behind this interest in festivals and forms of pleasure, lies the Republicans' recognition of the important role pleasure played in human motivation and development, and, therefore, in the development of social order. Zeldin, France 2:626-824, refers to the distinction the French made between pleasure and happiness, the latter being a condition which Frenchmen began to find increasingly illusive and to associate with utopian ideals. As the discussion in the text indicates, the Republicans felt that human beings were both sentient and rational and, thus, had a natural emotional need for both play and order. Here Herbert Spencer's ideas on the relationship between pleasure, utility, and art were probably influential in posing one approach to social value of pleasure, judging from Needham, Esthétique sociologique, pp. 233-244, and from Simon's criticism of Ferry, Dieu, Patrie, Liberté, p. 221. The origin of these ideas on the pleasure of utility and the utility of pleasure can be traced back as far as the late eighteenth century in France where the terms of the discussion were set by Rousseau, Diderot, and other philosophers, and later taken up by Schiller. See Rousseau's Lettre à d'Alembert sur le théâtre and Remy G. Saisselin, "The Transformation of Art into Culture from Pascal to Diderot." Joseph Pieper, In Tune with the World: A Theory of Festivity, trans. Richard and Clara Winston, Helen and Kent Wolff Book (New York: Harcourt, Brace and World, Inc., 1965), p. 40, notes that the "fine arts keep alive the memory of the true ritualistic, religious origins of festivals when these begin to be forgotten."

For a thorough study of nineteenth century French thinkers' views on folklore as the repository of popular values and naïve, i.e., pure, visions of the natural order, see Charles Rearick, Beyond the Enlightenment: Historians and Folklore in Nineteenth Century France, Folklore Institute Monograph Series, vol. 27 (Bloomington and London: Indiana University Press, 1974). For discussions of French painters' efforts to use this intuitive vision or mental construct of the world as a basis for developing new and, in their minds, more "truthful," forms and compositional ordering, see the following: Timothy J. Clark, Image of the People: Courbet and the 1848 Revolution (London: Thames

and Hudson, 1973); Linda Nochlin, "Gustave Courbet's Meeting," Art Bulletin, no. 49 (September, 1967); pp. 209-222; Mark Roskill, "Early Impressionism and the Fashion Print," Burlington Magazine, no. 112 (June 1970), pp. 391-395. The switch from the Image d'Epinal to the fashion print documented in the last article suggests a change in the concept of the world natural to man wholly in accord with the shift from the pre-industrial to an industrial, consumer-oriented economy that France was experiencing.

84"Ministère des arts," 237.

85Introduction, p. 234.

86L'Art sous la République, p. 79.

87"Salon de 1882," p. 546.

88On Hugo as a humorist see: André Gillois, La France qui rit . . . La France qui grogne (Paris: Hachette, 1966), pp. 239-40; Henri Guillemin, L'Humour de Victor Hugo (Neuchatel: Boundry, 1951); Charles Affron, A Stage for Poets: Studies in the Theatre of Hugo and Musset (Princeton: Princeton University Press, 1971). Lockroy's writings are characterized by a biting wit, as are some of Simon's. Their effect derives from a play of contrasts and oppositions. One also thinks of Ferry's title for his famous critique of Napoleon III's chief planner: Les contes fantastiques d'Hausmann.

89"Après le seize mai."

90Lockroy, Préface, p. xxxi. On the reforms in the system of hanging works in the 1880 Salon and the 1883 Salon national, which were innovations undertaken by Ferry's Undersecretary of Fine Arts, Edmond Turquet (b. 1836), see J.O., Chambre, 19 May, 1880, pp. 5390-5393, and 1 April, 1883, pp. 1642; Georges Lafenestre, "Le Salon et ses vicissitudes," Revue des deux mondes, 1 May, 1881, pp. 100-135, for a history of reforms.

91Simon here quotes a M. Didron, Introduction, pp. 250-251.

92On Le Duc see n. 93 below. John Ruskin's (1819-1900) ideas on form and function can be found in the Seven Lamps of Architecture (1849) and in Sesame and Lillies (1865) in the lecture entitled "The Mystery of Life and its Arts," where he sets the notion in a socio-economic, as well as moral, context. Horatio Greenough (1805-1852), an American sculptor and writer, is best known for his writings collected in 1958 under the title Form and Function.

93On the various theories of rationalism in architectural design current during this period and their common denominator functionalism, see Peter Collins, Changing Ideals in Modern Architecture:

1750-1950 (London: Faber and Faber, 1965). The influence of the ideas of Viollet-le-Duc on the Republicans should be noted. A recent book on this architect which I have not been able to consult is Ivo Tagliaventi, Viollet-le-Duc e la cultura architettonica dei revivals (Bologna: Patron, 1977). Pol Abraham, Viollet-le-Duc et le rationalism médiéval (Paris: n.p., 1934), presents both a review and a critique of the master's ideas.

⁹⁴Introduction, p. 190.

⁹⁵Préface, pp. xxi; xxv-xxvi.

⁹⁶Simon, Introduction, pp. 221-222.

⁹⁷For recent studies which take into account the role of economics in the Republicans' policies see S. Elwitt, Making of the Third Republic (a marxist interpretation); Azéma, La Troisième République; and Pierre Sorlin, Waldeck-Rousseau (Paris: A. Colin, 1966). Also see Zeldin, France, in n. 35 above, and Raymond Delatouche "Vers un renouveau de la physiocratie," Journal de la société de statistique de Paris 117(1976):47-53, which I was unable to procure. Basically, the Republicans believed that if individuals were provided with a sense of justice and the proper means to produce and distribute goods, free of artificial hinderances such as laws against association and protective tariffs, then an equitable economic system would result. Individual producers, both capitalists and laborers, created the economic system and the social order that supported it through their productive activity. The aim was not the accumulation of wealth, but the improvement of human well-being which the profits of labor brought. This concept of economy was consistent with the University's teaching of economics as a branch of legal studies. On this point see n. 64 and n. 118 also.

⁹⁸"Discours de Lyon," 6"199 and also p. 234; 6:233; 6:233.

⁹⁹Actes et paroles, p. 583. Maurice Agulhon, "Bartholdi et le soleil," pp. 187-191, discusses the emblems of liberty and their sources, without considering what is meant by the term.

¹⁰⁰On the breakdown of international trade relations and its effect on the art world and French labor market at the time see Chapter III below.

¹⁰¹"Discours sur l'Afrique," Actes et Paroles, p. 521. Elwitt, Making of the Third Republic, pp. 274-5, gives another interpretation to this colonialist policy. Zeldin, France, I:631, refers to the Republicans' concept of colonies as markets for French products rather than sources of raw materials.

¹⁰² See Lockroy, La Question sociale, passim, and J.O., 17 May, 1876, pp. 3341-3346 passim.

¹⁰³ Préface, p. xvii.

¹⁰⁴ Ferry, "Interpolation Langlois," Discours 6:208-209; 6:234-235. "Discours aux délégués des Voges," Discours 6:27; Lockroy, La Question sociale, p. 19.

¹⁰⁵ Préface, p. xxii.

¹⁰⁶ "Interpellation Langlois," Discours 6:225.

¹⁰⁷ Ibid., p. 234.

¹⁰⁸ See for example ibid. and Lockroy, La Question sociale, pp. 23-25. For the theory associated with commercial exchange see Needham, Esthétique sociologique, chapter on "Économie politique," in which he discusses the Saint-Simonians' placement of art at the head of a world-wide communication system associated with industrial production. Also Claire-Lise Charbonnier and Simone Desroche, "L'Espérance Française d'un internationalisme coopératif (1866-1960)," Archives internationales de sociologie de la coopération (Paris), no. 39 (1976), pp. 61-105, may be of interest here, although it was unavailable to me.

¹⁰⁹ Ferry, "L'Interpellation Langlois," Discours 6:234-236; Zeldin, France I:545, on origins of this idea in the second Empire; Elwitt, Making of the Third Republic passim.

¹¹⁰ Hugo, "Discours sur l'Afrique," Actes et paroles, p. 520; Ferry, "Discours de Lyons," Discours 7:19. Zeldin, France I:630-631, points out that the Republicans at this time saw colonies as market for manufactured goods, rather than as sources of raw materials. The impact of physiocratic ideas on their thinking may be discussed in Raymond Deltouche, "Vers un renouveau de la physiocratie," Journal de la Société statistique (Paris) 117 (1976):47-53, an article which was unavailable to me. Zeldin states that there is some question as to whether their interest in colonial expansion was thrust upon them by circumstances or was an integral part of their ideology. He favors the former interpretation in the case of Ferry.

¹¹¹ Ferry, "l'Interpellation Langlois," Discours 6:210, and repeated p. 211; 6:232; 6:232.

¹¹² "Discours de Lyons," Discours 7:19; Hugo, "Discours sur l'Afrique," Actes et Paroles, p. 520, in which the image of liberation is one of breaking away from a great weight: "sur cette terre de plus

en plus dégagée des prêtres et des princes, l'Esprit divin s'affirm par la liberté." Also see Lockroy, Préface, p. xvii; Proust, "Salon de 1882," p. 534; Simon, Introduction, p. 179.

113 "Discours au banquet d'Henner," Discours 7:378. In an excellent article summarizing the ideas of the German art theorist Alois Riegl, Henri Zerner notes the importance of space as an imaginary structure in Riegl's decorative theory. It mystically arises out of the interactions of other, tangible aspects of design: "Alois Riegl: Art, Value, and Historicism," Daedalus, Winter 1976, pp. 177-188. There is much in Riegl's concept of space and indeed of his theory of design which is strikingly similar to that of the Republicans' and of French art theorists and critics writing a decade before the German. See, for examples, the text in Chapters III and IV passim, for the architect Trélat's discussion of form in architecture, as well as the theory of Charles Blanc. It would be interesting to place Riegl's thought in a social perspective, as he wished to do with art.

114 p. 787.

115 pp. 778, 787, 779.

116 See Agoulhon, "Bartoldi et le soleil," n. 83 above; The mysticism attached to light, as a physical manifestation of the experience of enlightenment and of the presence in the universe of an ordering principle has its immediate roots in the Enlightenment. Jean Starobinsky, Les Emblèmes de la raison (Paris: Flammarion, 1973), discusses the aesthetic implications of enlightenment ideas of man, the universe, and the role of reason in the art of the late eighteenth and early nineteenth centuries. To my knowledge the only study which suggests that a connection exists between light, enlightenment, and commerce is one which centers on J. -L. David's painting Leonidas at Thermopylae (1814). The artist used the pose of the sixteenth century statue of Mercury by Giambologna as a model for certain figures in such a way that both the god's attributes as the bearer of enlightenment and of as the god of commerce are important. See Miriam R. Levin, "David, De Stael, and Fontanes: Some Intellectual Controversies of the Napoleonic Era," Gazette des beaux-arts, forthcoming, and also my paper "Liberal Republicanism in the Fine Arts: The Case of J. -L. David's Leonidas at Thermopylae," paper presented at the North East Association of Eighteenth Century Scholars, October 1978, Amherst, Mass.

117 Although the relationship of science to social thought and to aesthetics is today generally conceived as that of a series of analogies, the Republicans were not talking about analogies or metaphors but of systems of interrelated realities, or of levels of reality in which the psychological and the metaphysical met and were fused in the work of art, or in any perfected product of human labor. The painter Gustave Courbet in his typically and willfully obtuse manner,

first called this synthesis to the public's attention in his painting of The Painter's Studio (1855), which he termed an "allegorie réelle." Recently A. B. Price, "L'Allégorie réelle chez Puvis de Chavannes, Gazette des beaux-arts, January 1977, pp. 27-40, has examined the way in which a major salon painter of the 1880s approached the problem of giving real existence to an aesthetic and social ideal through the development of a convincing imagery evoking a poetic primitive existence.

¹¹⁸The quotations are from pp. 787-789.

¹¹⁹pp. 788-789; 781, 779, 779, 791.

¹²⁰See Simon, Introduction, p. 358 and also p. 362; Le Grand, Influence du positivisme passim; Pierre Albouy, "Raison et science chez Victor Hugo," Cahiers rationalistes, no. 125 (1952), pp. 1-22; W. M. Simon, "The 'Two Cultures' in Nineteenth Century France: Victor Cousin and Auguste Comte," Journal of the History of Ideas, January 1965, pp. 45-58, an argument for the similarity in the ideas of the Republicans' precursors and mentors: Idem, European Positivism (Ithaca: Cornell University Press, 1963), p. 156, while dismissing the economic aspects of Comte's philosophy, quotes Ferry on the significance of Comte's advocacy of the application of science to social reform: "There was 'a social art, distinct both from the bloodless [impassible] (sic) observation of the economists satisfied with mere description and committed to fatalism, and the irrational and harmful utopianism of most of the socialist schools.' Comte had found the proper mean between the extremes and arrived at a correct diagnosis of capitalism and labor." Jean Cuisenier, "Auguste Comte et la sociologie économique," Cahiers internationaux de sociologie, n.s. 5, nos. 135 and 136 (1958), is the only reference I have found to a study of Comte's interest in applying science to the study of social economy. John Eros, "The Positivist Generation of French Republicanism," Sociological Review, n.s. 111 (1955):255-277, argues that Ferry and the Gambettistes modified the determinism of Positivism and turned it into a prescription of tactics in gaining and holding political power, and he discounts its value to them as a guide for social reform, an untenable position to my mind. Like Kuhn's paradigm, Positivism opened up new possibilities in solving the problems of social reform.

¹²¹"Plein ciel," Légende, p. 781. See Charles Lecoœur, "Introduction," La Philosophie religieuse de Victor Hugo (Bordas: n.p., 1951), for an analysis of Hugo's use of science as an aid to creative production.

¹²²Ferry, "Interpellation Langlois," Discours 6:232.

¹²³"Ministère des arts," p. 232.

¹²⁴Simon, Introduction, p. 170.

¹²⁵"Interpellation Langlois," Discours 6:233.

¹²⁶See Simon, Introduction, p. 362, for his comment on the electric light as a means of popularizing scientific discoveries.

¹²⁷From the "Préface philosophique," to Les Misérables, quoted in Albouy, "La Raison et la science," p. 19, who points out that contemplation of this sort was the source of invention, a process Hugo described in the chapter of Les Misérables, entitled "Invention."

¹²⁸Légende, pp. 790-791.

¹²⁹Introduction, p. 359.

¹³⁰Simon, Introduction, p. 551, described the process of overcoming obstacles in life as one analogous to the way in which machines turn raw materials into useful objects.

¹³¹Légende, p. 778.

¹³²"Ministère des arts," p. 198.

¹³³Introduction, p. 170.

¹³⁴See *ibid.*, p. 212. See also Simon's comments on science and poetry on p. 135. Simon sponsored a competition in the Académie des sciences morales et politiques during these years on the subject of the application of science and poetry.

There is some ambivalence among scholars about whether this ideal was believed to be truly accessible in the sense that human beings could achieve a state of harmonious social existence. The Republicans felt it was accessible in the sense that men could understand the forces governing the physical universe and at least mentally perceive the possibility of arriving at such a harmonious existence. See for example Gaudon, Le Temps de la Contemplation, pp. 245-9 and also the chapter on "The Search for Style," below for further discussion of this point. Also see Needham, Esthétique sociologique, Chapter 4, which deals with the issue as it was raised in the 1850s and 1860s.

¹³⁵See Simon's comments in Introduction, p. 456, and Hugo, Légende, p. 778. One thinks here of André Malraux's comments in the Noyers d'Altenbourg on the Greek treatment of the acanthus leaf on corinthian columns: "It is not a stylized acanthus, but a humanized one." This attitude towards the perfection of the object is closely

associated with the question of finish in works of art that concerned many critics of the period. See for example the article by David Craven, "Ruskin vs. Whistler: The Case against Capitalist Art," Art Journal, Winter 1977/78, pp. 139-143, in which I think the author does not see that Ruskin is not necessarily against capitalism, but rather is criticizing its excesses by demanding that the moral, e.g. emotional and intellectual, element in art be maintained. On Ruskin's reception in France, see Needham, Esthétique sociologique, pp. 186-195, which places interest in Ruskin's ideas much later than one would believe from Jean Autret's study Ruskin and the French before Marcel Proust (with the collected fragmentary translations) (Geneva: Droz, 1965), where earliest mention is made in 1856 and then in the 1860s. In the 1880s Ruskin's ideas were possibly known to the artists Vincent van Gogh and Paul Signac and perhaps to Claude Monet and Auguste Renoir who spent the Franco-Prussian war period in England. In any case during the 1870s and 1880s there was in France an intellectual atmosphere that was open to ideas such as those of Ruskin, although the French were more positively disposed towards science and technology.

¹³⁶Introduction, p. 363.

¹³⁷Ibid., p. 358, and also Ferry, "Concours general, Le Temps, 5 August, 1879, in which he refers to classical literature in the same way.

¹³⁸See Simon, Introduction, pp. 211-218; Proust, "Les Travaux des commissions. Rapport de M. Antonin Proust," *passim*; Hugo, "Les Sept merveilles du monde," Légende, p. 195, in which he speaks through the Greek Temple of Ephesus:

Ma symétrie auguste est soeur de la vertu . . .
 "Le peuple en me voyant comprend l'ordre et s'apaise;

also "Plein ciel," p. 779. Gaudon, Temps de la Contemplation, Chapter "Art et Nature;" Carol Duncan, The Pursuit of Pleasure: The Rococo Revival in French Romantic Art, Outstanding Dissertations in the History of Art (New York: Garland, 1976), Chapter 3 "Social Meanings of the Rococo Revival," pp. 70-71.

¹³⁹See n. 28 above.

¹⁴⁰In this view of history the Republicans were intellectual heirs of the philosophers, particularly of Turgot and Condorcet. It also means that the mixture of conservatism and progressive ideas in their ideology is to be found in their aesthetic and underlies the tension between liberation and restriction which characterized both.

¹⁴¹Légende, p. 779; p. 790.

¹⁴²See Hugo's letter to "Membres de la Franc-maçonnerie de Dijon," 15 April, 1877, in Correspondence (1836-1882), 2 vols. (Paris, Calmann Levy, 1898), 2:368: ". . . faire que l'ouvrier travaille et le soldat ne travaille pas." Also see Simon, Le Travail, Dieu, Patrie, Liberté, Chapter 10 ("Bilan"); Ferry, "Discours de Lyon," Discours 7:6-25 passim. Other authors of this period, including Zeldin, Azéma, Morazé, have considered the Republicans' ideology as a static system of ideals, rather than one with specific social and economic goals related to industrialization and its effects on France.

¹⁴³Elwitt, The Making of the Third Republic, pp. 152-154, argues it was also self-serving, benefitting men like Ferry who were owners of large manufacturing establishments. I will take up this point in another chapter of this section when I consider the socio-economic background of the Republicans in light of their ideology.

¹⁴⁴See n. 60 above.

¹⁴⁵The entrepreneur has many characteristics in common with medieval chevaliers, and in fact the emphasis on labor as an alternative to war suggests a transference of the qualities of the ideal military man to the figure of the ideal laborer.

¹⁴⁶See Zeldin, France, 1:616-617 and 621-625, and 2:200-201, for a discussion of the Republicans' views on progress and a review of the literature on this subject. It would seem that for those with talent, the Republicans' promises for social advancement held high hopes; however, this could mean advancement within one's class rather than from one class to another, and generally did.

¹⁴⁷The final contract for the tower was signed on January 8, 1887, and stipulated that it was to be completed by May 1, 1889. See J. Morlaine, La Tour Eiffel inconnu (Paris: Hachette, 1971), Chapter 3, for a thorough discussion of the contract agreement which was quite detailed. A. Gustave Eiffel, La Tour de trois cents mètres (Paris: Lemerrier, 1900), published his own account of the contract. The details of the contract are also discussed in Alfred Picard, Exposition universelle internationale de 1889 à Paris: Rapport général, 10 vols. (Paris: Imprimerie nationale, 1891-92), 2:266-269. Lockroy, Préface, p. xvii, felt the contract for the tower, as well as those for other concessions at the exposition "se distinguât . . . par une organisation administrative et financière nouvelle . . ."

¹⁴⁸The most complete bibliography on the tower is in Harriss, The Tallest Tower, to which should be added the numerous articles on it in the issues of the Moniteur de l'Exposition de 1889, 5 vols. (1885-1889); Lockroy's Préface, pp. xxiv-xxvi; Monod, Exposition illustrée, 1:174-201; and Picard, *ibid.*

¹⁴⁹Reported in Morlaine, Tour inconnu, p. 62.

¹⁵⁰ See Eiffel's speech to construction workers on the subject recorded in "Chronique de l'Exposition: L'Achèvement de la tour Eiffel," Le Temps, April 2, 1882, p. 2.

¹⁵¹ Lockroy, Préface, p. xxv. Eiffel, La Tour, p. 17. Also see the article "La Tour de trois cents mètres de l'Exposition universelle de 1889," Le Moniteur des architectes, no. 20 (1886), p. 130, for Eiffel's defence of the tower's utility on the grounds of its contribution to science and engineering, military defense, the French economy, as well as French prestige and general human enjoyment. Barthes, La Tour Eiffel, p. 33, finds it has "empirical utility." Harriss, The Tallest Tower, pp. 100-102, argues that Eiffel's statements were simply an attempt to justify an essentially useless object, which is to define the term "utility" in too narrow a sense as my discussion indicates.

¹⁵² Lockroy, Préface, p. xxiv; Morlaine, La Tour inconnu, p. 50. Eiffel, La Tour de trois cents mètres, p. 6; Picard, Exposition universelle 2:266, 292. A modern author, Luc Benoist, in Le Compagnonnage et les métiers, p. 7, refers to the central position of labor in the construction of the tower.

¹⁵³ Eiffel, La Tour, pp. 22-23; Picard, Exposition universelle 2:266; Giedeon, Space, Time and Architecture, pp. 275-283.

¹⁵⁴ See Eiffel, *ibid.*, p. 23; Harriss, The Tallest Tower, p. 40; and Giedeon, *ibid.*

¹⁵⁵ Harriss, *ibid.*, and Giedeon, *ibid.*, both criticize Eiffel for being too conservative in his choice of materials. Giedeon, an ideologue himself, and Harriss are judging the past on the basis of their own belief in progress. My argument is that the tower and Eiffel's choice of materials have to be understood as progressive within the context of the French economy of the 1880s.

¹⁵⁶ "L'Achèvement de la tour Eiffel," Le Temps, April 2, 1889, p. 2.

¹⁵⁷ The arches are not structural, but purely decorative elements. These references were apparent to contemporaries, witness both the letter of protest in Le Temps and an illustration showing the Tower between the Arch de triomphe and Notre Dame included by Eiffel in the plans presented to the Exposition committee (Harris, Tallest Tower, p. 15), as well as the illustration in Le Moderniste, 11 May, 1889, in which the tower is transformed into the figure of a nude Marianne holding a torch above her head in the midst of a fireworks display.

¹⁵⁸ This is the context in which Barthes, La Tour Eiffel, discussed the Tower's aesthetic.

¹⁵⁹ Préface, p. xxv.

CHAPTER III

THE CULTURE OF LIBERALISM: CRITICAL TOOL AND INSTRUMENT OF PROGRESS

Ferry se montre ici l'adepte de la doctrine du progrès indéfini qui avec celle de l'autonomie absolue de la personne humaine, va servir de support à une morale aussi bien conditionnée que celle des théologiens et pas plus arbitraire, après tout que celle de l'impératif catégorique.¹

Introduction

The Republicans were committed to the concept of the independent individual and to the integration of technology into productive activity in such a way that it enhanced the integrity of the individual. Their support for these ideals was not a mindless mouthing of the ideological baggage they had inherited from the philosophes. but a solution for adapting a particular economic infrastructure and its supporting social organization to new conditions of production introduced by the industrial revolution. The small producers who constituted the backbone of their constituency were threatened by the growth of markets for cheap, mass produced goods. The Republicans' concept of art as a commodity and a symbol provided them with a context for assessing the situation and offered them a means of dealing with it that respected the traditional values and mores of this group. Their ideology and their art theory were formulated to help them contend with a situation in which they and their constituents were very much on the defensive.

Identification of the Problems

The character of French industrial products was considered by the Republicans to be both an effect and a cause of the situation. In a general way the quality of design provided them with an index of the degree of confusion and conflict existing in French society, and it also gave them a clue to the source of the problem. As Antonin Proust's complaints about the incoherent tastes of consumers and procedures of producers indicate, they felt that neither group had a clearly articulated sense of what constituted an integrated social system, and, therefore, both lacked a common set of principles to guide them in defining the form they wished the product to assume.² The causes of this confusion had already been identified by August Comte in his Cours; but the Republicans went further to lay the blame on the industrial revolution.³ It was not simply technology that was at fault here, however. It was the manner in which technology had been adapted to production that undermined workers' personalities and confused consumers' judgment.

In particular the specialization of tasks associated with the new factory system was held responsible. The factory had transformed the working classes into two separate groups: producers and consumers, neither of whom had a complete and intimate acquaintance with the entire manufacturing process. The effect of the modern system of production on all parties was devastating, in Proust's estimation. Through specialization,

le plus grande nombre des ouvriers attaches à la confection d'un objet n'en connaissaient jamais qu'une seule partie et n'avaient point la notion de son ensemble.

As for the designers of the products, they

se trouvaient le plus souvent privés de la responsabilité de leur oeuvre . . . et n'étaient admis à participer aux récompenses . . .⁷

The patrons, managers, and investors, isolated from the whole realm of experience which the products of human labor embodied, failed to understand how the products they bought could be useful to them. Such individuals installed

dans une partie de cette demeure, dans ce qu'ils appellent leur galerie, des oeuvres d'art ou plus souvent encore des signatures des oeuvres d'art.⁴

In essence, this new system of production was blamed for destroying the working class's sense of community by cutting the lines of communication between producer and consumer. This no longer existed a shared sense of how the intensions and efforts of the producer and the consumer's interest coincided.

Translated into economic terms, this situation can be seen as removing any stable basis on which to judge the quality and quantity of labor involved in manufacture, and therefore, on which to determine the fair price of goods. Herein lies the basis for the Republicans' criticism of objects that copied styles of the past or that relied on "trompe l'oeil" effects for their appeal. These designs were the result of "un art faux et gourmet," that denigrated the reality of the producer's experience in favor of an illusion desired by the factory owner and the consumer for self-serving ends. This false image

obscured the character of the materials, of the production process which transformed them, and of the practical purpose for which the object was intended.

Poorly designed, mass-produced goods were blamed for helping to worsen the situation. Lockroy measured the effects of industrialization in terms of the large number of people it put out of work. The working classes whom

. . . la multiplicité de la production, que la facilité des transports, que la création des machines, que l'acharnement de la concurrence condamnèrent aussitôt et d'une manière normale au chômage et à la misère!⁵

Proust held these goods responsible for the loss of markets for French manufactured goods and for the general decline in the French economy. Economic changes and psychological insecurity were seen as going hand in hand here. In an analysis close to that of Karl Marx, Proust described the effects of "la division du travail poussée jusqu'à l'infini,"

Cette fabrication a gravement atteint le travail purement manuel et presque complètement sacrifié la personnalité de l'ouvrier.⁶

The end result of industrialization was a breakdown of the community into a group of isolated, egotistical individuals. Thrown back on their own resources, they let themselves be guided by what Ferry termed "l'intérêt personnel." It had particularly affected the attitudes of businessmen, investors, managers, and artists, leading them to protect their own positions and maximize their profits at the expense of the working masses. Lacking that cultural and conceptual framework that tied all citizens together into a productive community where division of labor was by profession and metier, they were driven by a

grasping commercialism and a certain vanity that downgraded the value of the workmanship and the integrity of those who made it.⁷

Ferry's comments on the artists exhibiting in the annual Salon provides a good example of the Republicans' feelings on this situation. He felt

ce besoin de grande et large publicité, qui est la fondement première de toute renommée,

had driven artists exhibiting there to give up their interest in improving the design and execution of their work.⁸ Uncontrolled speculation combined with self-protective organizations were economic manifestations of the loss of self-control and social purpose which industrialization had caused; and both tended to reinforce its divisive effects.

The problem was clearly how to reverse this relentless movement towards social entropy, and related to this how to resolve the causes of what was commonly called at this time, the "social question." The answer involved deciding on an appropriate way to apply science and technology to production. The Republicans were not the only ones aware of the impact technology was having on French society, nor were they alone in their concern for counteracting its effects. A number of solutions were proposed, all of which were rejected by the Republicans on the basis that they undermined the fundamental premise of liberal democracy: the economic and intellectual autonomy of the individual.

Socialist programs calling for the government to minister directly to the economic needs of the working classes were felt to place the state in a position of being a vast paternalistic system. Posing his

views in the form of a rhetorical question, Ferry turned down a proposal from the reestablishment of national workshops as a buffer against the onslaught of industrialization in the Parisian building trades for the reason that they simply put off the time when individuals would have to face the reality of the situation on their own:

. . . serait-ce un bon remède, un remède approprié au mal que de substituer à l'atelier privé, qui se liquide par la force des choses, un vaste atelier national qu'il faudrait bien liquider quelque jour?⁹

In sum, the Republicans considered the proposals of the socialists impracticable and dismissed them with a few comments. The same was true of their attitude towards the proposals of the Proudhonian anarchists for the elimination of pauperism.¹⁰ Instead, it was the efforts of industrial capitalists to resolve the problem of alienation by extending their influence into the ranks of the working classes that drew the Republicans' attention and their most vehement criticism. From this quarter came the greatest threat to their political and economic position.

The Republicans were profoundly aware of the changes in the economic organization of production made possible by the technological revolution, particularly the formation and spread of large-scale manufacturing enterprises, and the general movement towards corporate forms of organization at the higher levels of management and finance. The concentration of the means of production and distribution and the growing division of labor were well suited to this form of organization that existed primarily for the purpose of making profits for its investors.¹¹ It gave investors an edge in the market place, enabling them

by its special legal status to maximize production and minimize competition from small businesses and independent producers. The extension of the "corporate regime," as it was called during this period, into the ranks of the workers through owner and church-directed unions offered them protection against technological change and competition in the labor force.¹² Certain theorists, most prominent among them Albert de Mun and La Tour du Pin, looked to this form of organization as the model for a new social system that would complement the modern system of production.

Before discussing the specific objections which the Republicans had to corporatism, it is necessary to explain that they associated this form of organization with the social and economic values of the Catholic Legitimists, who by the end of the decade would become the backers of the new right. If in their own ideology, political economy played a significant part, the Republicans' antagonism to their opponents on the right can be better understood when the Legitimists are considered to be proponents of another system of production and consumption in which the concept of the individual in society was entirely opposed to that of the Republicans.¹³

At the beginning of the period under scrutiny here, the relationship between Legitimist political, aesthetic, and social ideals and the factory system of production was strongly stressed by the Republicans. While Republican concern with political economy remained constant throughout this period, by the end of it, they tended to emphasize their role as champions of one form of lifestyle which was opposed, morally, aesthetically, and economically, to the corporate one. Only

veiled allusions to the existence of political opposition appear in their later remarks, particularly in the comments made about those responsible for interfering with the plans for the 1889 Exposition.¹⁴ The Eiffel Tower controversy was only one episode in the continuing confrontation of two cultures in which aesthetic values subsumed political and economic ones. The conflict between the members of the Société des artistes français, most of whose leaders were members of the Académie des Beaux-arts, and the organizers of the art exhibitions at the 1889 Exposition was another.¹⁵

In their assumption that a coincidence existed between the economic and political interests of the directors of large corporate enterprises in France, the Republicans were not mistaken. At the study of Robert R. Locke on the Legitimists has shown, there was indeed a close association within this political group of the old nobility, the church, and the major stockholders of large-scale industrial enterprises. This group considered uniting producers into one corporate system as the most efficient means of adapting technological discoveries to the production process and of acclimating the working classes to them.

. . . the industrialist sought not only to build a community but also to develop in his workers a corporate spirit. In the social context of the modern factory, nonfeudalism was just as pertinent economically as laissez-faire ideas about a free and uninhibited labor supply.¹⁶

Legitimists accepted the existence of the proletariat and placed primary emphasis on exploiting their labor for mass production ends. As for skilled laborers and artisans, they were offered a privileged position that gave them economic security in return for their allegiance to

the directors and the Church. The "syndicats mixtes" composed of skilled laborers, clergymen, investors, etc. proposed by Albert de Mun and a number of large shareholders in corporations, Legitimist deputies, and the Catholic church were in part meant to alleviate the poor economic situation of skilled laborers, but also to defuse their growing antagonism to the factory owners and non-working members of society by guaranteeing them the patronage and protection of these wealthy men.

This protective form of labor organization seems to have been a natural expression of the social outlook and values of these elites. It was in an altered form even offered as a means of protecting artists from the effects of overproduction in the art market.¹⁷ On a number of occasions, the Marquis Philippe de Chennevières, Director of Fine Arts from the last decade of the Empire until the year after Ferry's accession to the Ministry in 1879, proposed certain reforms in the administration of the Salon which would have made it a closed corporation protected by law and financed by the state. Although not closely allied with the Legitimists, he believed in the corporatist form of organization as a means of keeping out unqualified artists. Openly critical of democratic institutions and of the formation of a culture appropriate to them, the Marquis wished to separate the artists from the masses.

J'entendais fonder une corporation aristocratique, basée sur l'élite et sur le mérite reconnu, sur l'élection des meilleurs par les meilleurs, et par conséquent maintenant haut le niveau des élus.¹⁸

Although he makes no mention of religion, his choice of words alone reveals the degree to which he felt artists of merit belonged to the ranks of an elect whose talents placed them in a realm above that of

ordinary human beings, from whom they needed to be separated in order to preserve their talents.

The Republicans saw this system of patronage as based on an ethos of profit and ease for the few at the expense of the many and of dependency and protection at the expense of useful innovation. For their part they preferred to support the broad spectrum of the working classes against corporate forms of organization which divided its members into two very unequal groups. It was in the depths of the recession of 1882-1886 that they mounted an open assault on their competitors to the right. Ferry warned against the economic and political menace of corporatism in a speech of 1884.¹⁹ Lockroy had already elucidated the basic criticisms in a long discourse to the Chambre in 1883, published afterwards under the title La Question sociale. In it his remarks were addressed as much to the artisans and skilled workers as they were to his legitimist protagonists in the Chambre, among whom were Albert de Mun, the Vicomte de Belisal, and the Comte de Maille Laroch-Joubert, all men tied to corporatist interests.²⁰

Lockroy centered his attack on the economic, political, and social consequences of supporting the business organizations which were under the direction of the Legitimist industrialists and the Catholic Church. He declared that they would lead to economic stagnation by encouraging a conservative attitude towards methods of production and design. Corporate organization would "immobilise nos procédés industriels," drive out "l'esprit de découverte et d'invention." He used a lesson from history to indicate the types of problems the Republicans felt would result from such abrogation of individual liberty.

Overlooking the differences between the organization of the old guilds and that of the unions proposed by the Legitimists, he claimed these organizations in the ancien régime

qui, sous le nom de ghildes, de corps de métiers, de maîtrises et de jurandes, ont cree une aristocratie ouvrière, ont fait du travail le monopole de quelques-uns, ont immobilisé nos procedes industriels, ont proscrit l'esprit de decouverte et d'invention, a tel point qu'elles ont mis l'industrie francaise pieds et poings liés entre les mains de la concurrence étrangère; qui, pénétrés de l'esprit de caste comme l'aristocratie, la monarchie et le clergé, par lesquels elles étaient exploitées d'ailleurs, ont livre le restes du peuple à la mendicité et à la misère!

Support for these syndicats and for corporate enterprise was simply one more step, he warned, towards the reestablishment of a feudal social and economic order controlled by "les capitalistes chrétiens." In the extension of this system he saw a return to the corporate system of the pre-revolutionary period, now modernized and updated.

In other words, in seeking solutions for their economic troubles in traditional institutions, vested interests among the working classes would aggravate existing social and economic problems and at the same time help to undermine the foundations of political democracy to which they owed their newly gained social position.²¹

From Lockroy's remarks, it can be seen that the Republicans identified corporate capitalism with a certain kind of material culture, one which cultivated selfish desires, while at the same time downgraded the moral value of work. To Republicans the moral code of the corporationists was a cynical one, that made overseeing workers a right of the few and labor a fact of existence for the masses. Believing that man was born corrupted and was saved independently of his labor or personal

integrity, the Christian capitalists had no anxieties about self-indulgence and no qualms about exploiting the workers.

Lockroy's remarks have some basis in fact. As Robert Locke points out, although these industrialists had no knowledge of an little interest in human psychology and the effects which changes in environment had on individuals, they were well aware that a market for goods which satisfied human sensuality existed and were anxious to cater to it.²² They did not, however, appear to have developed an aesthetic ideal expressive of their social, political, and economic system; nor did they mount an organized campaign to cultivate the public's taste for physically sensuous experience. The Minister of Commerce's claim that they did must be seen as setting up a straw man, as identifying a group on which he could pin the problems of the working classes. The Legitimists also offered a foil that allowed him to give greater dramatic relief to the Republicans' solutions to the technological revolution.

Translated into the terms of aesthetic values and the aims of production, Lockroy characterized the corporate system as one supporting the production of goods designed to please the tastes of an elite of birth and wealth who had no need to work for a living. If they sought to produce for the masses as an outlet for their increasing supply of goods and a new source of income, it was to the human desire for diversion that their products appealed. By separating the activities of work and pleasure, making the former simply a means of earning money to pay for the latter, the corporate system turned pleasure into escape from the concerns of everyday life. The pursuit of pleasure was in the

minds of these capitalists and those who supported the corporate system, unconnected with morality and utility. Its ethos, as Chennevière's statement that art was an aristocratic endeavor indicated, dictated that making and appreciation of art were purely pleasurable endeavors. In their attitudes, the corporate capitalists were much closer to the romantic liberalism of Saint-Simon than the Republicans, who regarded the separation of work and pleasure as damaging to the individual's self-respect and to the unity of society.

So far as the Republicans were concerned, the liberalism of this group was really libertinism; a willingness to indulge the senses and emotions of individuals at the expense of their rational faculties. To the Republicans the "capitalistes chrétiens" were purveyors of a false vision of reality, of a totally irrelevant and socially dangerous fantasy world. They subverted the morally affective power of art and of work, and through the products of the artists and laborers who worked for them, the values of the entire population. This attitude helps to explain the Republicans' criticism of products which were incoherently designed, unintegrated into their settings, overtly sensuous or based on a false unionism.²³ In attacking such objects they were trying to discredit the system which produced them and discourage the working classes from making or buying such goods. Hugo had openly attacked this corporate system in numerous criticisms of the Church, the monarch, and the aristocracy: but he also exposed it at the level of its culture. In his remarks to Alfred Barbou at the end of his life and most cogently in the Légende des siècles his vivid descriptions of the objects in the dining room where Euiradnus awaited the two

traitors evokes both the sensuous attraction of metal armour made to resemble flesh and the moral repulsion which his reason caused him to feel against his false beauty.²⁴ In his indictment of the corruption of the materials harbours a criticism of the craftsmen who made the objects, of the client for whom they were made, and of the social order which condoned such exploitation.

Jules Simon, for all his political and religious toleration, agreed with Hugo's castigation of the egoism of the ruling classes in corporate society. If in the past, Simon stated, they had built for themselves sumptuous palaces, the lodgings of their servants were always "étroit, incommode, inhabitable." Such contrasts he felt were due to a disdain for the laboring masses on the part of the rulers or of the artists who worked for them and who had imbibed their values.²⁵ In the modern period this lack of concern for the common man persisted. Although Simon noted that goods were being produced which the worker could afford, their designs imposed the values of a wealthy elite on the poorer classes. To design wall paper to resemble woven tapestry, Simon argued, was to cultivate admiration for the lifestyle of a privileged class among the workers. The possibilities for playful fantasy existing in the contrast between the reality of the paper and the illusion of tapestry were to him an immoral diversion. Such false luxury led the consumer to forget where his true interests lay, and it made the designer an accomplice of the corporations in corrupting the population. For the consumer, whether worker or artist, it was imperative to be "ce qu'on est." For the designer, as a man of the people, there was, therefore, "une nécessité et un devoir de la franchise."²⁶

Not only did corporate capitalism disseminate a culture which was aesthetically inappropriate to the life of the working classes, but the Republicans felt its culture exploited the population economically by stimulating a desire for such goods. Lockroy was extremely critical of the social economist Frédéric Le Play's ideas for the establishment of permanent expositions of manufactured goods and new technological processes. Not mentioning the fact that many of the strongest supporters of these ideas were drawn from Legitimist ranks, he expressed the view that such projects were unacceptable because they necessitated continuous growth in consumption. Behind Lockroy's criticism lay his fear that continuous exhibitions would remove the spiritual character with which the universal expositions stamped production and consumption. Corporate industrialists would thereby remove the moral restraints and satisfaction created by work (that is the psychological reinforcements of economic individualism), opening the door to the establishment of a feudal social and economic order. This system would lead to illegitimate increases in prices and dispense with the economic controls on production and consumption which periodic exposition under government tutelage were thought to exercise. In sum, the effect of unchecked corporate enterprise would be to upset the stable relationship between labor and prices on which Republican liberal economics and democratic politics depended.²⁷

The Republicans also objected to such unrestrained speculation because it was unconcerned with the quality of the product's design and construction. Here again they focused on the product as the tangible element on which to hinge their argument. As the primary motive for

production, the search for profits overrode the possibility of building self-confidence and social solidarity through production and exchange. The legitimate basis for profits, according to Ferry corresponded "soit à une invention, soit à un perfectionnement, soit à une meilleure organisation commerciale ou administrative."²⁸ The legitimate basis for increasing wages, he argued, rested on similar types of contributions from the workers. Profit making as an end in itself could destroy the confidence of the public in the producers and in the lasting benefits of the scientific and technological revolution. Conversely, there existed the implied fear in the Republicans' denunciation of speculation that the public would come to demand products which provided immediate gratification. They would develop a base sensuality that subverted the function material culture ought to perform.²⁹

In short, the Republicans worried that due to the possibilities of mass production, the public was introduced more directly than ever before to the cultural values and habits of the aristocracy and encouraged to adopt their life-style, buying habits, and their social system at the most intimate level. Corporate capitalism seemed to them to threaten the very economic and social foundations of liberal democracy.³⁰

The Republican Solution

The Republicans' response to this situation was to offer their ideology as the means whereby industrialization could serve Republican democracy. The new system of productive relationships it established would gradually erase social conflict and fractionalism without

compromising individual liberty. Accepting the inevitability of industrialization, they opted for a special way of adapting these innovations to modern production that would not undermine the personality of the workers.³¹ They laid the major responsibilities for this adaptation on the skilled workers, artisans, and independent artists, that is on those members of the working classes whom they felt were least corrupted by the economics and processes of mass production and who were most threatened by the technological revolution.

Rather than reject technological progress, they sought to induce workers to develop a well designed product that could be manufactured through a rational process that did not undermine the maker's personality. By creating such products they could develop a market for their goods which would make the public dependent upon them for the satisfaction of their material and emotional needs. In this way, the disruptive tendencies of the factory system would be kept at bay. The very existence of a liberal democratic political system provided the working classes with the primary prerequisite for carrying out this aim.

Much of their writings and speeches on the social question were concerned with elucidating the moral, economic, and social benefits accruing to their concept of production. The entire section of the epic Légende entitled "Vingtième siècle" is a paên to the individual's ability to achieve a new moral stature and a new relationship to his fellow men by placing science and technology to the service of liberal democratic ideals.³² Lockroy praised this system which guaranteed the buyer "d'honorabilité dans l'exécution et de sévérité dans le contrôle," satisfying the emotional and intellectual needs of producers and

consumers while maintaining a high level of quality and keeping prices down.³³ The aesthetic character of the product itself offered an objective criterion available to both parties on which self-confidence and mutual trust could be built.

Given the correspondence between economics and science in their ideology, the aesthetic and moral value they placed on economy of means and ends can be seen to have been tied to practical economic ends. Cutting down on the amount of materials used, maximizing the results of the worker's efforts through efficient methods, were ways of ensuring that the producer would be satisfied with his work and the consumer would get his money's worth. This was the basis of their reasoning that Republican values would have real economic benefits for France, complementing moral and social effects. All French citizens would profit materially from products developed through the free exercise of individual initiative guided by Republican ideals. In his description of the economic benefits which the exiled artisans of the Commune had brought to their Belgian, German, and British hosts, Lockroy elevated the talents of independent workers familiar with technology to the level of national economic assets. Chastising the Legitimists for voting against amnesty, Lockroy noted in his 1876 speech to the Chambre that the value of these men needed to be recognized and cultivated.³⁴

The suggestion that the Communards' political beliefs may have been a positive factor in their professional accomplishments should not be overlooked. Lockroy clearly indicated that they were liberal Republicans whose ideology had a great deal to do with the attractive nature of their products and the success they enjoyed. In this sense,

their achievement was as much an example to the working classes as to the French public of the power of Republicanism.³⁵

The same sort of proof of the viability of such production methods and goals was offered by Proust in his 1882 Salon review. Written for the general readership of the Gazette des Beaux-arts, much of what he says about Gustave Courbet and Pierre Puvis de Chavannes in this article seems to have been addressed to artists and craftsmen in particular.

Certain artists, but especially Puvis de Chavannes and Gustave Courbet, were significant personalities, he felt, because they had broken with conventional modes of representation and composition and with the closed corporate system that perpetuated worn out formulas and economic dependence. Striking out on their own, they had been guided by empirical experience and a strong sense of what it was they wished to accomplish. Puvis asserted his liberal values not only in his art, but by exhibiting in galleries of private dealers instead of the Salon Annuel.

A cette époque, le Salon lui était fermé. Et l'on riait devant ses oeuvres presque aussi fort que devant les toiles de Courbet. Ce dernier passait pour un fou furieux. M. Puvis de Chavannes était considéré comme un fou tranquille. L'un s'adressait à la nature, voulant la conquérir toute entière, l'autre ne lui empruntait qu'une note à la fois, . . . ce que l'on est également forcé de reconnaître, c'est que l'allure générale de la composition est le plus souvent d'une incomparable grandeur et qu'elle est toujours juste. Quand un artiste montre à un tel degré une qualité de cet ordre, il est vraiment hors de pair.³⁶

By asserting that a direct relationship existed between the productive behaviour and the type of product, and by rewarding the fruits of such initiative and sacrifice with commissions such as that for the

Pantheon given to Puvis, the Republicans in effect offered the public proof that productive activity along the lines they advocated would result in an improved product. Such a product would compel social recognition and win public support and markets for those who practiced this method.

To these proposals for insuring individual liberty must be added Ferry's views on their efficacy in controlling the spread of the corporate regime.

Les contrepoids, il est d'une part dans une action croissante de l'opinion, agent de la morale sociale sur les chefs industriels . . . Ce contrepoids est, d'autre part, dans l'organisation collective et éducation croissante des masses ouvrières.³⁷

In reality these two controlling forces were seen by the Republicans as being united in the productive activity of the workers. They could check the power of corporations by developing a counter-culture of their own because they could shape public opinion and, therefore, buying habits, through the design of their products. That is, the production of goods whose design expressed the fact that they were economical, well made, useful, and meaningful to the worker would help to instill his liberal democratic values in the minds of the buying public. The Republicans not only claimed to offer labor a means of dealing with the problems industrialization caused them, but gave them an important role in helping to form a new set of economic relationships which would lead to a new social equilibrium.

The significant position of the product in their ideological system becomes fully understandable when it is realized that it provided the major vehicle through which the Republicans could convey their

values and economic ideas to the workers. The metaphors of architecture and construction vividly convey the nature of an interlocking system of working relationships in which a clear hierarchy of independent functions existed. At the top the Republicans placed themselves, then the industrial designers, engineers, artists, and architects responsible for inventing the appropriate designs and structures. Below them were the skilled laborers and artisans who were to adapt these forms to their materials. At the bottom were the proletariat who produced the raw materials and the multitude of copies based on these original designs. Horizontally, labor was to be organized into groups of independent producers of equivalent levels of ability.

As an alternative to the syndicats mixtes organically integrated into the corporationist order, they offered the syndicats professionnels and the unions ouvriers which mirrored the organization of the modern production system, but allowed workers to organize themselves into a functional system of working relationships that gave them autonomy and a sense of their common interests. The workers could counter the alienating effect of the factory system through their own efforts. The 1884 law permitting labor to form syndicats professionnels and unions, in which the various types of syndicats were to be joined in a manner close to that of the modern AFL-CIO, was intended to encourage workers to do just this. As Lockroy described it, the law

consiste à créer des associations libres, des associations qui donnent des droits égaux aux patrons et aux ouvriers. Nous pensons que de cette égalité doit naître, doit surgir plus tard la conciliation . . . alors que l'honorable comte Mun voit la solution de la question sociale dans le monopole et dans le privilège, nous la voyons, nous, dans la liberté et dans l'égalité.³⁹

It was a system of ranking determined partly by merit and partly by the degree of intellectual autonomy associated with the task. It was a system which allowed individuals the right to find their own place through merit and risk taking. And it was also a system which gave the most highly educated and talented members of the working classes, those whom industrialization tended to make superfluous, a position of moral and intellectual authority over the proletariat. Ironically, their right to this position, and to economic and moral superiority, derived from the very factor which machine technology downgraded: their sense of social utility arising from their skill. The other members of this system were to receive their sense of identity from their awareness of the total economic order to which they were contributing through the very act of production.

Some ambivalence existed in the Republicans' minds concerning where the lines for the upper echelon should be drawn, and part of the problem arises from their conception of the fine artist. Proust in speaking of the unity of the arts implied that in applying Republican ideals to the development of new designs, artists separated themselves from and placed themselves below the level of writers and philosopher-politicians who dealt with ideals on a more abstract level.⁴⁰ Yet at the same time the affective power the Republicans attributed to designs and their reliance on material culture as the vehicle for social reform placed the artist in a superior position to themselves. Clearly, they had not fully reconciled the craft status of art with its intellectual possibilities, an inconsistency which could lead to problems in the relations between government and the artistic community.

The Republicans' proposal to the workers also required that the latter accept certain responsibilities. Republicans did not offer a panacea and clearly stated that their proposal would not release the workers from the need to struggle. It was a two-edged sword, in that the prestige and independence to be gained entailed accepting science and technology as the givens of modern existence. It also necessitated the workers' engagement in a struggle to innovate for more rational production. Meeting the challenge of technology required long-term efforts. As Ferry with great candor told the deputies in the Chambre in 1884:

. . . il est permis de rever une société mieux organisée que cette société de bataille et de concurrence qui est le nôtre, une société plus fraternelle; mais aucun de nous, messieurs, ni aucun de ceux qui nous succéderont ne verra même le seuil de cette terre promise!

Moreover, daring and a willingness to continually innovate were required of workers in order to set the standards for the rest of society.⁴¹ Compensation for such efforts would come as much from a sense of satisfaction at having accomplished a particular task as from having encouraged someone else to share in the result by purchasing the product. If as Ferry put it, ". . . la seule base de la réforme sociale repose sur l'activité, sur l'initiative, sur la prévoyance individuelle," the end result would be the formation of a unified society, an integration of individuals into one great cooperative social system ceaselessly being improved as they improved their products.⁴² As the workers became more socially responsible in production and

accepted the risks and struggle of change, the Republicans argued, they could be the engine of their own salvation and that of the country. Republican ideology, thus, offered a way of counteracting the feelings of alienation wrought by industrialization.

They augmented their argument by lifting the struggle to an heroic plane. "La lutte pour la vie" became a wrestling of psychological forces within the individual, a new kind of moral battle between the individual's desire for self-esteem and his egotistical need for security at any cost.⁴³ The machine had separated humanity from the sphere of nature and had placed man in a context of his own making. It was up to individuals to mold this sphere to their own positive ends through their labor. They, therefore, cast technology in the form of a new means of testing humanity's mettle, and offered as a weapon in the struggle to shape it, the scientific method and scientific knowledge of the principles governing the universe.⁴⁴

The struggle against the incursion of corporate capitalism was another factor with which the individual had to contend. Unlike the effort to keep his own greed in check, the Republicans viewed corporate capitalism as an element external to him, but appealing to human weaknesses and undermining the inclination for economic and moral independence. By fighting his impulse to make easy profits, on the one hand, and to indulge himself physically and mentally by yielding responsibility for his fate to the corporate managers on the other, the individual could more clearly develop his consciousness of his true interests and the means of attaining them. The benefits of this self-generated equilibrium of contradictions and competition forces were

akin to those which Proust felt had issued from the quarrel between the partisans of the Romantic and Classical schools of painting in the nineteenth century:

. . . l'approfondissement des sujets, l'ordonnance réfléchi, la plénitude dans la composition, l'intensité de l'expression. . . . la liberté de l'imagination et de l'observation, une intelligence plus vive et plus rapide des réalités immédiates, un respect grave et sympathique pour toutes les manifestations physiques et morales de l'être humain à tous les degrés de conscience et de culture. Ce qui nous reste d'ailleurs, c'est cet amour puissant, général, indestructible, de la sincérité, d'est cette honnêteté consciencieuse de l'étude et du travail . . .⁴⁵

They were benefits which improved his sensibilities, his intellect and found lasting expression in his product, honing them down into a harmoniously organized design, clarifying and reifying them.

In adopting this system, the individual would have the support of the government in two important ways, neither of which directly impinged upon his independent status. First, the government would encourage individual initiative and, secondly, define the channels and methods into which it ought to be directed. It was a form of association which Proust described as excluding

. . . toute pensée de direction dans le sens étroit du mot, mais qui exige une collaboration étroite, une sorte de pacte de confiance entre l'action publique et l'action privée.⁴⁶

This important modification of classical liberalism meant that it was up to the government to establish an environment conducive to the improvement of French products. Officials in effect assumed the position of national tastemakers. In this capacity they defined the proper aim of production as the improvement of human existence, that is aesthetically bettering the physical conditions in which the general population lived. All products which did not fulfill such requirements were

useless and even dangerous. Hugo rejected out of hand the application of science to technology in order to conquer space because it was a dehumanizing effort. "Tout autre rêve altière/L'espèce d'idéal qui convient à la terre." He preferred to see the balloon as a real and metaphorical image of the ideal structure that constituted the basis of a better life for mankind. Its form, which allowed it to overcome the forces of gravity and convey one human to another, found a parallel in man's new social order which allowed him to conquer ignorance, hatred, and absolutism.⁴⁷

In essence the Republicans presented the public, and especially the workers, with an image of a special type of ideal order, natural to man because he had invented it and could control it through the use of his reason acting in the interests of his needs. The achievements of their favorite artists and engineers testified to the possibility of putting this mechanized world in the service of those who designed the products, manned the machines, and purchased their output. The dynamic equilibrium which constituted the end product of their system was built out of and maintained by the energies of individual producers and the exchange of their products. The sense of fraternity which this exchange engendered in the population would arise out of the harmony achieved in the design of such products.

The Republicans placed this struggle in an historical context, giving it epic proportions and a pedigree which helped to justify their ideology. Like their intellectual ancestors, Diderot, Turgot, Condorcet, and Comte, they conceived of history as an ongoing process towards a future social ideal.⁴⁸ Unlike their predecessors, however,

their view more openly affirmed the role of economics in historical change. In particular, it was the working classes who constituted the focal point in historical change.⁴⁹ They saw them as engaged in an ongoing process of liberation dating back to the beginnings of time, but having its most recent impulse in the second half of the eighteenth century. The main thread of Hugo's Légende is the struggle of the laborer to free himself from the tyranny of his own nature and from tyrannical governments which exploited him economically through innovative production. The poem begins with man imprisoned in a pile of rubble, from which he painfully escapes in his first formative act, and charts his moral growth through the process of his growing self-consciousness, won through a continuous development of his material culture and battle against external authority.⁵⁰

They made the impulse to produce according to the dictates of one's own conscience the motor force of historical change and "progress" for workers. Here the product itself played a central role. The inclusion of the natural motifs in the decorative objects in Hugo's "Salle à manger," not only strike a different and novel note in the decor, but foretell the advent of Eviradnus and an era of political liberation for those who fabricated the objects. The image of his face appearing out of the corrupted armour is a metaphor for the same kind of transformation which the individual can effect in his own environment.⁵¹

Viewing the past from the perspective of the present, they presented the cultural achievements of the Greeks, the medieval period, the Renaissance, as not only expressions of the innovative marriage of

reason and sentiment, but as the direct consequence of social systems in which labor enjoyed a certain amount of economic liberty and social prominence. The achievements which these systems made possible took on the dimension of proofs for the Republicans' argument that economic and intellectual liberty were essential to the well-being of the workers and, therefore, of the Republic.⁵²

The economic institutions developed by the workers during these periods enhanced this liberty, helping to cultivate the natural impulse towards positive social change which this class possessed. As Ferry told the Chambre in 1884:

Où, parmi ces artisans, où le travail et le talent humains avaient la primauté, les corporations . . . ont eu leur rôle historique. . . . Elles ont été libératrices au moyen âge . . .⁵³

Economic institutions, however, he felt were only vehicles developed by groups of individuals to enhance their independence. As such, the guilds and corporations developed in the Middle Ages for example, were means of protecting the liberty of artisans, and they allowed the natural impulses of this group to flourish. But in the seventeenth and eighteenth centuries, declared Simon, Lockroy and Ferry, the situation changed. These corporate societies had begun to hinder individual initiative and innovative tendencies by restricting membership, imposing quotas, trade barriers, and requiring that products be manufactured and designed according to "formules officielles."⁵⁴ Such institutions had finally come to serve vested interests rather than those of the working population as a whole. Simon stated that this corporate system with its

lois, reglements, usages, qui sous l'ancien régime, interdisaient le travail, comme ignoble, à la portion la plus éclairée de la société, et les lois, qui sous prétexte de les patrons et les compagnons, l'interdisaient aux plus malheureux, avaient pour effet direct, nécessaire, de diminuer la quantité due travail national et la somme commune de richesse et de bien-être.⁵⁵

In the discontent of the manufacturing and commercial sector of society, the Republicans located the origins of the reform movement of the late eighteenth century. It was the technological revolution which gave it its real impetus and its humanitarian focus by offering those outside the corporate system the possibility of new markets, new jobs, and new outlets for innovative ideas. Ferry summarized this interpretation in his 1884 address to the Chambre:

Ce qui a fait disparaître les corporations, c'est la substitution civilisatrice, de plus en plus complète croissant d'année en année, de jour en jour, du travail mécanique au travail manuel.

From the moment machines began to be introduced into production, humanity was "condamnée à produire beaucoup."⁵⁶ Obviously a mixed blessing, technology had given these men on the fringes of the old production system an opportunity to tie their fortunes to those of the masses.

It was not the discoveries of Newton and the chemists concerning the nature of matter and the principles governing its interactions which had changed people's views of the social order. Technology had done this, the scientists were merely conforming eternal truths, Ferry contended. Furthermore, he stated that the economists of the eighteenth century had translated this scientific paradigm into terms which provided a framework for a new system of production and exchange in which the economy of the functioning of the natural world became the model for commerce as well.⁵⁷ Diderot, Beccaria, Condorcet, Turgot,

Voltaire, whose works the Republicans had studied carefully had taken this system and applied it to the world of production and government, developing its possibilities for perfecting French products according to a utilitarian model.

The efforts to reform French production and commerce beginning with "le grand oeuvre de Turgot et des assemblées révolutionnaires" were cited by Lockroy as the first steps taken to make these ideals a political reality and in so doing to give the independent producer legal protection from corporate enterprise and corporate privilege.⁵⁸

Essentially what the Republicans were describing was a change in the scientific paradigm as a result of changing mentalities in situations of material and social change. They felt that the philosophes' efforts at synthesis had appealed to the working classes primarily because they confirmed a truth about the workings of the universe which this group intuitively felt was congenial to their interests.⁵⁹ The new position of the arts, at the head of the new production system, was an expression of the realignment which technology had forced on the artists and craftsmen as well as merchants. The arts by providing new models for the design of products had furnished visual emblems of the conceptual framework within which the working classes were now committed to work. Art had in the words of Paul Mantz, writing in the volume Proust edited on the arts at the Exposition of 1889, lent this reform movement

. . . le secours de sa collaboration et le charme de sa parure.⁶⁰
In the quality and character of the artistic compositions of men such as David and his teacher Vien lay the seeds of the design for a new

social order supportive of "la liberté de travail."⁶¹ Even the 18th century idea of the unity of the arts and of the hegemony of the decorative principle to Proust expressed the integrity of the individual and his integration into a well-ordered society to which the reform movement was committed.

In their historical scheme, the nineteenth century had seen a continuation of the struggle for the independence of labor and a transformation of the terms on which it was waged. The art and architecture of the universal expositions confirmed that the independence of labor could be maintained through the concerted efforts of the working classes now politically liberated under the Third Republic. In this sense, the three hundred meter tower dreamed of by the businessmen and manufacturers who organized the first exposition in 1798 during the First Republic having become a reality in 1889 provided a kind of living proof that their faith in the power of labor to act in the best interests of society was justified.

A New Role for Liberal Democratic Aesthetics

This history of the progressive rise to prominence of the working classes and their culture gave a certain scope to the Republicans' ideology. It might be considered a means by which they flattered the working sector of the population into supporting them in office. Among their contemporaries and among modern scholars, the Republicans have been castigated for their "opportunism," for allowing business interests to dominate, and for manipulating the public to serve their own personal interests. Most recently, Elwitt has accused them of gross

economic self-interest, pointing out that Ferry's ties with the textile manufacturers in the North made it profitable for him and them to seduce the workers into cooperating with the capitalists who simply wished to exploit them.⁶² According to such an interpretation, the Republicans' translation of abstract concepts of democracy, liberty, labor, science, technology and utility into an aesthetic vision to which human labor gave material form would be simply an effective means of propagandizing among a largely unschooled population still close to the craft traditions and manual labor processes of pre-industrial society. It was a way of speaking to them in terms they could understand, of using the affective power of material culture to seduce them into seeking the solution for their predicament in the ideal of Republicanism. While such an explanation may have some truth in it, it fails to take into account several facts. First, that the Republicans had been closely allied with the working classes before the establishment of the Third Republic and before they had held any elective offices. Moreover, all of them, save Hugo whose identification with the workers began about 1830, had begun to formulate their ideas during the Empire, well before they held political positions of any power. Third, the degree to which aesthetic values are wedded to political, economic, and social ideals in their thought makes it difficult to see them as anything but a way of thinking which was natural to them and to the group as a whole. Finally, this explanation disregards the fact that they were addressing themselves to a broad segment of the middle classes, many of whom were educated and were engaged in the sale

and distribution end of production, rather than in just the actual manufacturing process.⁶³

It would seem then that the best way to understand the rhetoric and ideology is to approach them from the point of view of those for whom they were meant. That is to say, the terms the Republicans used were those traditionally used by the artisans and tradesmen working in the commercial world and which had been institutionalized in the rituals and legends of the Compagnonages and Free Masons.⁶⁴ The major values of the Republicans were those upheld by these groups. They included the importance of individual initiative and personal responsibility for one's work, the moral development of the individual through the perfection of the production process, the use of the individual's product to determine his social position within his profession and his moral worth, and a concept of community based on the interdependence of the skills of its members. Even though the membership of the Masons had evolved away from métiers involving manual labor, as business and professional men they had maintained these values and simply transformed them into virtues arising from the production of services and intellectual goods. This translation is in fact incorporated into their creed, which affirmed their ties to the building trades:

L'art opératif, la construction des édifices matériels ayant cessé pour nous, nous en tant que masons spéculatif, symbolisons les labeurs d'un temple spirituel dans nos coeurs, temple pur et sans tache, digne d'être la demeure de celui qui est l'auteur de toute pureté . . .

The particular meaning which the Republicans gave to the ideals of democracy, economic liberty, labor, utility, and commerce had existed in latent form within these groups for centuries. Even the

significant role which the Compagnons and the Free Masons gave to the product of human effort had strong parallels with the Republicans' views. The most highly perfected products were imbued with a sacred character so that moral and aesthetic values comingled to give them a symbolic power.⁶⁵ Here a word should be said about the role these perfected objects played in the rituals of the Compagnons and Free Masons. Known as "chefs-d'oeuvre," they were offered as a testimony to the maker's mastery of his trade. Traditionally, especially before 1789, on certain feast days these objects were paraded through the streets and brought into the cathedral. Here the conjunction of the perfected object with a sacred architectural setting and a social activity imbued with religious significance finds its parallel in the Republicans' concept of the international expositions as architecturally defined environments in which the most progressive fruits of human labor received the blessing of public acknowledgement. Even the Free Masons no longer having material objects to offer, admitted individuals into their ranks and advanced them on the basis of intellectual works. The accomplishments of their members were celebrated in secret initiation ceremonies, while during the Third Republic the achievements of great intellectual masters such as Voltaire often provided the central theme for civic festivals in which they participated.⁶⁶ Although in the Third Republic for many the state had replaced the Church as the main authority and the context was the modern commercial rather than the spiritual world, the ritualistic and mutually reinforcing character of the product's design, productive activity, and public fête were maintained because they were still considered to have social binding power.

These rituals and values of the working classes were crystallized into a few striking images which were central to the Republicans' ideology. Primary among them is the story of the building of Solomon's temple and of the architect Hiram, which forms the major myth in both *compagnonnage* and masonic lore. In it is found the basic concept of community which binds various types of laborers together, the high level of achievement which their cooperation makes possible, the important social position and function of artisans, and the hierarchy which exists within the crafts.

In the myth the temple assumes the status of a symbol of social order on which the structural form determined by the architect established the pattern of the design for the rest of the workers to emulate. The architect Hiram not only provides them with an ideal vision, but establishes the rhythms and patterns by which their productive behaviour will enable them to turn their own personalities into spiritual temples filled with a divine spirit. As in the Republicans' ideology, both the material and moral products of labor are conceived in terms of architectural structures. It was an expression of communal organization, providing a means of defining the intellectual and physical activity by which the community of laborers welded themselves together.⁶⁷

In addition to Solomon's Temple, one other architectural monument had a significant place in the iconography of the working classes, especially in that of the *compagnonnages*. The biblical Tower of Babel represented for the *compagnons* both the vanity of man striving to become the equal of God and the power men had at their disposal when they

cooperated with one another. Luc Benoist in his book on the Compagnonnages defined its meaning as

symbol ambivalent de l'entente des fils de Noë, qui ont commencé la Tour, puisque tout construction n'est possible que par l'entente parfaite des différents métiers. Mais symbole équivalent de la confusion des langues qui n'a pas permis de la terminer. En Chaldéen Babel signifie Porte du Ciel, symbol du chemin, jamais terminé, de la perfection.⁶⁸

The Biblical Tower of Babel represented for them (as it did for Hugo in the Légende) both the vanity of man striving to become the equal of God and the power men had at their disposal when they cooperated with one another.⁶⁹ If Solomon's Temple was a symbol of the perfection of which humans were capable, the Tower of Babel stood for continuous human effort to attain perfection through constructive acts.

The striking parallels existing between the terms of the Republicans' ideology and the lore and symbolism of the working classes are not fortuitous, but reflect the Republicans' intimate knowledge of working class culture. It was their own familiarity with this sector of the population, gained in part through their own family connections and through the experience of working closely with them during the Empire, and Franco-Prussian war, and early years of the Third Republic which probably accounts for their choice of terms. While Gambetta was in the countryside wooing the peasant, these men were deeply involved with the problems of the working classes who formed the major part of their constituencies. Hugo's concern for and identification with them since about 1848 is well known, as is his use of popular dictionaries and dictionaries of slang to find a vocabulary through which to communicate with this popular audience.⁷⁰ Although less well studied, the

activities of the other four Republicans also reveal their continuing interest in this sector of the population and sensitivity to its traditions, organization, and values. Proust had begun his affiliation with Baron Taylor and the group which had founded the Union Centrale des arts in the 1860s when these individuals (amateurs, publicists, and industrialists) had begun to encourage the fruitful union of art and industry in the wake of industrialization during the Second Empire. Ferry had not only begun his reading of Comte at this time, but wrote a number of articles on industrialization and spoke before the assembled members of the Société philotechnique. Simon published a major work on the social significance of labor during this period, and Lockroy began during the Franco-Prussian war and Commune the long association with the workers in the eleventh arrondissement, whom he was to represent in the Chambre for over twenty years.⁷¹

When the ties which Ferry, Lockroy, Simon, and even Hugo's ancestors had with the crafts and trades of pre-industrial France are considered, there is added reason to believe that the terms in which they formulated their ideology were a natural expression of a view of life which they shared with the working classes and which they imbibed as children. Lockroy's father was an actor and popular playwright. Ferry came from a long line of bell founders, who had risen to become local notaries during the Revolution, without relinquishing their commitment to the work ethic of their ancestral trade. Simon's father was a tradesman engaged in small-scale commerce. Only Proust's family background remains obscure. In Hugo's case, his paternal grandfather had been a shoemaker, and although he preferred to create a myth about his

origins, tying them to the noblesse de l'épée of the ancien regime, one senses in him the conscious effort to reassociate himself with his more humble roots after his spiritual crises in the 1840s by nurturing out of them a great tree of compelling universal truths. By presenting his feelings for the people as the humanitarian response of a sensitive, just, and altruistic individual, he allowed himself to identify with the people without openly admitting he was one of them by birth.⁷²

There are of course differences between the Republicans' ideology and the cultural symbols and values of the working classes. These differences indicate the way in which the Republicans felt the old system of production could be modified without sacrificing the ideals of individual liberty and democracy which industrialization threatened to destroy. They reflect the Republicans' familiarity with the ideas of progressive social thinkers of the enlightenment and the nineteenth century.⁷¹ The most important novelty advocated by the Republicans was the expansion of the concept of the fraternal group to include society at large. The community of the worker in pre-industrial France had been that of his métier and it had existed primarily for the purpose of encouraging his personal development through his work. Moreover, the ultimate judgment of merit came from one's peers, not from society at large. The Republicans proposed to extend the concept of community in such a way that the group to which one belonged by virtue of one's métier was part of a larger system composed of many groups, each of which had as its aim helping individual members to contribute to the welfare of society through their labor.

In order to achieve a democratic social order, the Republicans argued that a certain amount of innovation was necessary in production.⁷³ This was a requirement which ran counter to the tradition-oriented mentality of the French skilled workers, and, therefore, constituted another significant difference between the Republicans' terms and those for whom they were meant. Among the guilds and compagnons in pre-Revolutionary France, the concept of perfection was associated with refinement and embellishment of objects, rather than with formal invention. The chef d'oeuvre was more often than not a highly ornamented object in which a series of tours de forces testified to the creator's skill. The corporations, characterized by strongly hierarchical organizational structure and continual jealousies between masters, journeymen, and apprentices, tended with the passage of time to discourage formal innovation. By the late eighteenth century only the circle around the Free Masons whose members had broken away from the corporate structure and were known as "masons spéculatifs" considered invention and risk-taking virtues. The Republicans, fully aware of these historical developments, associated guild restraints with the moral corruption of the individual. As an alternative they proposed that the spirit which had motivated workers to form the guilds originally could find fuller expression and be more effectively exercised in the "syndicats libres." Lockroy, speaking in the Chambre in favor of the law on professional associations, argued that they would enable

. . . cet ouvrier, avec son énergie, avec son enthousiasme, avec sa faculté, avec son esprit de propagande . . .

to put his natural concern for the integrity of the individual and his entrepreneurial spirit to positive social ends. "d'où dépendent notre prospérité et sécurité intérieure."⁷⁶ These organizations would enable the workers to join their fortunes to those of the rest of society in the Republic. Ferry openly challenged the workers and businessmen of the Third Republic to join their traditional sense of independence and self esteem to "cette initiative" and "cette prévoyance" which constituted "la véritable principe," "la seule base de la réforme sociale."⁷⁷

From this perspective, the Republicans viewed science and technology as modifications of traditional Masonic and Compagnon concepts of the role of method and formal ideal in the production process. Ferry, in fact, made a point of noting the compatibility between the Masonic idea of productive activity and that of positivistic science in the address he delivered on the occasion of his initiation in the Order.⁷⁸ Science and technology were presented as a means of correcting old methods, generalizing and clarifying the character of the ideal without fundamentally changing the concept of labor. As Simon said of their value in production

On recontre des obstacles. La science leur applique aussitôt le principe de la morale stoïcienne . . . et transformer l'obstacle in instrument.⁷⁹

They in effect offered a guide and assurance to the individual as he moved from conventional modes and practices into a realm of intuited visions and possibilities. They provided him with a new grammatical framework into which his traditional vocabulary could be integrated.

To those engaged directly in the production of goods and services, it was an invitation to relinquish their traditional hermeticism and paranoia about the outside world and to make them aware of the contribution they did and could make to society at large. To businessmen and professional men it was an invitation to temper their search for personal profit in the name of the social good. By presenting their ideology as a logical modification of the values which these two groups had in common, the Republicans made it possible for those who created and designed products and those who distributed and consumed them to have a meaningful common ground on which to communicate with one another. The aesthetic dimension of their ideology was a natural form for expressing the basic sentiments and social ideals cherished by both groups. The purpose of bringing patrons and workers together was to overcome those divisive effects which industrialization had on them by encouraging them to see how cooperative effort could be mutually beneficial. By associating the pleasure communicated by certain designs with public utility and the design of the products with the character of fêtes, they offered the working classes the opportunity to raise their activities and values out of the personal sphere onto a public and sacerdotal level.

In essence, the Republicans' use of the traditional values and symbols of the working classes provided a coherent framework within which workers could conceive of how they might successfully adapt to industrialization. The fact that emphasis was placed on fundamental concepts common to patrons and workers was not so much a means of tying the workers to their employers, as of convincing both that their common

interest lay in producing and distributing goods which inculcated these essentially entrepreneurial ideals into the minds of the general public. By producing for themselves and for others like them, they would be spreading respect for the value of labor and individual integrity, thus securing the foundations of the Republic and their own liberty. Within the economic and social context in which the universal expositions were conceived and designed, they were a vehicle for the Republicans to demonstrate how the type of accommodation they favored between the old and new methods of production could help establish an equitable social order in which individual initiative subordinated technology to its own ends.

The construction of the expositions and the fabrication of objects to be displayed in the exhibits offered an opportunity on a limited scale for laborers and capitalists to cooperate in bringing to fruition an ancient ideal that had inspired humanity since Biblical times. The result of this cooperation was the creation of a group of cultural emblems whose affective powers were to raise the prestige of the working classes and of their Republic in the public's mind and to stimulate a demand for French goods. More than any other monument, the Eiffel Tower was to prove to those responsible for its creation and to the general public that Republican ideology provided a viable solution to their economic and social problems. What had seemed only the dream of an ancient and more primitive society (in the sense of simpler in its production methods and less specialized in its economic tasks), had been transformed into a contemporary reality full of promise for the future. The Republicans in identifying themselves with

the working classes saw that their own fortunes were bound up with the ability of these groups to use this system of values to stabilize their own economic situation, to find a coherent framework in which to produce, and to develop a line of goods which were aesthetically compelling. In this way, their self-interest can be said to exist in so far as bettering the position of their constituents would improve their own situation.

There is, however, no doubt that the Republicans' arguments in support of their programs were based on a tautology.⁸⁰ This circularity was not entirely aimed at justifying the Republicans' position as social leaders. Instead it expressed a kind of historical and economic determinism associated with the processes by which the working classes had been the vehicle of their own rise to social prominence and by which the laws of the physical and economic systems had been revealed to mankind. If it were impossible to refute the truth of these laws, as Ferry claimed, it was equally certain that the working classes would eventually bring their productive activity into alignment with them. The historical process would come to fruition for the same reasons that Proust declared Gambetta's plan for the Ministry of Arts would someday be instituted: "parcequ'il est dans la force des événements."⁸¹ This form of reasoning was not so much a mechanism for justifying the Republicans' ideology in the eyes of the workers, as it was an expression of the basic contradiction which the Republicans perceived existed in the condition of the working classes and of the way to resolve it. It takes note of the differences between reality and the ideal, between wishing for something to be so and the effort required to make it so.

Ferry and Proust's comments bear ample witness to this conflict and to the need for faith on the part of the independent producer that he could resolve these contradictions through his own efforts.

If in the eighteenth century, the freeing of labor and commerce was seen by the intellectual ancestors of the Republicans as a way to break the economic and cultural bond tying the working classes to the aristocracy and to allow the former to produce for itself, in the 1870s and 1880s, the Republicans were fighting to get the working classes to maintain their commitment to their own interests in economically adverse conditions. The ideal they held up was one now on the defensive. To continue to serve it, forced the individual to hold out against the corporatism and the self-indulgence in cheap, mass-produced pleasures.

Various historians, including Alfred Cobban, have declared that liberalism died with the Revolution, that politically democracy, with its aggressive assertion that the will of the people should prevail, placed governments at the mercy of human self-interest.⁸² In this context, the Republicans would have to be described as trying to whip a dead horse in asking the population to exercise self-control and see their best interests and those of the nation as intertwined. However, under the circumstances in which they formulated their program and propounded their ideology, it seems more reasonable to say that the Republicans were marking out a new role for liberalism. They made it a moral and economic balancing force, equilibrating the two opposing tendencies in modern society: anarchy and corporatism. The ideal they

expounded and wished to be given a material existence was less one they believed would prevail as a general rule in the future, than an assertion of the sentiments which were still alive among a large sector of the working population. Getting these individuals to produce products according to the prescribed methods and ideals would reconfirm their commitment to their ideals and to the Republic. Moreover, it could influence public opinion in favor of such values, and thus create a growing market for them. In so doing the corporate system of enterprise and the factory system of production would not be destroyed, but their growth would be held in check.

By swinging the allegiance of the artists and craftsmen over to the working classes, the Republicans hoped to put their talents in the service of developing attractive new designs for goods that would set the style for all manufactured goods, and thereby, in the process of creating new demands, influence the moral values of all consumers. The independent artist and craftsman would be given a new function in modern industrial society, that of keeping humanistic values alive through the innovation of meaningful designs, of a visual language which kept abreast of technological and scientific developments. Their art would not only affirm these values, but act as an indictment of those products which did not embody the proper aesthetic and moral qualities.

The new position of the independent producer was imbued with a certain heroism and also a certain poignancy. Hugo's balloonist soars above the earth, and in risking his life for a vision, separates himself physically and intellectually from his fellows at the same time he

is acting to assist them. It is in the product, rather than in social intercourse that the creative individual and the public meet, communicate, and reach new levels of understanding. The material culture of the universal expositions for all its innovative qualities was ephemeral. In the exposed metal, ceramics, clear glass, chemically colored tiles, shaped with a new precision and placed together in the multitude of interlocking designs which human reason could invent, could be found both a celebration of the power of liberal ideals to provide a coherent conceptual framework for innovation and a testimony to the fragility of the harmonious synthesis which it had made possible.

In order to strengthen the commitment to the principles of liberalism among the working population, the Republicans, like d'Alembert and Diderot, looked to public education to "réformer sa manière de penser, ses sentiments, ses opinions et ses mœurs . . . d'une manière profonde."³³ Not unexpectedly they gave a prominent place to art and aesthetics in their curriculum. Just what part art and aesthetics played in their educational theory is the subject of the next chapter.

FOOTNOTES

¹Maurice Reclus, Jules Ferry (Paris: Flammarion, 1947), p. 17.

²Antonin Proust, "Le Ministère des arts," pt. 2, Revue politique et littéraire, 25 February, 1882, pp. 235, 237.

³See Auguste Comte and Positivism: The Essential Writings, edited with an introduction by Gertrude Lenzer, (New York: Harper & Row, Harper Torchbooks, 1975); pp. xxxiii, 349; Louis Legrand, L'Influence du positivisme dans l'oeuvre scolaire de Jules Ferry (Paris: Librairie Marcel Rivière et Cie., 1961), p. 35.

⁴"Ministère des arts," pt. 2, pp. 235, 237.

⁵La Question sociale: Réponse à M. de Mun (Paris: Balliot, Questroy et Cie., 1883), p. 29.

⁶See Proust, "Ministère des arts," pt. 1, Revue politique et littéraire, 4 February 1882, p. 200; and Lockroy, Journal officiel de la république française, 17 May 1876, pp. 3344-3349. The quotation is from Proust, "Ministère des arts, 2, p. 235.

⁷Discours et opinions de Jules Ferry, Paul Robiquet, ed., 7 vols. (Paris: A. Colin, 1893-98), 6: 233.

⁸Ministère des arts, 2, p. 235.

⁹Journal officiel (Chambre des députés), 23 April 1883, p. 2010.

¹⁰Discours, 6: 197.

¹¹Ibid., 6: 226-227.

¹²Matthew Elbow, French Corporative Theory, 1789-1948: A Chapter in the History of Ideas (New York: Octagon Books, 1966), pp. 80-85, 97-107.

¹³See Lockroy, La Question, p. 29.

¹⁴Elbow, pp. 53, 89-90. Also Lockroy, ibid., and Robert R. Locke, French Legitimists and the Politics of Moral Order in the Early Third Republic (Princeton: Princeton University Press, 1974).

¹⁵See for example: Lockroy, Preface, in Emile Monod, L'Exposition universelle de 1889, 2 vols. (Paris: E. Dentu, 1890), 1: xxiv, xxvii.

¹⁶See the interpellation of Edmond Turquet, Under-Secretary of Fine Arts, in the Journal Officiel (Chambre), 19 May, 1880, pp. 5389-5390, and 23 April 1883, p. 2010.

¹⁷French Legitimists, p. 133.

¹⁸Philippe de Chennevières, Souvenirs d'un Directeur des beaux-arts, 5 vols. (Paris: aux bureaux de l'Artiste, 1883-1889), 3: 69-114.

¹⁹*Ibid.*, p. 91.

²⁰See Lockroy, La Question, p. 9 and pp. 5 and 29, as well.

²¹*Ibid.*

²²Locke, The Legitimists, pp. 114-117, 132, 143, 179-80. See also Elbow, pp. 48-49. This aspect of Le Play's ideas is not generally treated by modern economic theorists so far as I can discern from the Encyclopedia of the Social Sciences and from C. Gide and C. Rist's Histoire des doctrines économiques.

²³See Chap. 4 below, pp. 6-7; Chap. 1, "Democracy," and notes 44-52, 82c.

²⁴Victor Hugo, La Légende des siècles, Jean Gaudon, ed., (Paris: Garnier Frères, 1974), "Eviradnus," pp. 276-271; and discussion in Chap. 1 above and notes 44-52.

²⁵Introduction, p. 225.

²⁶*Ibid.*, p. 246.

²⁷Preface, pp. xxviii-xxx.

²⁸This theme runs through his public debates of the period. See Journal officiel, 17 May 1876; La Question, and "Les Artistes contre la tour Eiffel," Le Moniteur de L'Exposition de 1889, 20 February 1887, p. 514.

²⁹Discours, 6: 225. Also see Lockroy, Preface, pp. xxvii-xxviii.

³⁰*Ibid.*, 6:

³¹*Ibid.*, 6: 230.

³²*Ibid.*, 6: 233. Also see 6: 232-234.

³³See Lockroy, La Question, p. 31; Reclus, Ferry, pp. 135-136; and Chap. 3 in this section.

³⁴Lockroy, Preface, p. xxii.

³⁵Journal officiel, 17 May 1876, p. 3346.

³⁶Ibid. This is implied in his sly jab at the Legitimists. He noted that these men, working according to liberal principles of production, "qui vous cause tant de terreur ici en France, inspirent la confiance au Souverain de la Belgique!"

³⁷"Le Salon de 1882," Gazette des Beaux-arts 25 (1882): 543.

³⁸Reclus, Ferry, pp. 135-136.

³⁹La Question, p. 14.

⁴⁰See his remarks on his relationship with Ferdinand Dutert, designer of the Gallerie des machines in "Ministère des arts," 2, p. 233. Also see the article by Paul Bourde, "Chronique de l'Exposition: Pourquoi l'Exposition est comme elle est," Le Temps. 29 May, 1889, p. 2; and Ferry, Journal officiel, 23 April, 1883, p. 2010, and 23 June, 1883, p. 3126.

⁴¹Discours, 6: 233.

⁴²Ibid., 6: 214-200, 225.

⁴³Ibid., 6: 234. Also quoted in Theodore Zeldin, France: 1848-1945, The Oxford History of Modern Europe, 2 vols. (London, Oxford University Press, 1973), 1: 625.

⁴⁴Quoted in Monod, L'Exposition de 1889, 1: 599.

⁴⁵L'Art sous la République (Paris: Bibliothèque que Charpentier, 1892), p. v.

⁴⁶"Pleine ciel," La Légende, p. 787.

⁴⁷For a general introduction to the philosophe's ideas, see Frank Manuel, The Prophets of Paris (Cambridge, Mass.: Harvard University Press, 1962). The links between the philosophes and the Republicans are affirmed by the Republicans themselves: Lockroy, La Question, p. 5; Hugo, La Légende, p. 40 and "Pleine ciel;" Ferry, Discours, 6: 231-32; Simon, Une Académie sous le Directoire (Paris: Calmann-Levy, 1885). The influence of various philosophes' ideas on those of Ferry is explored by Louis Legrand in L'Influence du positivisme dans l'oeuvre scolaire de Jules Ferry (Paris: Librairie Marcel Rivière et Cie., 1961); on Victor Hugo by Pierre Albouy, "Raison et

science chez Victor Hugo," Cahiers rationalistes, no. 125 (1952), pp. 1-22. While Albouy explores Hugo's use of enlightenment ideas on science, he does not touch on economics. Charles Duits, Victor Hugo: Le Grand échevelé de l'air (Paris: Pierre Belfond, 1975) refers to Hugo's compulsion for production as "capitalistic" without tying it to eighteenth century economic theory.

⁴⁸On the economic theories of the philosophes there is, of course, Georges Weuleress, Le Mouvement physiocratique sous les ministères de Turgot et de Necker (1774-1781), Preface by Paul Mantoux, foreword by J. Conan (Paris: Presses universitaires de France, 1950). The entries to the Encyclopédie are threaded with references to the economy, proposals for improving production and trade. To my knowledge no study has been done on the relationship between the social and economic concerns of the editors of the Encyclopédie.

⁴⁹La Légende, pp. 60-68.

⁵⁰Ibid., p. 265-266.

⁵¹See Ferry, Discours, 6: 235-237; Lockroy, Journal Officiel, 17 May, 1876 and La Question; Simon, La libre échange (1870) and Le Travail (1866).

⁵²Discours, 6: 232.

⁵³Lockroy, La Question, p. 10; Ferry, Discours, 6: 232.

⁵⁴Introduction, p. 455.

⁵⁵Discours, 6: 232.

⁵⁶Ibid., 6: 231-233.

⁵⁷Lockroy, La Question, p. 10.

⁵⁸See Ibid. Also Ferry, Discours, 6: 231-232, where he does admit that this truth is a hard one to bear; and Hugo, La Légende, p. 789; Les Chatiments; "Centenaire de Voltaire," Le Temps, 1 June 1878; "Nouvelles du jour," Le Temps, 18 April 1876; and Charles Lecoer, Introduction, La Philosophie religieuse de Victor Hugo: Poèmes choisies sur la méthode philosophique du mot juste (Paris; Bordas, 1951).

⁵⁹Antonin Proust, ed., Paul Mantz, Introduction, L'Art français depuis 1789 (Paris: n.p., n.d.), p. 1.

⁶⁰Ibid., pp. 3-15.

⁶¹Sanford K. Elwitt, The Making of the Third Republic 1868-1884 (Baton Rouge, La.: Louisiana University Press, 1975).

⁶²These are points already established in the text.

⁶³The links between the Republicans and Free Masons are strong and well documented. All save Hugo were Masons, Proust, Ferry, and Lockroy all belonged to the Lodge Clémentine amitié. Historically, the Masons were in part an outgrowth of the Compagnonnages, and various attempts at reconciliation were made by members of these two organizations during the nineteenth century. See Emile Coornaert, Les Compagnonnages en France du moyen age a nos jours (Paris: Les Editions ouvrières, 1966); Luc Benoist, Le Compagnonnage et les métiers, Que sais-je?, no. 1203 (Paris: Presses universitaires de France, 1966). Of the histories of the Masons available, I found most useful Paul Naudon's La Franc-maçonnerie, 5th ed., Que sais-je?, no. 1064 (Paris: Presses universitaires de France, 1974). Also see Jean-Pierre Azéma and Michael Winock, Naissance et mort: La III^e République (Paris: Calmann-Levy, 1970, 1976), p. 146-149.

⁶⁴Naudon, pp. 12-13.

⁶⁵Ibid. Also see Benoist, Chaps. 4 and 5 and Coornaert, pp. 258-263.

⁶⁶For example, both groups came out in large numbers for Victor Hugo's eightieth birthday celebration and for his funeral.

⁶⁷See Benoist, pp. 21, 115-120, and Coornaert, pp. 214-219.

⁶⁸Quotation is from Benoist, p. 75.

⁶⁹Coornaert, p. 169 disagrees with Benoist about the significance of the legend of the Tower of Babel, seeing it only as an example "de la présomption et l'échec."

⁷⁰For a discussion of Hugo's bibliographical sources and an inventory of his library at Hauteville House see, Jean Butrand Barrère, Victor Hugo à l'oeuvre: le Poète en exile et en voyage (Paris: Librairie Klincksieck, 1965), pp. 30-31, 38-40, 61-64, and the Appendix. Of particular interest is the fact that Hugo read both Georges Sand and Eugène Sue's works, while several of the dictionaries he consulted were compiled in the eighteenth century.

⁷¹See n. 1, Chap. 1, Ferry's articles on industrialization and economics are reproduced in Discours, 7: 451-535. His speeches to the Societe philotechnique can be found in Discours, 7: 366-383. Simon's book was Le Travail (1866).

⁷²Hugo's reasons for building such a mystery around his origins have been explored by Charles Baudoin, Psychoanalyse de Victor Hugo, a book unavailable to me. For an account of Hugo's gradual identification with this group through a study of the use of the word "peuple" see: M. Tournier, "Le mot peuple en 1848 designant sociale ou instrument politique?," Romantisme 9 (1975): 6-20.

⁷³See Chap. 3 on art education. Also Ferry, Discours, 7: 376-378.

⁷⁴Coornaert, pp. 258-263.

⁷⁵See Lockroy, La Question sociale, p. 6. Also Ferry, Discours, 6: 233-234.

⁷⁶Ibid., pp. 30-31.

⁷⁷Discours, 6: 234.

⁷⁸Legrand, p. 181.

⁷⁹Introduction, p. 551.

⁸⁰This is a characteristic of all ideologies. See George Lichtheim, "The Concept of Ideology," History and Theory, 4 (1965): 164-195. Also see Sheila Gaudon, "Prophétisme et utopie: Le Problème du destinataire dans Les Châtiments," Saggi e ricerche di letteratura francese, 15 (1977): 423-426. She feels Hugo was unconcerned just after 1850 with the practicability of this dream, keeping it in the realm of prophesy and withdrawing himself from politics. Yet, I would and do argue in the two following chapters that Hugo later recognized his power to capture and direct the attentions of his audience through the appeal of his works. He used his prophecies to mold opinion and stimulate optimistic activity among the working classes. Whether or not he was successful, he seems to have believed in his effort, if not in the accessibility of the ideal.

⁸¹L'Art sous la République (Paris: Bibliotheque Charpentier, 1892), pp. iii-iv.

⁸²Alfred Cobban, A History of Modern France, 3rd ed., 3 vols. (Baltimore: Penquin Books, 1963; reprint ed., 1969), 2: 263-265. Azéma and Winock, pp. 110-111 and 263-265, provide statistics to support their contention that the ideology of the Third Republic helped to stabilize society and infuse a certain dynamic into socio-economic change that was salutary during the first half of its existence.

⁸³Ferry, Discours, 6: 233.

CHAPTER IV

THE ESTABLISHMENT OF MODERN LIBERAL DEMOCRACY THROUGH ART EDUCATION

Le gouvernement actuel, comme celui de la première République, doit voir surtout en [art] un moyen puissant d'éducation nationale et de prospérité industrielle. . . . Il s'agit de la répandre, d'en généraliser le goût dans le peuple et de le mettre . . . au service de la démocratie.

Official Report on the Paris Exposition of 1878¹

Introduction

The remarks in Ferry's report on the Paris Exposition pinpoint the fundamental role the Republicans assigned to art education and their desire to give a pedigree to their proposals. Seeing morality and taste as two sides of the same socio-economic coin, they felt the arts could help members of the middle classes forge their own well-being within the context of commodity exchange.² As a commodity which symbolized social values and transmitted them through everyday use, art could provide the entire population with a common vision of the productive, ordered life for which they yearned and a method for attaining it that did not preclude technology. While there is much in the Republicans' proposals which recalls Marx's discussion of alienated labor in Capital, their methods were designed to make the individual wary of mass production and large scale industrial organizations. Identity was to be reestablished by cultivating a taste for goods that increased the sense of personal control over technology.

A General Theory of Art Education

The Republicans felt art could reunite those "masses flottantes . . . qui semblent aujourd'hui hésiter, reculer, douter d'elles-mêmes" in the face of technological change, by cultivating an orderly set of working procedures and a taste for a certain type of order and form in commercial products that would allow for the adaptation of technology.³ To achieve this end they were careful to integrate science and technology into all levels of the art education program. Their art educational theory rested on the fundamental premise that learning occurred through an interaction between the environment and the individual's senses. By controlling the sensations the individual received and by focusing his attention on certain phenomena, it would be possible to cultivate within him a sense of order and process, of proportion and relatedness. Thus formed, his sensibilities would act as internal guidance systems directing his interactions with the material world and with his fellows in society. Even more importantly, they would bind him emotionally to the actual environment in which he existed and interest him in its continual improvement for his own and others' well being. At the most basic level of human intellectual development, then, art could be used to cultivate the perceptual and organizational faculties of French citizens and provide them with a common, preverbal system for perceiving, communicating, and satisfying their needs.

There are two ways in which art was thought to perform this function. First, the work of art presented an already organized and select view of nature which helped to focus the student's attention on certain

aspects of external reality, enabling him to extrapolate on his own when directly confronting nature. Second, the student could learn to become the organizer of his own experience by creating a work of art, or a less refined product. In this way, the eye, the hand, and the mind would be engaged in a process which was itself orderly and whose aim was the creation of ordered experience.⁴

Recognizing the need for order in the entire system of commodity exchange, it is not surprising that the Republicans' elevated order to the position of an immensely satisfying aesthetic goal. Creating a taste for ordered chains of experience did not preclude satisfying emotional needs. Ferry was strongly affected by art which seemed alive, and responded to this quality in Mercié and Henner's work. He particularly liked Mercié's method which "anime le bronze, fait vibrer le marbre," but saved his special praise for Henner's ability to evoke in him a profound and refreshing sense of the "rêve mystérieux de l'éternelle beauté."⁵ It was not an empty formality which art education was to introduce into people's lives; rather, art was to transmit to them a way to think about their own feelings so that they could infuse them into their own work and communicate them to others.⁶

The Republicans directed their art educational efforts into two major channels: drawing instruction in the public schools and exhibitions. Less programmatic in character was their use of the popular press to focus the public's attention on the arts and on the characteristics which made them capable of producing the psychological and economic equilibrium on which social integration depended.

Drawing. The Republicans were avid supporters of drawing instruction, wishing it to begin in the primary grades.⁷ One of the most popular textbooks of the period celebrated the practical value of such instruction for artisans and craftsmen. Marguerite Fouillee's La Tour de France par deux enfants, which was used in Republican primary schools during the 1870s and 1880s and went through innumerable editions, introduced French school children to the notion that drawing was "si utile aux ouvriers."⁸ The Republicans sought to broaden its application, creating some basis of consensus among a population only partly comprised of artisans. Its value for them lay in the universal appeal of a method which permitted, in Proust's words,

. . . les conceptions ultérieurs de l'esprit . . . de se dégager avec d'autant plus d'assurance.⁹

Drawing was essentially a rational process related to designing, in the sense that that term suggests the conscious effort to manipulate matter and form to achieve a preconceived, orderly result.¹⁰ Because it required the physical as well as mental engagement of the individual, drawing was seen as one of the most effective ways to have large numbers of individuals carry a sense of order and restraint into their daily activities.¹¹ Simon's remark à propos of the home furnishing exhibition at the 1878 Paris exposition indicates just how practical they felt the results of drawing instruction would be:

Peut-être la nouvelle impulsion donnée à l'étude du dessin rendra-t-elle le consommateur plus exigeant et le fabricant plus habile.¹²

In a series of laws and administrative decrees instituted from 1876 on into the 1880s, the Republicans attempted to expand the

teaching of drawing and to establish a curriculum in primary grades and manual arts schools.¹³ The methods they proposed were aimed at bringing the student out of a state of self-absorption into active discourse with the surrounding world.¹⁴ Understandably, aimless sketching was anathema to them.¹⁵ Emile Picard in his 1889 report on the Republicans' art education program described the method and pointed out the benefits of a curriculum which combined drawing from plaster casts and tracing figures with the study of geometry.

Les élèves passent successivement par une gradation logique, qui leur apprend à tracer des lignes, à en évaluer la grandeur, à en apprécier la direction, puis grâce au géométral [sic] et aux éléments de perspective, à mettre en place n'importe quel objet, à le représenter vu dans son apparence. . . . L'enseignement . . . a pour but de donner aux enfants la faculté d'observation, de les habituer à reproduire toutes les formes, quelles qu'elles soient, dans leur vérité absolue . . .¹⁶

Nothing in the primary school art curriculum was overtly utilitarian. It did not deal with the design of everyday domestic objects, for example. Yet, the men who formulated it made clear their belief that the curriculum would improve simultaneously the moral and economic life of French citizens. There is Picard's description stressing the practical, orderly effects of the method that trained children to follow logical procedures in their work and to work independently. Moreover, the very act of drawing according to this method allowed the individual to examine the concept of reality he harbored in his imagination and the method acted as a corrective for any misconceptions he may have had about the structure of reality. It was one way the individual could learn through first hand experience that, as another report succinctly put it,

. . . les conditions dans lesquelles se meut l'humanité ne sont pas indéfiniment et arbitrairement modifiables, que l'on ne peut y toucher qu'en respectant ce qui constitue la nature des choses . . . que la terre . . . où nous vivons n'est pas le domaine de l'absolue et que ce qui y regne en souverain, c'est le relatif.¹⁷

In other words, one might be able to conjure up a vision in one's mind of a frictionless existence, of a perfect, seamless form expressing absolute harmony, but one could not find its equivalent in the material world. This fact was brought home to the student through the method of drawing which approached the model as a system of interdependent parts deriving its vitality and appeal from the relationship itself. Through drawing one came to discover the truth of Simon's statement concerning the necessity of variety and unity within any living system.¹⁸

The method confronted students with the fact that perfection in a product and in life consisted of the precision and balance attained among the various elements, not in the erasure of distinctions. Here, however, the insistence was not on inculcating an abstract system of disembodied relationships, but on tying this system to the material world and to the emotional experience of the student. The method defined the field to which human activity should confine itself by focusing the student's attention on concrete entities before his eyes and away from mental chimeras or visions of realms outside human experience.¹⁹ In part, they hoped to encourage the identification of human with external nature by having students draw "à la main levée," forcing them to make comparisons between the model and their own drawing.²⁰ Although none of the Republicans elaborated on this technique, it may refer to having the student draw on an upright easel, rather

than on a horizontal surface which would force the head down, fixing attention on the paper and on the student's own thoughts.

It is true, as Zeldin and others have remarked, that the models consisted of plaster casts of sculpture and architectural ornaments from all periods of Western art "depuis l'art égyptien et l'art grec jusqu'à art nationale," and of both two- and three-dimensional geometric forms.²¹ Nonetheless, these objects, which have little obvious reference to contemporary life, were not considered antithetical to the aim of training the population to comprehend the world as it really was. When Proust said art education should encourage "l'observation directe de la nature," he was referring primarily to human nature. By this he meant the basic psychology of human beings which the Greeks had first characterized in their philosophy and art.²² Simon's remarks on Plato confirm this interpretation. Although criticizing the philosopher for mis construing the sources of human consciousness, Simon felt the Greek had made a lasting contribution in clearly identifying the "principles constitutifs de la raison humaine."²³

The decision to begin training by having students draw two- and then three-dimensional geometrical figures grew out of the Republican desire to give young children a rational mental structure and process compatible with human nature. For in rendering such figures one learned literally how to put personal experience into perspective. That is, the student would conceive of the seemingly isolated elements in his mental and material environment as related to one another through a system based on the scientific laws describing physical and mental functions. Since these laws derived from human behaviour, the Republicans did not

feel that drawing was imposing an alien way of organizing experience on the student, but helping him to clarify the principles of a logical procedural pattern which he, like all humans, would find most comfortable. Ignoring the teleological character of this interpretation of science, the Republicans felt that it offered a guide to individual behaviour which was in Ferry's words, "la seule digne à s'opposer à l'esprit d'utopie et d'erreur."²⁴

Drawing abstract forms was followed by drawing plaster casts taken from original works of art. Gabriel Monod (dates unknown) in his evaluation of the 1889 Paris exposition, explained why works from a variety of periods and geographic areas were used. The models taught the students that the same principles were active in the creation of the material culture of all ages. Variations were due in part to "les modifications que subissent les formes et l'exécution suivant la matière employée."²⁵ Emphasis in the drawing program was, therefore, not on encouraging students to identify their feelings with specific rational systems and visual forms of the past, but on having them imbibe the principles underlying all past styles to guide them in productive activity suited to their own time and technology.²⁶

The technique which the sculptor and painter Eugène Guillaume (1822-1905) instituted in his capacity as Director of Fine Arts was well fitted to this end. Rather than teaching students to record internal details, irregular textures, superficial physical features, or volume, the man whom Ferry appointed to this post in 1879 advocated "une représentation essentiellement . . . par le trait, par le contour."²⁷ This technique, which reinforced the identification the schools made

between visual and written language, taught French youth the rudiments of what Proust called "la science de la lecture et de l'écriture des formes." Moreover it allowed the student to analyze and organize his perceptions in the most economical and easily communicable terms. Guillaume, in fact, argued that it was fully compatible with the rational and humanistic character of the method.

C'est le procédé instinctif de l'homme primitif et de l'enfant
 . . . en même temps c'est parfaitement rationnel.²⁸

It might be said that the linear technique added the final touch to the child's art education for it cultivated in him a sensitivity to the aesthetic qualities possessed by technology. An acquired taste for precision, for economy of means and ends, for a mechanistic system of relationships reducible to geometrical terms, and for a method based on careful mathematical analysis and synthesis could encourage individuals to conceive of technology as a creation very much like a drawing, and, therefore, an aspect of the material world over which one could exercise some control. That is, they would come to see it, not as alien to human nature, but as an expression of it which functioned in the material world much as drawing functioned in the intellectual and moral realm. It is certainly possible to find an analogy between Proust's concept of drawing as a process that brought the latent ideas submerged in the human mind out into the world in a legible form and Simon's comment that technology enabled the producer to move "de la matière brute à la matière ainsi transformé . . ."²⁹ One was an act the individual performed on

himself, the other, one he performed on matter. Guillaume's remarks on the benefits of the method reveal that the Republicans actually identified the two:

On comprend sans peine quel profit on peut tirer d'un pareil dessin: mis entre les mains d'ouvriers sachant le lire, il leur donne le moyen de reproduire exactement l'original. Ils le font avec une si grande précision, que, si plusieurs entre eux doivent exécuter la même pièce, ces exemplaires peuvent être confondus les uns avec les autres. Par là, ce genre le dessin rend les plus grands services à toutes les professions qui ont pour bût de construire, de créer des formes ou simplement de multiplier des images.³⁰

Although he is speaking of the value of drawing instruction for professionals, it is clear from this quotation that the method seemed to him a way to help the individual compete with technology on its own terms.

There were, however, two different interpretations of how drawing would help individuals accommodate themselves to technology. For Guillaume, and Ferry as well, it would form the individual in the image of the machine, so that the individual took upon himself the responsibility for performing like his model. For Simon, Hugo, Lockroy, and Proust, drawing and technology were tools under the direct supervision of the individual, helping him to independently generate his vision.

Despite these differences, it is possible to understand how the Republicans could feel the primary school drawing program constituted an important first step in rectifying the fragmented personalities and inconsistent working methods responsible for social friction. It would enable individuals to conceive of the world as a system of interlocking relationships among independent entities and to feel capable of using technology to create a balanced social existence modeled on this

system. The dynamic equilibrium a person achieved on paper might be created in the mind, in the market place, and ultimately in society. Logically, the outcome of such an aesthetic education would be the formation of a population with a taste for liberal democratic values. In terms of the practical ends the Republicans set for the program, a large sector of the population would demand the development of goods with the aesthetic character already defined in Chapter II, and the most talented among them would be inspired with the vision and the desire to adapt new technology to the design of goods that would satisfy this demand. The art education program at the primary level provided a blueprint for the foundation of a modernized middle-class community.

Manual Arts and Fine Arts Education

The Republicans' proposals for advanced art education were all intended to build on the foundation talented individuals had acquired in primary school. The curriculum was designed to equip students to design a material culture expressive of their own society and fitted to its economic and psychological needs. In his 1878 report on the Paris exposition Simon first pointed to the pragmatic nature of the curriculum.³¹ Proust provided a résumé of the reforms in the conclusion of his 1882 article on the short-lived Ministry of Arts.

Son intention était . . . d'associer l'enseignement de l'art appliqué à l'industrie à l'enseignement des sciences appliquées à l'industrie dans les établissements du second degré; de placer enfin au degré supérieur, à côté de l'enseignement spécial, au enseignement général qui ramènerait tous les artistes à la notion de la conception décorative.³²

Not just its content, but its methods were intended to give students the integrated working procedures, sense of organization, and appreciation for materials and technology needed to make their design efforts aesthetically and economically effective.

They hoped to maintain continuity with the primary curriculum by continuing to stress the importance of drawing according to a rational analytical and synthetic method. Emphasis was placed on refining and deepening the knowledge and skill already gained with a view to focusing students' attention on the present. One change, therefore, was having students work from original objects and live models. These study models were to be drawn from all cultures and periods and presented in a chronological order that respected their geographic origins. As they drew, students would be encouraged to take into account production techniques, handling of figures and motifs, materials, and compositional organization, to understand how these contributed to the models' aesthetic character. By sensitizing students to these factors, the Republicans hoped this expanded curriculum would also help them learn the logical filiation between cultural circumstances and artistic style.³³ The other important innovation introduced courses intended to make art education more technical, that is to reach something of modern scientific discoveries and production techniques.

In the manual arts schools the curriculum reforms aimed at giving students the intellectual integrity, skill, and confidence necessary to design and/or produce new products to compete with mass produced goods pouring in from abroad. The training students were to receive did not reject the possibility of adapting designs to mass production. In

fact the chaste aesthetic it purveyed could be easily reproduced by machines.³⁴ In this sense the curriculum was broader in its application than the Republicans' narrow focus on training designers suggests. The idea was to make the designers leaders of the manufacturing community.

A number of laws were passed during the 1880s, intended to reform the programs in the provincial manual arts schools, particularly those in manufacturing towns such as Limoges and Roubaix.³⁵ Students would not only be taught design and the history of the technology and materials used in their *métier*, but be introduced to the new materials and machines on the market. For example, students at Roubaix, a textile producing town in the northeast, would study a variety of textile patterns and fabrics, and the machinery and dyes used to create them. Special emphasis was to be given to the study of French products so that students would identify with their once great native cultural traditions and feel confident of developing them further.

It appears that many of these ideas were formulated in response to the suggestions of the artisans themselves. Proust had organized a commission in 1881 to identify the reforms needed in manual arts schools. The responses of the designers and artisans to the commission's inquiries reiterate the Republicans' diagnosis of the problem and their proposed cure. Emile Gallé (1846-1904), whose glass and ceramic works contributed to the development of Symbolism and Art nouveau in the '80s and '90s, submitted a written deposition which summarized the reforms other artisans had also requested. Describing himself as an artisan and civil servant:

Céramiste, graveur et décorateur sur verre, secrétaire de la commission de surveillance de l'école régionale des beaux-arts de Nancy,

he offered the following program:

. . . la réforme de l'enseignement du dessin n'est qu'un premier pas dans la voie d'améliorations urgentes et nombreuses: applications industrielles introduites autant qu'il est possible dans l'enseignement de nos écoles d'art décoratif; envoi de modèles en nature, en évitant les spécimens de certaines fabrications modernes . . . des exemples mémorables de la décadence où peut choir un peuple quand il se détourne du dessin, quand ses artistes se cantonnent dans des genres, au lieu de prendre part à toutes les manifestations de l'art à leur époque.

Les ateliers de province demandent que ces modèles soient choisis, non pas toujours dans l'antiquité grecque et romaine, mais parmi ces productions du génie human enfantées par l'Egypte le Mexique, l'Inde, le Pérou, la Chine, le Japon, et surtout le moyen âge et la Renaissance française.³⁶

At the top of the art education system stood the Ecole des Beaux-arts and the state schools of architecture and fine arts such as those at Lyons and Besançon. Reforms slated for these schools were intended to mold a group of architects and artists capable of developing the models from which skilled workers, builders, and industrial designers would derive their designs.³⁷

Curriculum proposals were perhaps the most important, for on them hinged the development of the new material culture the Republicans believed would establish economic and social security of the French working classes. Generally speaking, they sought to produce artists who were willing and able to design for modern middle-class life. Proust saw the stress on a realistic assessment of the function of art as a way to divest artists of fantasies that led to irrelevant and inconvenient design. In an anecdote recounting the response of the Director of the Ecole de médecine to the school's new quarters, he ridiculed the

self-deluding pretensions of the architect as evidence of a lack of concern for basic human needs. The Director was not astonished to find there were no dining halls or bathrooms in the Classical Revival building, Proust noted:

. . . puisque tout le monde savait que les Grecs n'avaient pas de salle à manger, qu'ils prenaient leurs repas sur les figuiers, et que, pour remplacer ces petits appartements privés que nous avons baptisés d'un nom anglais, ils allaient rêver sous des lauriers roses plus éloignés.³⁸

Such fantasies were to be replaced by teaching artists to tailor their designs to both the rationale and the activities peculiar to the middle classes.

The reforms they proposed built to some extent on modernizations introduced in 1863 by the Comte de Nieuwerkerke under Napoleon III. While willing to admit there was some continuity between the Third Republic and the Second Empire, Proust indicated that the only innovation to be retained was the ateliers at the Ecole des Beaux-arts where students learned techniques needed to create works of art. Even here, Proust insisted the curriculum would be updated.

. . . en créant les ateliers d'enseignement speciale de l'Ecole des beaux-arts, c'est non pas de faire connaître à ceux qui fréquentent les ateliers les procédés des maîtres disparus, mais bien des procédés des maîtres contemporains.³⁹

Emphasis was placed on updating the curriculum to help artists accommodate themselves to the exigencies of the world around them.

To put young artists in touch with present realities, the new curriculum required students to study the activities of the working

classes and to draw from living models. In sum, to leave the studio and, as Proust explained, to travel not only to Rome, but

. . . dans les contrées où l'aspect de la nature et l'allure de ceux qui les habit peuvent développer les aptitudes . . .⁴⁰

They were also encouraged to identify the images and usages most central to working class life, which did not necessarily mean that the artist was limited to contemporary appearances. The Republicans were divided on the issue of the modernity of certain images. Proust might wish to have artists depict Frenchmen "tels que nous sommes," in modern dress, seated in restaurants or working on the docks; but Simon believed that certain ancient, medieval, and early modern images still exercised a strong hold over the emotions and ideals of the working classes.⁴¹

There is some justification for his belief. After all, the past intruded into contemporary life in the form of the works of art and architecture from past centuries that remained part of the French environment. It was a living heritage which Hugo in particular was anxious to preserve.⁴² Moreover, artisans had for generations used these traditional images as motifs in their designs, and many of these mythological figures and saints were a part of their folklore.⁴³

The Republicans' solution to the problem was to train artists to conceive of traditional images and the art of non-western peoples as expressions of more primitive, less self-conscious states of human psychology or of alternate formulations of it.⁴⁴ In either case, students were to understand all stylistic differences had one major element in common: all conveyed a culturally determined image of reality

visually and conceptually apprehendable and capable of being expressed through drawing. Because architecture encompassed the other arts, the study of the principles of architectural design assumed a prominent place in the curriculum, establishing the organizational patterns and general aesthetic character from which all artists were to take their cue in handling materials. In so doing it enabled all the arts to fulfill their double duty of responding "aux plus nobles besoins de l'esprit" and to the practical necessities of daily life.⁴⁷

The second step in training was to provide a conceptual framework. Here, the Republicans proposed that artists receive some instruction in scientific theory, the nature of matter, the laws governing the universe, and the operation of human perception. In essence, they were to be taught a modern cosmology in the form of the prevailing scientific paradigm.⁴⁸ This knowledge would allow them to design for social ends in accordance with ostensibly "natural patterns" and ultimately to align social activity with these patterns. It was knowledge the artist could gain at the level of personal experience, for science helped him develop the knowledge of self and of the relationship of that self to the surrounding world which he could pass on to other individuals through his art. This step represented a practical application of the general chain of relationships outlined by Simon in his

Introduction:

La science . . . qui la produit? La pensée humaine. Et qui cultive, fortifie, et développe la pensée humaine? L'éducation.⁴⁹

Aside from Simon's comment that artists should be taught "tous les arts et toutes les sciences accessoires," the Republicans made

via the manipulation of aesthetic means. Proust urged this conception of artistic style be adopted as the basic premise of the fine arts curriculum:

. . . nous ne saurions trop admirer, trop étudier ces chefs-d'oeuvre [du passé] jusqu'au moment où, forts de cette éducation, nous devons, en présence de la nature, demeurer sincères, en nous gardant avec soin d'emprisonner notre propre inspiration dans les formules qui nous ont paru séduisantes . . .

Students were to learn how to apply the insight gained into the relationship between outward appearance and psychological expression to the development of images with a new character. In this way, the past could be updated, made conceptually compatible with the present culture, and turned into a point of departure for the creation of a new style.⁴⁵

In addition to reforming the existing program, the Republicans settled on two new measures intended to help architects and artists design socially and economically functional works. Both measures dealt with teaching students the principles of composition and methods for establishing compositional order. The first step, as Proust noted, was obviously to provide students with a concept of design broad enough to encompass all the arts, that is to develop their "esprit décoratif."⁴⁶ Painters and sculptors were to learn the principles of each others' disciplines and that of architecture, while architects would be introduced to those of the other two.

Training was to stress the threads all three disciplines had in common so that students could develop a general sense of the integrity of design within and among objects. Most important was the fact that all three depended on an internal rational organization which was

little reference to the specific content of these courses. Their own statements about science and the nature of the universe do, however, provide an insight into the character of the paradigm they wished taught. Moreover, it is possible to glean a sense of how artists were to utilize this information from discussions on the subject at the International Congress of Architects held in conjunction with the 1878 Paris exposition. Three French architects, Gabriel Davioud (1823-1881), Emile Trélat (dates unknown), and Archille Hermant (dates unknown), all employees of the government and tied to the Republicans by bonds of friendship and political ideology, spoke at length on the role of science and technology in the architect's education.⁵⁰

As for the nature of the paradigm, the Republicans held the view that the cosmos was an energy system in dynamic equilibrium, whose character and laws human science had discovered and could exploit. Simon stressed the active nature of this system and spoke of it as operating like a self-contained unit whose elements constantly interacted and produced a stream of energy that could be tapped and transformed. He elaborated on this point by identifying all physical processes as different manifestations of one universal process:

On distingue les transformations chimiques et les procedes mechaniques; mais il faut se hater, car depuis que les sciences diverses vivent cote a cote, elles se penetrent les unes les autres, elle decouvrent chaque jour entre elles et entre les choses des analogies qui sont presque des identites, qui vont le devenir.⁵¹

By virtue of their sentient and rational character, human beings could participate in this system and exploit it to establish the same continuous, integrated and efficient existence in their economic and

psychological life that existed in nature, and in fact could integrate themselves into the natural system. As was already noted in Chapter II, Ferry believed the physical laws of the universe took the form of economic laws governing commodity exchange in society, and of physiological psychology in the human body. Thus, there was a chain that linked the laws of the cosmos and external physical phenomena with human internal responses and economic behaviour. As Simon observed, all these phenomena could be reduced to mathematical equations describing or establishing relationships between any given set of physical entities:

. . . on a pu dire qu'il n'y a de réalité que dans les proportions ou les rapports.⁵²

Their paradigm rested on Newtonian physics which the Paris Académie des Science and the Marquis de Condorcet had used as a model for French society in the eighteenth century. Remarks such as Simon's reveal the fact that the Republicans were well aware of more recent discoveries in the field of thermodynamics including those of Frenchmen Pierre Berthellot (1827-1907) and Eugène Chevreul (1786-1889). The Republicans had adapted to the economic world the theory that material appearances were transformed through an energy exchange caused by friction. They accepted the law of the conservation of energy--which described energy exchange as the cohesive force in a closed and balanced continuum--as a model for the dynamic social equilibrium they wished to establish through regulated commodity exchange.⁵³

Their concept of matter was an integral part of their paradigm, for their liberal democratic conception of the individual depended on

it.⁵⁴ Ferry's disparaging remarks about painters

qui recherchent passionnément les réalités de la lumière, les colorations grises et claires, le plein air,

indicate a general mistrust of fleeting visual phenomena as the sole source of information about reality.⁵⁵

Light was not matter. Matter, according to the Republicans was stable in character. It might change its outward appearance as a result of its interaction with natural forces, but it possessed an enduring essence communicable through the activity of visual data. This rather mystical definition of matter can be found in Simon's comments on the handling of glass and iron for the Palais du Champ de Mars and in Proust's request that artists learn to use "la chose vue," "notre propre physionomie," to convey the essence of matter: "l'expression vivante."⁵⁶ Matter's indestructible quality gave it--whether inert or biological--its integrity.

While it is difficult to say whether the Republicans' paradigm evolved to fit their diagnosis of the social situation or vice-versa, definite parallels do exist between the character of the paradigm and the abrasive economic and emotional situation in France. The paradigm was a harmonious system in which equilibrated interactions of matter and conflicting physical forces produced orderly change. The Republicans understood stabilization of cosmic conflict as an abstract vision of the economic and moral goals they had set for art. The paradigm can also be understood as a model to guide artists in inventing the new designs destined to produce equilibrium in French society.

This is precisely the deductive logic that was used in determining the science curriculum for artists and architects. Emile Trélat provided a striking insight into the process in his discussion of how he and his colleagues at the Ecole spéciale de l'architecture in Paris had adapted scientific knowledge for classroom use. Training was based on their definition of the architect as a constructor of forms. The architect perceived form through the impact of the environment on his sense of sight and could comprehend and manipulate it through his knowledge of the paradigm:

. . . la forme serait . . . le résultat du conflit de la lumière et de la matière. La lumière et la matière en lutte donneraient pour résultante la forme.⁵⁷

To help the student understand form, it was important to give him a vivid mental picture of the universe and its operations. Trélat was partial to the Romantics' favorite symbolic image: the ocean. Composed of ether and matter, the universe was "un immense océan" of ether in which "la matière se trouve dispersée ou condensée depuis la condition de simple molécule de particule éparsée ou de nébuleuse, jusqu'à la condition des corps célestes." Light was the ocean of ether set moving through "une cause lumineuse" existing outside the system. Through the reflection of light waves off particles of matter "nous connaissons les formes qui nous environnent." Communication of this information is a dynamic process in which reflected light waves do not

. . . voyagent tranquillement jusqu'à notre oeil. Elles sont incessamment contre-battues et altérées par d'autres ondes lumineuses.

All this motion and conflict were taken in by the eye and interpreted and evaluated by the mind and the sensibilities of the individual.⁵⁸

On a practical level this vision of the universe could sensitize students to the character of their materials, of the surrounding landscape, and of the site. On a more abstract level, it could teach students to conceive of design in terms of the relationships between the light sources and the type and arrangement of the building materials. Because such relationships were calculable, the student would be able to mine their expressive and utilitarian possibilities.

Trélat also drew on the paradigm for a method of designing. He turned visionary in his proposal that architects learn to mimic the process by which the collision of matter and light produced a sense of meaningful form in the viewer's eye, when integrating rational spacial distributions and economical and solid construction into an overarching harmonious form. In essence, the method was based on a metaphor which placed the architect in a position analogous to that of God in the universe. Just as the divine light external to the cosmos set it in harmonious motion, Trélat advised the architect to achieve harmony by allowing the light of his imagination guided by the idea of the building's function to play over the structural materials:

Voici un programme! Aussitôt que l'architect a lu et en a compris la matière . . . il retient les parties majeures ou caractéristiques; et de celles-ci qu'il assemble, fait un tout qui se ramasse sur lui-même, et qui dégage son unité, non seulement sous le rapport de la destination mais surtout sous le rapport de la form.⁵⁹

In his view, teaching architects to design so that form followed function, meant giving them a method that enabled them to integrate utilitarian organization into a rational and symbolic form whose rational character was symbolic.

Although this method was empirical, guided by intuition, Trélat felt architects had to be taught some practical, technical knowledge to help them stabilize the proportions of their design. They also needed some general knowledge of the characteristics of social evolution to help them understand the utilitarian aspects of designing. Education in the social and physical sciences had to remain on a general level, however. In addition, technical subjects had to be taught through visual demonstration which Trélat described as "la méthode qui convient aux tempéraments d'artistes."⁶⁰

Trélat's prescription implies that artists--whether architects, painters, sculptors, or artisans--should learn to make designs which to the eye appeared stable, harmonious, and utilitarian. In other words, they were to search for visual means of expressing the moral and economic value of their work. It was left to the students in engineering, chemistry, and other technical schools to learn how to turn designs into functioning, physically stable entities and how to develop new processes and materials to inspire new designs.

In actuality, the Republicans were concerned about the question of how much technical training artists should receive. Artists had to have enough technical information to design for modern circumstances and to make use of new materials in these designs; but not so much that their imaginations were overburdened with niggling details and distractions. No clear line was drawn on this issue. Simon, for example, felt architects should know the art of building construction. Trélat did not. Proust wished artists to learn the law of simultaneous contrast of colors, but said nothing about the physics of optics on which

it depended. Gallé felt glass designers should rely on technical experts to achieve the color effects and shapes invented by the designer. Davioud believed architects should be acquainted with building codes and other legal matters affecting the construction industry.⁶¹

The nature and extent of this controversy over the technical side of artistic education confirms what has been suggested throughout this chapter. In proposals for curriculum change in primary schools, manual and fine arts schools, the means of rationalizing behaviour and modernizing design were also intended to establish a hierarchical system of working relationships among artists, engineers, industrial designers, skilled laborers, and the public.

The Didactic Dimension of Hugo's Art

The Republicans also sought more immediately effective ways to educate public taste and productive activity through the arts. One of the most obvious avenues open to them was the press, and they did not hesitate to promote their ideas on the moral and economic value of art education in numerous articles and in public speeches recorded in the newspapers and journals. Perhaps the best example of such a tactic are Proust's journalistic efforts which appeared in the Revue bleu and the Gazette des Beaux-arts in 1882.⁶²

Hugo's use of the popular press, however, is perhaps the most significant example. He was unique among the Republicans, for he utilized his own artistic efforts, supplemented by his speeches, to purvey liberal democratic ideology. Addressed primarily to the urban working classes, the major didactic function of his efforts was to

encourage them to produce for their own needs.⁶³ At the same time, the level at which Hugo pitched his rhetoric allowed him to include the general public in his audience, arguing that workers' efforts at self-improvement would prove universally beneficial.

Hugo's "Discours sur l'afrique" (1877) is enlightening for what it reveals of the role he marked out for art and artists. Using the power of his rhetoric to picture colonization as an incentive for developing and spreading working class culture, he tried to appease the anxieties of the upper classes regarding the social question and to build an image of the worker as a messiah of modern civilization.⁶⁴ In a verbal tour de force that drew on the image of conflict, Hugo simultaneously pushed into the background the question of whether those who held economic power would be willing to relinquish it and brought into relief an image of the independent worker as the positive force in society. Hugo's own position as a successful self-employed producer with a vast following offered living proof that the artist and his works could exercise enormous influence over the public.

It is this tactic which lies at the heart of Hugo's educational efforts, and it is in works published from 1852 through the early 1880s that he attempted to use his own art to win the public and the workers to his views.⁶⁵ Using the Châtiments in the 1850s to berate the cowardly acquiescence of Parisian workers to Louis Napoleon's government, in later speeches, interviews, novels, and poems, he denounced the selfishness of those with money and power who failed to see that it was only gained through the sacrifices of the poor.⁶⁶ To balance such negative criticism, during this same period he idealized the

character of the worker, the forms of his culture, and his innate abilities. By presenting these aspects of working class existence in a positive light, he in effect encouraged workers and the general public to accept them as the constituents of a new material culture with its complementary ethical, political, and economic system.⁶⁷

Novels such as Les Misérables (1862), 1793 (1874), and the epic poem La Légende des siècles (1859, 1877, 1883) glamorize and ennoble the intelligent, skilled worker. The humanitarian impulses which possess men, such as the reformed Jean Valjean and the inventor of the balloon, are to a large extent nurtured by their growing awareness of belonging to a specific socio-economic class. They are "les hommes du peuple" who make the application of scientific knowledge meaningful to all human beings. The innate impulse of this class to struggle in order to help themselves and others, the enormous energy they are willing to devote to the perfection of the material environment.. are celebrated as their primary virtues and the motor force of progress.

For example, the Légende begins with the image of "l'homme" as the archetypical laborer, and the celebration of work recurs throughout the poem.⁶⁸ Hugo selects incidents showing that struggle and conflict between man and matter can be the means of satisfying an instinctual need for harmony in this life. In a segment entitled "Entre géants et dieux" the Titan struggles to escape from under the crushing weight and darkness of a mountain prison, driven by a phototropism which Hugo terms "hope." The Satyr pleads the cause of man before the gods in "Seizième siècle: Renaissance-Paganism" with an inspiring image of what human labor can accomplish with their help:

Oui, peut-être on verra l'homme devenir loi
 sous lui, saisir et tordre Cette anarchie au point d'en faire
 jaillir l'ordre . . .

In a series of images loosely arranged in chronological order Hugo unfolds an increasingly luminous panorama of the heroic accomplishments of human labor.⁶⁹ The story of human progress ends with the section entitled "Vingtième siècle" in which Hugo celebrates the invention of the aerial balloon, the telegraph, and the steamboat as liberating acts of inspired laborers that will end in an international economic and spiritual liaison among all workers.⁷⁰

With equal fervor Hugo apotheosizes certain images and forms deeply rooted in the popular imagination. The Tower of Babel is the most obvious of these; but he pointed out the value of working class songs and theater as well.⁷¹ The balloon, which appears in almost every published illustration of a Paris exposition since 1798, is another. Popular art forms which appear in works such as Les Chansons des rues et des bois (1865), L'Homme qui rit (1869), and the Légende provide a sense of the general character of working class people and, thus, ask the audience to appreciate the power of the culture. For example, by establishing a relationship between the attainment of humanitarian ends and the completion of the Tower of Babel in the Légende, Hugo suggests that in the forms of working class culture lay the seeds of a new and better civilization.

Hugo also ennobled the struggle of workers to subordinate technology to the cultivation of human values and talents by turning the struggle into a quest for an ideal state. It was an ideal which encompassed all human experience and physical and economic phenomena in

one vast, integrated system of harmonious proportions and relationships. The relatively concrete nature of the image--which derives from references to color and form--makes visible to the mind's eye, the highly abstract moral, economic, and aesthetic aspects of the ideal Hugo championed. Hugo's most vivid description can be found in "Plein ciel" where the form and structure of the balloon is used to suggest the pattern of the ideal.

Superbe, il plane, avec un hymne en ses agrès.
 Et l'on croit voir passer la strophe du progrès.
 Il est la nef, il est le phare!
 L'homme enfin prend son sceptre et jette son baton.
 Et l'on voit s'envoler le calcul de Newton
 Monté sur l'ode de Pindare.

He pursues this vision even further, giving it fuller scope by identifying the results of inventive activity with cosmic phenomena.

Elle [the balloon] a cette divine et chaste fonction
 De composer la-haut l'unique nation,
 Al la fois dernière et première,
 De promener l'essor dans le rayonnement,
 Et de faire planer, ivre de firmament
 La liberté dans la lumière.⁷²

Hugo also makes clear to his audience the character of this universal system with which human labor strove to unite itself. In this instance, he relies on a scientific paradigm to indicate the nature and limitations of human effort. The universe in the Légende is painted as a composite of energized matter. The thrust and counter-thrust of the components create tensions which tend to equilibrate the components into one interdependent system composed of an infinite number of sub-systems. Whether at the level of cosmic or atomic phenomena, Hugo pointed out that these physical systems were dynamic, their components either harmonized with one another or in the process of becoming so.⁷³

Le spectre vibrion vaut le soleil fantôme;
 Un monde plus profond que l'astre, c'est l'atome;
 Quand, sous l'oeil des penseurs, l'infiniment petit
 Sur l'infiniment grand se pose, il l'engloutit;
 Puis l'infiniment grand remonte et le submerge.

While Hugo asserts further on in this verse entitled "A l'homme" that the first cause of the system can never be known, he indicates in "Plein ciel" that a certain regularity exists in the self-generated interactions of the system's components. Man can model his morality and his society on these relationships by adapting them to the design of material goods. In short, Hugo's imagery provides a way for his audience to envision the character and operation of liberal democratic society.⁷⁴

It is possible to interpret Hugo's educational efforts on a much more technical level, for Hugo indicated the methods that would allow his readers to resolve the contrasts and contradictions of contemporary life. Like the other Republicans, he urged artists and artisans to use scientific knowledge and technology to solve the "grand problème de proportion" through the inventive handling of their material.⁷⁵ Unlike Ferry, Hugo took a more inspirational and optimistic stance vis-à-vis this portion of his audience, pointing out to them that their traditional forms, their love of light and color, their sensitivity to the contradictory character of life, and their willingness to struggle were personal resources, intuitive guides, which science could cultivate.

His descriptions of creative activity and of the role science and technology can play in it offer the initiated reader the beginnings of a formula for calibrating opposing natural forces and wresting from them a positive result. Passages in Les Misérables proclaim the wisdom

of looking on nature as a resource possessing enormous potential for improving the material existence of humanity. As Jean Valjean told the peasants of Montreuil-sur-mer in pointing out the economic value of the nettle which they considered worthless: "Mes amis, retenez ceci, il n'y a ni mauvaises herbes, ni mauvaises hommes. Il n'y a que de mauvais cultivateurs."⁷⁶

Like Trélat, Hugo felt that matter could be domesticated through the exercise of a little human imagination, humanitarianism, and the application of a little science. For instance, the nettle which grew wild near the town possessed certain physical properties that resembled those of flax. The analogy between the two plants suggests to Valjean how this new material might be adapted for human consumption.

. . . quand elle vieillit, elle a des filaments et des fibres comme le chanvre et le lin. La toile d'ortie vaut la toile de chanvre.⁷⁷

Through such examples Hugo argued that the individual could transform raw matter into a useful product, turn new or unconventional materials into an economic and moral boon. In just this way, Jean Valjean became the saviour of the town. He discovered that it was possible to substitute cheaper materials in the manufacture of black beads, thus saving the town's major industry and making his own fortune and reputation. It also marked an important step in his effort to redeem himself morally.

The balloon in "Plein ciel" is Hugo's most effective vehicle for indicating the successful application of the method. He described it as being made of simple materials. Through the imaginative vision of the inventor, aided by "le calcul de Newton," a way to tailor and

combine the materials was devised that capitalized on the movement of natural forces.⁷⁸ Its design allowed inert matter to overcome the pull of gravity and to lift itself, its inventor, and ultimately humanity onto a higher plane of existence. By emulating the inventor of the balloon, Hugo indicated to his readers that they too could move from the old patterns of production to new ones and in the process achieve new moral and economic status as social benefactors.

The method Hugo urged on his audience was one he used in his own work. The Légende des siècles is really on one level an effort to teach by example. Recent scholarship on Hugo has revealed the poet's interest during the early 1850s in using his work to explore his personal experience, both as a human being and as a creative artist.⁷⁹ The Contemplations are considered to be the product of this change of focus in his work. In them he turned in upon his own thought processes and identified them with the developmental processes of external phenomena. From this perspective, it is possible to consider the Légende as Hugo's attempt to convey a concept of artistic production to his working class audience--specifically, the artists, artisans, and architects within it.⁸⁰ In the preface to the epic, Hugo described his aim in terms of a constructive act:

Comme dans une mosaïque, chaque pierre a sa couleur et sa forme propre; l'ensemble donne une figure. La figure de ce livre on l'a dit plus haut, c'est l'homme.⁸¹

Moreover, in calling attention to his working method, Hugo stressed the role science had played in structuring the design of the Légende. One began, he declared, with a given idea, a vague sense of a form or an element, and from this one developed an entire system by identifying

the salient features of the idea and allowing the light of logic to dictate the relationships they engendered. Making the Légende was done in much the same way that a paleontologist attempted "la reconstruction du monstre d'après l'empreinte de l'ongle ou l'alvéole de la dent."⁸² Hugo applied this methodology in the poem by having its final form emerge as a product of the reconstruction of the Tower of Babel and the evolution of the enlightened individual over the course of the epic.⁸³

The Légende is actually designed in accordance with the formula recommended in its verses. Hugo established its structure through a series of juxtaposed and discrete vignettes, pieces he had written over the years, rather than through a flowing narrative. There are alternations between images of evil and of good, feelings of despair and hope. "Seizième siècle, paganism" in which the Satyr pleaded the cause of humanity is followed by "Chutes"; while, within the verse "Vingtième siècle," the image of the lonely ship struggling with the forces of the ocean comes before that of "Pleine ciel," the realm of brotherhood and light.

Hugo stacks these contrasting images and feelings one above the other in a framework of time. Opposing forces are the means by which the poem ascends towards the resolution of dichotomies into a dynamic equilibrium. Hugo attempts to resolve the tensions of his poetic imagery into that "équilibre vertigineuse" with the soaring balloon and the Tower of Babel at the end. His long description of the various materials used to construct the balloon and of the way they are fashioned is a synecdoche for what he had attempted to do in the poem. By referring to the balloon as "le nef" of the new civilization, he

endows it with an architectural and religious signification that harks back to the character he attributed to the Légende. Like the nave of a church in which the congregation gathers, Hugo's poem is a construction meant to embrace humanity, its novelty lying in its structure and the character of the new social order it symbolized.

Hugo also used science and technology to help him in the way he had advocated his readers use them: as a means of clarifying an intuited sense of the nature of experience in order to transform matter into a useful form. Not only did he present technological inventions as materializations of his aesthetic and utilitarian vision, but he drew on scientific theory in several ways in constructing the Légende. First, he found the atomic theory of matter a useful way to conceive of his basic structural materials. It was possible to use words as discrete units with some substance and an internal life to them.⁸⁴ The arrangement he gives them, first into cadenced lines, then rhymed couplets, stanzas, verses, and books, suggests a parallel, if not a direct analogy, between the poem and the relationships among celestial bodies calculated by Newton. The same is true of the universal system which Hugo described in "A l'homme" as consisting of an infinity of interlocking subsystems.

There remains one other educational technique which Hugo employed in the Légende. He utilizes the method his fellow Republicans wished to establish in the classroom, that is, engaging the sentiments of the students by using art to manipulate their sense impressions. Hugo exploited both the physical quality of words and images to engage the feelings of the reader, organize them and direct them into constructive,

socially oriented activity. In his preface, Hugo admitted his intention to appeal to the reader through such means:

Comme on le verra, l'auteur, en racontant le genre humain, ne l'isole pas de son entourage terrestre. Il mêle quelquefois à l'homme, il heurte à l'âme humaine, afin de lui faire rendre son véritable son, ces êtres différents de l'homme que nous nommons bêtes, choses, nature morte, et qui remplissent on ne sait quelles fonctions fatales dans l'équilibre vertigineux de la création.⁸⁵

Hugo conceived of his words and treated them as so many building blocks, or physical entities. His vocabulary exploits the physicality of the words to evoke physical, emotional and mental responses in the reader or listener. For example, words such as "lugubre" in the phrase, "C'est la lugubre Tour des Choses," have an onomatopoetic quality. Their sound emotionally colors the image the subject has of the tower through their effect on the subject's senses. Words denoting colors also appear often and in unexpected places. Through the use of an element of surprise, Hugo also evokes images of vibrant color and light in the subject's mind, and he contrasts light effects with dark ones. The following lines from "La Vérité" provide a good example of all of these techniques. He is describing the intellectual:

Il vit là-haut! Il est ce monstre, le penseur! Quoi! Sa prunelle est sainte, et serait la première qu'éblouirait l'auguste et lointaine lumière! L'abîme est noir pur nous et pour lui serait bleu!

The order in which the images are presented locks these feelings within a pattern that binds them into moods. Generally speaking, Hugo uses the play of contrasting images on the subject's sense to build from dark and depressing states to light and uplifting ones by the end of the epic. He also varies the rhythm and sound of the words, slows or increases the pace, so that by the end, the images of flight are

conveyed in short liquid phrases that create a sense of the rising, airy, swaying motion of flight. The end result is that the reader is made to pass from one emotional state through a gamut of feelings to that of exhaltation. When added to the fact that he sees in his mind's eye the material results of progress and is led to understand and appreciate the processes that have made them possible, this exhalted feeling confirms for him the psychological value of the progressive method.

Hugo's drawings are instructive in much the same ways as his poetry, the difference being that in works like the frontispiece he created for the Légende, he turned directly to the visual arts to offer his audience an example couched in terms directly accessible to them (Fig. 41). The drawing is composed entirely of architectural forms, save for the sculptural monument of the Sphinx and the letters of the title. Internal detail is sacrificed in favor of the simplified architectonic forms. These forms build up from the small shapes of the Tower of Babel and the Sphinx on the horizon--which Hugo illuminates from behind, causing them to be noticed first--to the ascending spire and dark arching forms which press themselves against the foreground of the drawing and into the viewer's consciousness. The meaning of the drawing--the relationship between visual space and the passage of time, of the shape of primordial longings and their clarification in the present--emerges from the way in which the viewer absorbs the forms juxtaposed within the rectangular format. Foreground forms repeat and modify on a larger scale those in the distance. Even shadings of light and shadow are treated in zones that distinguish the time periods, and

the ordering of the words in the title acts to stabilize the structure by repeating the pyramidal forms and reversing the order of the shaded zones. The character of Hugo's original poetic vision is expressed through this structuring of pictorial elements and the idea gradually emerges as they build upon one another.

Not only are the density of the ink and the way it spreads and blots physically appealing tactile qualities, but the contrasts of dark and light, the arrangement of the architectural shapes, the ominous quality of the shadows and the glowing light, the texture of the paper, draw out feelings and thoughts from the viewer and organize them within the framework of the structured architecture.

With the Légende and its frontispiece, Hugo attempted to teach his audience the process through which social progress was realized. There are a number of levels at which he pitched his didactic efforts, as many as there were levels of expertise within the working class audience. The more technical he became, the higher the level of skill he expected of the audience to whom he addressed himself. At all levels, however, he used the visual arts as a vehicle for engaging individuals in a vicarious experience that can be transferred to the real world of productive activity. His statement in "L'Abime": "J'achève Babel," may be considered both a declaration of his own artistic aim and a challenge to the members of his audience, whether artists, architects, engineers, skilled craftsmen, small businessmen, or day laborers, to follow his example as best they can.

For all his references to "le calcul" as a means available to the artist and laborer, Hugo did not apply mathematics in proportioning his own poetry, nor was he able to synthesize the components in the Légende into a truly harmonious order. The poem lacks a methodical development of the author's stated intentions, its formal oppositions are not well balanced, and there is no real formal and emotional resolution of the contrasting ideas and physical impressions into the unified aesthetic whole to which Hugo aspired.⁸⁶ The vision and the means for carrying out the task are fully explicated, but the process of production had not yet been refined and carried to a satisfactory conclusion. The image of the Tower of Babel brackets the poem, but it does not really develop as a structure as the poem progresses.

Hugo was aware that he had not fulfilled his intentions for the Légende, and at the end of his life passed the responsibility for perfecting his method and continuing social mission on to the younger generation, just graduated from the Republic's schools.⁸⁷ Young writers were given the responsibility of perfecting Hugo's methods and guiding artists, architects, engineers, and craftsmen in designing works intended to serve the needs of the working classes.

Exhibitions and Expositions

The exhibitions mounted by the government or supported by it were used to a great extent as object lessons for members of all sectors of the middle classes. They were conceived as exercises in participatory democracy. In theory, the Republicans felt the educational experience at exhibits was identical to the one the

public underwent in public school art classes. Exhibitions simply made the experience more vivid and real.

The Republicans regarded exhibits as a particularly effective way to encourage designers and craftsmen, many of whom were in need of work, to learn how to use Republican aesthetic values as guidelines.⁸⁸ They also looked to such occasions to foster collaborative efforts among those independent producers who had accepted the challenge.⁸⁹ When it came to mounting exhibitions of new work, the Republicans could directly influence artists by requiring those submitting works to meet certain standards. In his 1883 speech to the jury for the Exposition nationale des ouvrages des artistes vivants, Ferry attempted to turn the standards for admission into a moral challenge by declaring the jury's decisions were to be based on "le choix rigoureux, la sélection sévère."⁹⁰ The salons des arts décoratifs sponsored by the Union Centrale, on whose board of directors Proust sat, employed competitions and awards to stimulate artists' interest in designing functional objects and incorporating new technology into designs.

In addition to having artists learn by designing for specific occasions, the Republicans also discussed ways to educate them through museum exhibitions mounted not only in the capital, but in the provinces at municipal art museums and museums affiliated with manual arts schools, such as that at Roubaix.⁹¹ The organization of the displays in these museums received special attention. Proust, in particular, wanted objects integrated into period settings and into contexts that allowed students to appreciate the relationship between functional utility and design and between the character of a period design and the

technology available.⁹² Such displays, he felt, would enable them to go about designing, on their own, works which could be integrated into larger environments. Exhibitions in museums affiliated with manual arts schools would combine technology, raw materials, and finished products in displays meant to give students a grasp of the resources at hand and of the interlocking nature of production tasks.⁹³

The proposed art exhibits were also ways of impressing on middle class consumers the value of the works created for these occasions. The pleasing effect which well-designed and well displayed domestic objects and architecture made on the public was bound to cultivate a taste and create a demand for products with the proper aesthetic character, they reasoned.⁹⁴ Beyond this result, the effect on the sensibilities would stimulate in the public a desire for the rational, work-oriented lifestyle and an understanding of its psychological and social value. It is possible, therefore, to see the exhibitions as a way to provide designers, artists, and other artisans with the stimulus they needed to adapt to technological change. Exhibitions were also a way of convincing consumers that under the new system of production, skilled laborers and artisans were their benefactors, not their nemesis. The products on display would offer them not only good value for their money, but a rational design that conveyed a vision of an ordered world which seemed within reach. Ferry's statement about the value of art education, quoted at the beginning of this chapter, would receive its ultimate expression and justification in these exhibitions. Through them all levels of the French middle classes would understand that Republican ideology offered a viable resolution of tensions into productive

energy. The international expositions were perhaps the most significant and certainly the most dramatic of the educational experiences. The vast scale on which they were mounted allowed the Republicans to engage large numbers of artists, architects, and craftsmen in a cooperative endeavor that would draw the attention of millions of individuals from all over the world. Because the expositions were intended to celebrate the Republic and its way of life, as much attention was paid to how they were designed and constructed, as to their final physical appearance.

Architects in particular were encouraged to adopt new principles of design and new materials in their plans for buildings at the fair. Regulations both in 1878 and 1889 stipulated that the structures of all buildings had to be made of iron.⁹⁵ Although such a rule would seem unprogressive, for by this time iron was not a new construction material, its aesthetic qualities had not been fully explored. Nor had iron been used for building the large, curving structural forms the Republicans desired. The contest for the three hundred foot tower presented architects with a challenge intended to force the adoption of new structural principles and engineering methods upon them.⁹⁶ The actual construction of the Tower and Galerie des machines was expected to give architects and engineers the opportunity to pass on the new building techniques they had devised to the skilled workers and day laborers. Men with different capabilities would have the chance to cooperate with one another in developing new working procedures and relationships fitted to the new techniques and designs.

Perhaps the most dramatic of the 1889 fair's lessons was the one workers would learn in completing the Eiffel Tower. The personal meaning which the image of a tower had for workers could not have escaped the Republicans' notice. The project was not only a way to train them in modern techniques and modern design, but a way to get them to feel their learning experience contributed to their moral growth and self-esteem. They were, in essence, to fulfill their social destiny. Indeed, the Tower achieved all those objectives, it seemed to some Republicans. According to Picard, the project had overcome the workers' antipathy toward innovation, helping to alleviate their sense of social and psychological alienation.

. . . les ouvriers se sont rivaillés pour l'oeuvre commun, abordant tous les obstacles avec une confiance absolue d'atteindre le bût.⁹⁷

Its completion was taken by the Republicans and members of their circle as a sign that everyone involved in the project had accepted Republican principles to guide them in working towards social solidarity. Eiffel later described the Tower as a "symbole" of "la force et les difficultés vaincues."⁹⁸

When completed, these expositions were like huge schematic boards in which the productive energies of the Republic coursed along inter-connecting paths (Figs. 42 and 43). Not only were the buildings physically joined into regular patterns, giving the visitor some idea of the sequential order in which production of consumer goods occurred; but the organization of the displays within was intended to vicariously engage the public in the flow of production in order to educate them to appreciate the character of the process and the supporting system. The

entire rationale was summed up by Simon in the statement on the dynamic of expositions:

Il y a dans toute exposition un bazar et un atelier. Le bazar éblouit; l'atelier instruit. Le bazar montre les richesses déjà produites; l'atelier, en expliquant les créations déjà faites, permet d'entrevoir et aide à trouver les créations à venir. Outre l'utilité qu'on en retire, on y goûte un plaisir peut-être moins vif au premier abord, mais plus profond et plus durable, le plaisir qu le poète a décrit et q'il met avec raison au-dessus de tous les autres: rerum cognoscere causas.⁹⁹

At the same time, the manner in which the dramatic architecture enveloped and ordered the other arts on display allowed the public to imbibe a sense of the hierarchy of a production system in which architects and engineers initiated and guided productive activity.

The plans also had a symbolic value capable of being used for didactic ends. Lockroy's reference to the 1889 plan as an "arc de triomphe couché le sol" indicates to what extent the plans were consciously intended to impress the character of the Republican system on the public. This concept of exhibition planning as symbolic design was not new. The 1867 exposition had been laid out in an oval arrangement expressive of Frédéric LePlay's views on socio-economic relationships.¹⁰⁰ Perhaps partly to distinguish themselves from the Second Empire, the Republicans used a grid plan in 1878, recalling that planned for the 1849 Paris expositions. For 1889, they selected the triumphal arch.¹⁰¹ Yet, the grid and the arch do have a dynamic character, a staccato rhythm wholly in keeping with the Republicans' image of progressive liberal democracy. Moreover, the Eiffel Tower translates this character into vertical terms. Its form certainly conveys the idea through the multitude of small parts which join and seem to

equilibrate themselves in the rising asymptotic curves that infinitely yearn towards one another. The plans, therefore, may be considered didactic in the sense that they help crystallize all the information and experience a visitor gained at the Expositions into one simple and moving mental image. The Tower to Lockroy's mind has done exactly this.¹⁰²

Republican Art Theory in Perspective

The syncretic character of the art program is unmistakable. In it all the strands of progressive French thought from the Enlightenment to mid-century are tied together and an attempt made to synthesize them into a meaningful pattern on the basis of their rational appeal. Methodologically and theoretically it fits into a pattern of thinking established over a century earlier by men such as Etienne de Condillac, Jean-Jacques Rousseau, Denis Diderot, the Marquis de Condorcet, and even the Swiss Pestalozzi, all of whom were interested in liberal education and sensationalist psychology.¹⁰³ Moreover, these ideas are traceable through the writings of St.-Simon and Auguste Comte directly to the Republicans; but, as will be shown, they also had their connections with the traditions of the working classes whom they were intended to assist.

Hugo, for instance, was familiar with the Marquis de Condorcet's Esquisse d'un tableau historique des progrès de l'esprit humain (1795), and he shared the Marquis's radical concept of personal liberty and his views on the role science and technology could play in securing it. Other similarities can be found between Hugo's image of the ideal

society in the Légende and the one Condorcet proposed to establish through his social calculus. Hugo also fully agreed with the philosopher's belief that the progress of human society depended upon the improvement of the common man's condition.¹⁰⁴ Both men were painfully aware that progress required a hard struggle between man and the material world, and both found solace in the faith that this effort would emanate in the evolution of human consciousness and of the material culture that testified to this growth. There are, however, significant points on which Hugo's ideas can be distinguished from those of Condorcet, the major differences being the emphasis the poet gave to the arts as a vehicle for public education and his open espousal of the working class cause.¹⁰⁵

All the Republicans agreed with Auguste Comte's view that the evil which art education must combat was over-specialization. As Comte wrote in the Système de politique positive (1851-54):

The system of dispersive specialty now so much in vogue shows itself . . . to be brutalizing, because it would condemn his [the worker's] intellect to the most paltry mode of culture, such as will never be accepted in France . . .¹⁰⁶

When it came to finding solutions, they also were in agreement with the reformist tradition. Ferry's approval of J. J. Henner's works because they allowed the viewer access to a world of dreamy relaxation at the end of the working day found its precedent in Comte's proposal that the role of art was to create a vivid picture of the new system that would appeal to the popular imagination.¹⁰⁷

Simon's views on how to improve the condition of the workers and combat specialization of tasks reveal much of Victor Cousin's

ecclecticism and St.-Simonian faith in the power of science and technology to improve the condition of the workers.¹⁰⁸ Simon identified, as did they, aesthetically satisfying experience with spiritual satisfaction. The difference between Simon and his mentor Cousin is that he spelled out the social benefits of this satisfaction, articulating more clearly than St.-Simon the means by which such ideas could be put into effect through the operations of the market place.¹⁰⁹ Improving the design of the ordinary individual's surroundings and of the objects he used daily was a way of automatically engaging people in an activity that entailed a moral commitment to others. For Simon the controlled market place provided a context in which everyone had an interest and from which all could reap spiritual satisfaction without regard to doctrinal differences.

There is no doubt that Simon was reluctant to see what he considered a debasement of art occur. His naive view that the moral superiority of the Greeks lay in their total unconcern for personal discomfort is a good indication of where his personal preferences lay.¹¹⁰ But his comments on the necessity of bringing art down to earth reveal his attempt to reconcile himself to the fact that new conditions of existence had firmly entrenched themselves and had to be taken into consideration.

The differences between Simon's views and those of Cousin offer an insight into the evolution which Republican art educational theory underwent over the course of the nineteenth century. In Le Travail, published in 1855, Simon, like Cousin, clearly distinguished the realm of work and utility from that of spiritual and aesthetic beauty. By

1878 he declared in the name of social progress that art had to come to the aid of the worker and through him to society as a whole.¹¹¹ His own critique of Cousin, first published in 1887 and reissued in 1888, marks the culmination of his evaluation of the means of dealing with modern life. In this work, Simon criticized his mentor on two points: first, for his logically contradictory notion that the ideal existed both as an a priori psychological state and as an external metaphysical state with which the individual sought union; secondly, for his failure to provide a clear and rigorous method for apprehending the ideal.¹¹² Simon's introduction to the 1878 Exposition catalogue, in which he attempted to find a way out of these difficulties, marks an important step in adapting Cousinian values to the circumstances of modern life without sacrificing the position of leadership they gave to the artist and the intellectual.

The same parallels prevail between the Republicans' art program and those proposed by the eighteenth century reformers. Almost all the constituents of the program have their antecedents in the pre- and post-Revolutionary period. Diderot and Pestalozzi were interested in the role art could play in a national education system intended to create integrated personalities and capable of using new technology in manufacturing. They were also concerned about how to encourage individuals to direct their efforts towards social ends, not least of which was the growth of a commercially based economy.¹¹³ In this respect, the Republicans' pedagogical concept which equated "les mots et les choses" found its precedent in Pestalozzi's technique of having students draw objects and then write the identifying word, in order to

have them make a connection between words and things, between the natural order, manual processes, and thought. Moreover, they all were interested in art as an educational tool because it combined pleasurable experience with ordered presentation--a synthesis which it was felt produced positive intellectual and moral results.¹¹⁴

Drawing instruction in the primary school curriculum had been proposed during the Revolution, when reforms of the school system were first seriously undertaken. Not until the Law Guizot of 1833 was it introduced into the state schools. Although Guizot's reasons for this reform were much the same as those given by Ferry and the others, it was only instituted on a limited scale. During the Second Empire, as industrialists became increasingly aware of the importance of consumer goods, drawing instruction of the structured sort advocated by the reformers was offered to the public in courses held outside the university system.¹¹⁵ Perhaps the biggest impetus for its use in the formal training of industrial designers came from the Parisian municipal art schools in which professors like Justin Lequin developed new methods of teaching the subject during the 1860s.¹¹⁶ It had, however, long been recognized by the followers of David and Ingres, as well as by Viollet-le-duc and the staff at the Ecole Centrale des arts et métiers, as a means of training artists, architects and industrialists to analyze and synthesize experience.¹¹⁷

As for the modernization of technical education and its reorganization on a national scale, this too was an effort begun during the First Republic by individuals such as the Duc de Larochefoucauld-Liancourt (1747-1827). The most important of these schools, the Ecole

Centrale des arts et métiers, founded by the Duke in the late eighteenth century, was an early effort to establish methods and set standards for training industrial designers. It was intended to pave the way for the reorganization on a national level of the apprenticeship system controlled by the guilds and compagnonnages before the Revolution.¹¹⁸ The Ecole des Beaux-arts and the Institut were also products of the same reform movement, established to serve similar functions in training artists and architects.¹¹⁹

The idea of exhibitions and festivals as vehicles for stimulating public moral and social sentiment certainly became well established during the Enlightenment and Revolution. One has only to think of Rousseau's famous letter to d'Alembert on the theater and the Revolutionary fêtes.¹²⁰ Proposals such as Anne-Marie Turgot's for the use of fairs to open trade and stimulate improvements in manufactured goods found their historical expression in the first national industrial arts exposition held in Paris in 1798 where the project of the three-hundred foot tower was first proposed.¹²¹ The same is true of the idea of public museums. Public art exhibitions such as the salons of the Académie go back to the seventeenth century, however, they only became important means of influencing taste and public opinion in the eighteenth.¹²²

The Republicans were well aware of the program's historical antecedents. Proust and Lockroy went to some length to establish a chronology for it, perhaps to give it a respectable pedigree.¹²³ Their speeches and writings indicate, however, that they wished to distinguish their program from those of their predecessors in two important ways. First, they emphasized that it was tailored to the character of

the French working classes and served their needs and those of the nation at large. In short, it was democratic and liberal. In fact, their program looked to the personality of the average individual to provide the motivating force needed to start the system going. The program took as its starting point "le goût," the French taste for pleasant physical sensation encapsulated in an ordered pattern. Taste was, as Simon said, "La plus grande force industrielle de la France."¹²⁴

Secondly, they felt that their program synthesized the elements of other programs into a coherent system capable of being implemented on a national scale. The drawing program was chiefly responsible for this improvement, being based on the assumption about French character and being designed to cultivate the responsiveness of that character to constructive activity.

Together, these points of distinction suggest that the ultimate source of the program's character was the culture of the working classes. Indeed, as discussion in Chapter III suggested, in their effort to cultivate this taste the Republicans looked afresh at the forms which were most meaningful to this group. Festivals, exhibitions, work and leisure activity of the common man, and the material culture he produced were means of mobilizing middle class energies in the cause of social progress. Even the origin of the concept and technique of drawing may be found in the traditions and mores of the *compagnonnages*. According to Agricole Perdiguier (1805-1875) the *compagnon* and writer friend of Georges Sand, not only did the *compagnons* believe that moral and economic advancement took place through the exercise of one's *métier*, that is through constructive struggle between man and matter,

but Perdiguier noted the traditional method of drawing "par le trait" constituted the initial step in the creative process leading to these improvements.¹²⁵ The Republicans, who very probably had read Perdiguier, were not doubt aware of the artisanal ancestry of their drawing program and sought to capitalize on it. At any rate, they took great pains to work out the details of how it would be taught at each level in the school system so that individuals might learn easily.

The history of governmental efforts to develop a modern culture for the working classes out of the constituents of traditional popular culture has yet to be written; but it would seem that the Republicans' educational ideas were influenced both by their intellectual predecessors and by their direct contact with the working classes who were threatened by the very technology that had promised them so much a hundred years before. It is, therefore, possible to say that although by the eighteenth century reformers had identified the forms and techniques that would be used to stimulate social progress, the situation after 1870 led the Republicans to alter the focus of the program. Seeing the working class on the defensive, they tended to define social progress first and foremost in terms of the material and moral welfare of this social group. Thus, the inspirational forms and methods were turned into ends, forming boundaries to keep industrialization in check, fixing the middle class's attention on cultivating self-consciously those aspects of middle class lifestyle which were being undermined.

Conclusion: Liberty within Unity as a
Functional Aesthetic Principle

The Republicans' art education program was a complex strategem to maintain the middle classes as the pivotal power in French society. This involved renewing middle-class self confidence and commitment to their traditional way of life. As this chapter has shown, the principles and methods they proposed to use as the foundation for a new material culture might be viewed as logical ways to dispel the feelings of confusion and insecurity that plagued their constituency. Their proposals allowed the individual to exercise initiative, while securing the right of an external authority to set the boundaries within which the individual could operate. They also gave the individual a method capable of producing both well-designed goods and feelings of mental and emotional wholeness. That is, art education promised to eliminate the anxiety which industrialization had wrought in middle class existence by teaching the population to consider technology, science, economic competition, democracy and labor a set of parameters within which personal independence could be exercised. The purpose of drawing instruction and of the various exhibitions was to instill in individuals a desire to be self-motivated and to give them the methodology that would allow them to function within the stipulated limits.

Art education, in essence, taught the public a universal language that could be used for personal expression and at the same time provided the common element needed to bind the middle classes together within a system of commodity exchange. In this language meaning was conveyed through the handling of materials, the general character of

the images, the proportions of individual units and the relationships existing among them, rather than through anecdotal or veristic detail. The practical value of this linguistic concept of art lay in the fact that it was a means of uniting human productive activity with human thought, so that the manner in which the principles of artistic language were learned established patterns of behavior and thinking which could be carried over into the social and economic spheres.

Of particular importance in this respect were the two ways in which their art education theory related economic production to innovative design. Designing could be considered a means of expressing the use and the physical character of the setting for which the product was destined, which was Proust's position; or it could be a means of applying the principles of engineering to solving problems of structural stability which arose when objects had to be designed to satisfy new needs, which was the view of Ferry, Hugo, Lockroy, and Simon. These functions, although one is derived from the decorative arts and the other from architecture, were not mutually exclusive, as Simon's comments on the Palais du Trocadéro quoted in Chapter II reveal; nor were they limited to one art form. Rather, when buttressed by a scientific paradigm, they could help the student think of the design of any object as having utilitarian and symbolic dimensions associated with social, moral, and natural processes that altered reality.

While their language was flexible, allowing individuals a great deal of leeway in interpretation, it required the presence of an external authority to institute and monitor its use. This fact raises the

question of whether their program to create independent and self-motivated individuals caught them in a paradoxical situation that undermined their aim.

One can argue that this imposition of direction was salutary. After all, their intention was to stimulate innovation, not to squelch it. The Republicans may have wished to impose their values on society, but intellectual and economic liberty, political democracy, and legal equality offered the individual some independence from that authority, while setting the limits within which differences could be expressed. Moreover, the aesthetic provides some clue to the fact that the Republicans aimed at establishing a dynamic equilibrium among producers and consumers not a single static formalized pattern of hierarchical interactions.

The observation that liberal democratic thought of this period is marked by a tension between individualism and authoritarianism is by now a cliché.¹²⁶ Rather than the tension reflecting a repressive attitude or lack of logic on the Republicans' part, it was an integral part of their theory and provided a means of making the individual autonomous, while also making him subject to certain constraints that gave him the security he lacked.

In the chaotic economic situation of the early 1880s, they clearly offered the commercial community the leadership it needed and wanted. From this perspective the authoritarian elements in their program served a purpose and were not necessarily antithetical to the independent attitude they wished to foster in the population. In fact, it is their education program, including the training in the arts,

which helped to form the intensely independent generation who came of age at the turn of the century and who turned out to be equally as authoritarian in their pronouncements concerning individual liberty.

Their proposals did contain some built-in safeguards against the establishment of absolute conformity. First, the method of drawing they advocated placed emphasis on being self-critical in the organization of empirical information. Even in drawing from reproductions or from original works of art, they wished the student not to copy details, but to analyze its parts, to get a sense of proportion of part to whole, and then to apply this principle in the organization of other information. Such a method allowed the individual to become self-directed and to use his own experience as a guide rather than to accept authority without question. At the very least it allowed the individual to test the solutions of authority against his own experience. Consensus lay more in the method and the principles themselves than in the superficial appearance of the final results. From the study of the art of the past students could derive a general idea of what constituted order, that is of the principles which governed organization and a sense of what constituted an organized procedural method. This sense would give them a conceptual framework into which modern technology and scientific knowledge could be integrated.

Secondly, the Republicans offered contemporary scientific theories as the paradigm for the social and moral idea. They saw science as a process of continually refining human knowledge about the principles governing the natural order. There was, therefore, not an absolute and unchanging order which individuals were to accept, but a

design which was functional at a particular moment in the history of human society. Moreover, what mattered was not so much the apparent order the design assumed, as the principles from which it was derived, for the object was a medium for conveying these principles from one individual to another. Even the reality which science described lay not in the fixed form of the object pupils drew, but in the relationships between the parts and whole and between one object or one person and another. It was a dynamic ideal which was initially perceived through an intuition of the ordering of sensate experiences, and therefore, in the final analysis, subject to a certain degree of individuality in interpretation.

Furthermore, the Republicans' theories on art education allowed for the existence and accepted the utility of human feelings and emotional needs, so long as these could be categorized as universal. Primary among such feelings was the middle class's need for emotional and economic security. Art education offered them a means of stabilizing their feelings through an organized system of reference to the external world. At the same time this process was meant to train them in manual and intellectual procedures that could be applied to productive activity of all kinds, thus enabling individuals to satisfy their economic needs and desires through constructive activity also beneficial to others. The emphasis the Republicans placed on images which were popular and contemporary was a means of associating universal human needs for order with common cultural motifs that were immediately recognizable and appreciated by the public. The metaphors of construction, of fête, of nature were made directly accessible to the popular

imagination when associated with images taken from contemporary life, from French history, the Bible or classical art, as was the case with Puvis's Doux pays, for example. As such, the combination of a particular aesthetic with certain types of images offered a means of satisfying the individual's need for meaning in his life.

In their desire for social order and economic security, the Republicans did eliminate the useful role which idiosyncratic needs and feelings can play in the individual's life. In their desire to establish social equilibrium, they pushed to the side and even consciously rejected the special feelings and needs of individuals which art can cultivate and satisfy. Art for art's sake, art as simple play were rejected. Models for students were intended to direct attention to the process of rational ordering and to universal principles of order that controlled experience. Their own personal dislike of such feelings, which they connected, rightly or wrongly, with the ethos of the corporatist capitalists and with moral decay, found its way into the program for public education.

There is one other way in which their own program tended to limit Republican authority over the individual. Because of their need for models for the market place and the classroom, they gave artists an important place in the economy, making them key figures in the educational program and setting them up in a position to share authority with the government. In theory the artist was expected to assume enormous social responsibility, becoming a sort of public servant and benefactor through the exercise of his talents. At the same time the Republicans assigned him a difficult role it was he who had to be the first

autonomous individual by being the first to work out the problems of designing new products. In so doing he would also be the first to assume the burden of learning how to use liberal democratic principles to overcome the contradictions and frustrations of modern existence through the medium of his art. The Republicans, in essence, accepted the moral, social, and economic value of an artistic avant-garde, wishing to tap the energy and imagination of artists, by offering official recognition to those whose designs were most expressive of liberal democratic principles. They not only allowed the artist to share in the exercise of authority, but in exchange they demanded that he provide the Republic with a new style. The significance of this expectation is the subject of the next chapter.

Before going on, however, a word should be said about how the art policy could affect relations between the Republican government and the artistic community. The power to define the principles on which self-guidance ought to be based and the objectives towards which individuals ought to aim in their work allowed the Republicans to judge artistic production. They enthusiastically welcomed this task and felt that in their role as taskmakers they could make visible the salutary effects of their reforms. Unfortunately, their judgments could and did lead to friction between them and a number of French artists.

First, there were the artists who based their efforts on liberal democratic principles, but whose works did not receive official recognition. The remarks of Emile Bernard quoted in the introduction reveal surprise at the exclusion of Seurat, Gauguin, and others from the 1889 exhibit. They suggest that a major source of the hostility young

avante-garde artists felt towards the Republicans might stem from their sense of being cheated of a birthright. That is, these artists were not against the Republic, nor the principles on which it was founded; they were frustrated in their desire to be accorded the rewards and social status to which they believed their artistic accomplishments entitled them. In other words, they were the victims of the "Catch 22" in Republican education theory: the method could confirm the artist in the rightness of his product's design and in his sense of self-worth and social calling, but it did not guarantee that the political tastemakers would recognize these solutions. The aesthetic language was too flexible to be reduced to a single formulation or "look."

The fact that young artists felt an attachment to the Republic indicates the possibility of a new interpretation of the relationship between the avant-garde and the government during this crucial phase of the Third Republic. Although the subject needs further study, evidence suggests that the Republicans, who belonged to an older generation of the avant-garde, once in power began to reap the harvest of contradictions which a liberal-democratic education had sown in the fertile minds of a younger generation of artists. As for the artists, they had to use the methods and values learned in Republican schools to confirm their own worth and at the same time to criticize the society which rejected them but also espoused these ideals. Some of the effects which this ambivalence towards the socio-economic system had on their art will be discussed in Chapter V.

The Republicans' efforts to use exhibitions, survey their aesthetic values, also created tensions between them and those with a vested

interest in the Salon and the Ministry of Education and Fine Arts. The remarks of the Marquis de Chennevières and of Deputy Robert Mitchell quoted in Chapter III may be taken as indicative of the attitude of many supporters of the previous administration. They were forced to cast their elitist definition of liberalism in more exattered and political terms. In striving to protect the institutions which they felt encouraged talented artists, they were driven to support art that cultivated unique emotional experience as a perverse way of taking a stand against the Republicans.

Generally speaking, the Republicans' efforts to institute a program based on their art educational theory created new contradictions within the intellectual and economic life of the individuals close to the arts in France, while resolving old ones. They also tended to bring to the surface the different meanings which intellectuals and artists attached to individualism and liberty that had not previously been fully articulated, and they also helped to liberalize the art world, although in a rather round-about manner. Looking for ways to influence public taste, The Republicans found that supporting independent group exhibitions and art exhibits at national industrial expositions was one way to get around the vested interests in the Salon and still affect the art market. Thus, they place their seal of approval on institutions for the exchange of artistic commodities which had once been considered disreputable and threatening to the social order.

FOOTNOTES

¹Published in Débats et documents parlementaires de la Chambre des députés 12 August, 1881, p. 844.

²See for example, Ferry's analysis of the industrial system in two unpublished articles he submitted to the Revue des deux mondes in 1863. These are included in Discours et opinions de Jules Ferry, ed. Paul Robiquet, 7 vols. (Paris: A. Colin, 1893-1898), 7: 451-535. Like Marx, the Republicans rejected the fetishism of liberal economic systems, seeing manufactured goods as the means by which social systems changed. It is to some degree probably the impact of utilitarianism on both Marx and the Republicans that accounts for the similarity of the analysis and of the attitude towards human artifacts.

³Discours, 7: 122.

⁴See Ferry's remarks to the Chambre reprinted in the Journal officiel de la République française, 1 April, 1883, p. 1644. Here he comments on the general value of science in education. For the value of drawing as an active learning experience, see Proust's comments in L'Art sous la République (Paris: Bibliotheque Charpentier, 1892), p. 184.

⁵Discours, 7: 350 and 347.

⁶See note 4 above.

⁷For a review of the legislation see Alfred Picard, Exposition universelle internationale de 1889 à Paris, 10 vols. (Paris: Imprimerie nationale, 1891-92), 4: 103-105. Also see Theodore Zeldin, France: 1848-1945, 2 vols. (Oxford: Oxford University Press, 1973-1977), 2: 447-450. Zeldin's discussion, however, is confusing, perhaps because he is attempting to give some sense of the haphazard way in which the art education program was administered and also because he lacks a good grasp of the aims of the program and of the basic theory.

⁸She published the work under the name "Bruno." The quotation is from p. 83 of the 120th edition, published in 1884 in Paris by Vve. Eugene Belin et fils.

⁹"Ministère des arts," La Revue politique et littéraire, ser. 3, 3 (25 February, 1882): 232.

¹⁰The term "dessin" in French falls somewhere between "drawing" and "design," combining the active characteristics of the first with the organizational implications of the latter term. For contemporary definitions see: Ferdinand E. Buisson, Dictionnaire de pédagogie et

d'instruction primaire, 1887 ed., s. v. "Le dessin." E. Viollet-le-duc, "De l'enseignement des arts: Il y a quelque chose a faire," Gazette des Beaux-arts, 12 (September 1862): 249-255; idem, Histoire d'un dessinateur (Paris: Hetzel, 1879), p. 194.

¹¹See Proust, L'Art sous la Republique, p. 184. Also see Simon, Introduction, Exposition universelle de 1878. Rapports du jury international (Paris: Imprimerie nationale, 1880), p. 534.

¹²Introduction, p. 250.

¹³Picard, Exposition de 1889, 4: 104; Proust, "Ministère des arts, 2: 231-234 (the entire article reviews reforms made since 1863): Emile Monod, L'Exposition universelle de 1889: Grand ouvrage illustré, historique, encyclopédique, descriptif, 3 vols. (Paris: E. Dentu, 1890), 1: 622-623. To my knowledge no systematic survey of all the legislation and administrative decrees passed exists.

¹⁴See Proust, "Salon de 1882," Gazette des Beaux-arts 25 (1882): 533-554.

¹⁵Idem, "Ministère des arts," 1: 198-199.

¹⁶Picard, Exposition de 1889, 4: 123.

¹⁷Journal officiel de la République française, 1 April, 1883, p. 1644.

¹⁸See Dieu, Patrie, Liberté (Paris: Calmann-Levy, 1883), p. 252.

¹⁹One is reminded here of Hippolyte Taine's discussion of hallucinations and reality in Philosophie de l'art. Richard Shiff examined Taine's ideas in an article "The end of Impressionism: A Study in Theories of Artistic Expression," The Art Quarterly, n.s., 1 (Autumn 1978): 338-378.

²⁰See Picard's description, Exposition de 1889, 4: 104. He uses the expression, placing it in quotation marks to indicate its origin in an official protocol for drawing instruction.

²¹Zeldin, France, 2: 448, mentions only models of antique sculpture, architectural decoration, and geometric figures were actually used. The quotation is from Monod, Exposition, 1: 623.

²²The quotation is from Proust, "Ministère des arts, 2: 232. Also see idem, "Salon de 1882," pp. 534-535. Art historians and historians have often been confused by the seeming discrepancy between artists and theorists' declarations of allegiance to nature and their reliance on the art of the past. I am trying to show that the method was

logical, if one understands that they meant by nature, "human psychology," something which was apparent to some degree in all human artifacts. For further elaboration of this point, see the discussion in the text and my forthcoming article: "The Republicanization of French art in the Aftermath of the Revolution," Revue de l'Institut napoléon.

²³Simon, Introduction, p. 131. Simon also attempted to provide a source of models for artists who could not afford to travel. See Pierre Vaisse, "Le Musée des copies à l'assemblée nationale ou le vote du chapitre quarante: Le débat Jules Simon, Armand Buisson du 10 decembre, 1872," Revue de l'art, 1976,

²⁴J. O., Proust, 1 April, 1883, p. 1644.

²⁵Monod, Exposition, 4: 623 and 622.

²⁶Proust, "Salon de 1882," p. 535. Also see Simon, Introduction, p. 81 and 179, 358; Suzi Grablic, Progress in Art (London: Thames and Hudson, 1976) who develops a modern theory of the evolution of Western art based on Piagetian concepts of cognition and learning that comes very close to the Republican's own theory of art history.

²⁷Eugène Guillaume and Jules Pillet, L'Enseignement du dessin, Recueil des monographies pédagogiques publiées à l'occasion de l'Exposition universelle de 1889, 4 vols. (Paris: Imprimerie nationale, 1889), 4: 547-548. Zeldin France, 2: 448, mistakenly identifies Guillaume as a painter instead of a sculptor. During the Third Republic he executed a number of portrait busts of prominent Republicans, including Jules Ferry (1887), the painter J.-D. Ingres (1887), the scientists Eugène Chevreul (1888) and Claude Bernard (1886). He held the post of Director of Fine Arts for only a few months in 1879. He then became Inspecteur général de l'enseignement du dessin and also in 1882, assumed the chair of Art History and Aesthetics at the Institut which Charles Blanc had held until his death in 1882. In 1887 he became professor of drawing instruction at the Ecole polytechnique.

²⁸The quotations are from Proust, "Ministère des arts," 2, p. 232, and Guillaume, *ibid.*, pp. 547-548.

²⁹See note 4 above and also Simon, Introduction, p. 170.

³⁰Guillaume, L'Enseignement, pp. 548-549.

³¹Introduction, p. 224.

³²"Ministère des arts," p. 239.

³³See *ibid.*, p. 231.

³⁴Guillaume comments on the value of knowing how to read a drawing in L'Enseignement, p. 548: ". . . mis entre les mains d'ouvriers sachant le lire, il leur donne le moyen de reproduire exactement l'original. S'ils le font avec une si grande précision, que si plusieurs entre eux exécuter la même pièce, ces exemplaires peuvent être confondus les uns avec les autres."

³⁵See Proust, "Ministère des arts," p. 231, 235. Also see J. O., 1882, p. 2079 and Débats et documents parlementaires de la chambre des députés, 5 July, 1881, p. 1284.

³⁶Antonin Proust, Commission d'enquête sur la situation des ouvriers et des industries d'art (Institué par décret en date du 24 décembre, 1881) (Paris: Imprimerie nationale, 1884), p. 512.

³⁷"Ministère des arts," p. 235.

³⁸L'Art sous la République, p. 113.

³⁹"Ministère des arts," pp. 235 and 238.

⁴⁰Ibid., p. 238.

⁴¹See Proust, "Salon de 1882," p. 534; Simon, Introduction, p. 252.

⁴²See Le Temps, 22 September, 1882, p. 3, where Hugo's efforts to preserve sections of Paris dating back to the Renaissance and medieval periods are discussed. For a short study of the image of the cathedral in modern art and literature, including the work of Hugo and Viollet-le-Duc, see Donat de Chapeaurouge, "Die 'Kathedrale' als moderne bildthema," Jahrbuch der Hamburger Kunstsammlungen, 18 (1973), pp. 155-172.

⁴³See Chapt. II, above.

⁴⁴See Simon's comments on the historical exhibition of architecture and furnishings at the 1878 Paris Exposition in Introduction, pp. 212-215.

⁴⁵Proust, "Salon de 1882," p. 535.

⁴⁶"Ministère des arts," 237-38. Proust takes up this theme in most of his writings on art.

⁴⁷Simon, Introduction, p. 211.

⁴⁸This term was not used by the Republicans, who preferred "analogie." See Simon, Introduction, p. 358. The concept of the scientific paradigm as an expression of a world view is articulated

by Thomas S. Kuhn, The Structure of Scientific Revolutions, International Encyclopedia of Unified Science, Vol. 2, no. 2 (Chicago: University of Chicago Press, 1970). The only figure contemporary with the Republicans who used the term, so far as I know, is the critic Félix Fénéon in an article on Impressionism in 1886, reprinted in Oeuvres plus que complètes, ed. Joan U. Halperin, 2 vols. (Geneva: Librairie Droz, 1970), 1:36. Ferry referred to the laws of the universe taking the form of economic laws governing commodity exchange in human society. Discours, 6:199. Proust, L'Art français depuis 1789, p. 8, argued that the principle of the modern artistic ideal should be sought in scientific discoveries of the present, not the art of the past.

⁴⁹Simon, Introduction, p. 170.

⁵⁰Ibid., p. 224. The architects' speeches were published in the transcriptions of the Congrès international des architectes (2^e) tenu à Paris, du 29 juillet au 3 août, 1878, Congrès et conférences du palais du Trocadéro, no. 9 (Paris: Imprimerie nationale, 1881). Davioud, the architect for the Palais du Trocadéro, had for many years advocated the introduction of new materials, building methods, and integrated design in French architecture. Emile Trélat, a friend of Ferry's since the 1850s, was Architecte de la département de la Seine à Paris; Archille Hermant, architecte de la ville de Paris et de la Maison de répression à Nanterre. I have been unable to find any dates for him.

⁵¹Introduction, p. 170.

⁵²Ibid., p. 359.

⁵³References to discoveries in the field can be found in Simon, Introduction, pp. 358 and 364. Auguste Scheurer-Kestner (1833-1899), Ferry's relative by marriage, recounted in his Souvenirs de jeunesse (Paris: Bibliothèque Charpentier, 1905), pp. 330-331, that the French chemists Pierre Berthélot (1827-1907) and Charles Wurtz (1817-1884) were well known in Republican circles their differing theories on the essential nature of matter being a cause of political controversy. Berthélot's research laid the foundation for Helmholtz's work in thermo-chemistry and had been an extension of Michele Chevreul's on fats. A useful source of information on the the impact of thermodynamics on religious ideas is Erwin N. Hiebert, "The Uses and Abuses of Thermodynamics in Religion," Daedalus, 95(1966): 1046-1079.

⁵⁴According to Scheurer-Kestner (see note 53 above), some Republicans ranged themselves into two political camps on the issue of the character of matter. In the one, they sided with Berthélot, accepting matter as a unified physical substance visually apprehendable, inert, alterations in appearance resulting from mechanical processes. In the other group, which formed around Wurtz (under whom Scheurer-

Kestner had studied), the Republicans accepted the atomic theory of matter as composed of sub-visual particals containing within them a vitality, a potential energy that could be released through self-generated activity and interaction with external stimuli. While apparently Wurtz was known to his admirers as a person with an artistic sensibility, Puvis de Chavannes admitted tht he had struggled to adapt the chemist Berthélot's ideas and was interested in art and art education himself. See, Aimée Brown-Price, "L'Allégorie réelle chez Puvis de Chavannes," Gazette des Beaux-arts, January 1977, p. 37; Grande Larousse universelle du XIX^e siècle, s. v. Berthélot and Wurtz; Dictionary of Scientific Biography, s. v. Berthélot; and the writings of Berthélot and Wurtz.

⁵⁵Discours, 7:348.

⁵⁶"Salon de 1882," pp. 533-534.

⁵⁷Congrès, pp. 160 and 157, respectively.

⁵⁸Ibid., p. 158.

⁵⁹Ibid., p. 161.

⁶⁰Ibid., p. 167.

⁶¹Simon, Introduction, p. 211; Hermant, Congrès, pp. 48-65; Trélat, Congrès, pp. 162-168; Proust, L'Art français, p. 8; Gallé, in Proust, Commission d'enquête, p. 8; Davioud, Congrès, p. 146.

⁶²Research on the systematic use of the arts by modern French governments has really only begun to scratch the surface. For the purposes of my own study, I have found the efforts of Maurice Agoulhon very useful. See the following articles by him: "Bartholdi et le Soleil," Gazette des Beaux-arts, May-June, 1977, pp. 187-191; "Le Problème de la culture populaire en France autour de 1848," Romantisme, no. 9(1975), pp. 50-64. Evelyn M. Acomb, The French Laic Laws (1879-1889), Studies in History, Economics, and Public Law (New York: Octagon Books, 1967), is also helpful, as is the study by Pierre Vaisse mentioned in note 23 above. I have chosen not to include a discussion of Republican festivals because they comprise a separate subject which still needs a great deal of research; and, then too, while they were thought to express in embryonic form the patterns and spirit of the vast middle class, the Republicans were interested in capturing those in more enduring media.

⁶³See Hugo, Actes et paroles (1864-1885). I have used the André Martel edition of Victor Hugo, Oeuvres complètes, 35 vols. (Paris: Andre Martel, 1948-1955), 25:553. This collection is by no means complete. It must be supplemented by reference to Le Temps for texts of Hugo's addresses to skilled workers and artisans, as well as small businessmen.

⁶⁴Ibid., pp. 517-520.

⁶⁵On Hugo's audience, see note 63 above and Sheila Gaudon, "Prophétisme et utopie: Le problème du destinataire dans les Châtiments," Saggi e ricerche di letteratura francese, 16(1977): 403-426.

⁶⁶Hugo summed up his views in an interview he had with the young journalist Alfred Barbou. See Barbou's Victor Hugo et son temps (Paris: G. Charpentier, 1881), p. 403.

⁶⁷Ibid.

⁶⁸See Victor Hugo, La Légende des siècles, A. Dumas editor, Introduction by Jean Gaudon, (Paris: Garnier Frères, 1974).

⁶⁹Writers on Hugo have stressed the intellectual and spiritual side of progress in his work, overlooking or underplaying the part which human labor plays in producing positive material and ethical change. See Pierre Albouy, "Raison et science chez Victor Hugo," Cahiers rationalistes, no. 125(1952), pp. 1-22.

⁷⁰La Légende, p. 791.

⁷¹See Proust's reference to Hugo's speech on the value of popular art forms in L'Art sous la République (Paris: Bibliothèque Charpentier, (1892), p. 79.

⁷²La Légende, p. 791.

⁷³See the section on Science and Technology in Chapter I above.

⁷⁴La Légende, pp. 594 and 791.

⁷⁵This phrase was used by Hugo in his Introduction to Les Misérables. Similar references can be found in his "Préface de la première série" of the Légende.

⁷⁶Les Misérables, Book 5, Chapt. 3. I have used the following edition: Edited and with an introduction by Maurice Allen, Bibliothèque de la Pléiade (Dijon: Gallimard, 1964).

⁷⁷Ibid.

⁷⁸La Légende, p. 799.

⁷⁹The major study on this subject is Jean Gaudon, Le Temps de la contemplation: L'oeuvre poétique de Victor Hugo des "Misères" au "Seuil du gouffre" (1845-1856) (Paris: Flammarion, 1969).

⁸⁰See Sheila Gaudon, "Les Châtiments." To my knowledge no one has seen that Hugo's espousal of the workers' cause involved appropriating and adapting their working procedures to his own creative process.

⁸¹"Préface," La Légende, p. 7.

⁸²Ibid., pp. 5 and 9.

⁸³Ibid., p. 799. In the final section of the epic, as in Les Misérables, Hugo made clear his position on the possibility of attaining utopia. Ultimate salvation comes after death as a gift from God made on the basis of some logic unknowable to man. Hugo's main interest in the Légende is on the areas of existence which humans can improve. On these points he was in full agreement with Ferry and Simon.

⁸⁴Hugo's technique, his choice and manipulation of words, and his application of scientific theories to his verse are discussed in the introduction Charles Lecoœur wrote to his book La Philosophie religieuse de Victor Hugo: Poèmes choisis sur la méthode philosophique du mot juste (Paris: Bordas, 1951).

⁸⁵La Légende, pp. 5 and 645.

⁸⁶See Jean Gaudon critique of the work in his introduction to the Garnier edition of the Légende. Arthur Symons, who had no liking for Hugo's poetry, made an interesting observation on Hugo's method that is worth noting: "They are the mathematical piling up of a given structure, in a given way, always the same." Colour Studies in Paris (New York: E. P. Dutton & Co., 1918), p. 135.

⁸⁷See Victor Hugo, Correspondence, 2 vols. (Paris: Calmann-Lévy, 1898), 2:371 and 372.

⁸⁸Lockroy's comments on the economic value of the 1889 Paris Exposition are in his preface to Monod, Exposition, 1:xxv-xxvi.

⁸⁹Ibid., and also Proust, "Les travaux des commissions de la société de l'Union central des arts décoratifs. Rapport de M. Antonin Proust, etc., 13 décembre, 1889," Revue des arts décoratifs 10 (1889-90): 192-197.

⁹⁰J. O., 23 April, 1883, p. 2010.

⁹¹Débats et documents parlementaires de la Chambre, 29 March, 1881, pp. 843-845; and 5 July, 1881, p. 1264. Proust, "Ministère des arts," p. 235.

⁹²See Proust's comments in L'Art sous la République, p. 183 and p. 228; idem., "Les Travaux des commissions de la société de l'Union centrale des arts décoratifs," pp. 192-197. In addition to Proust, Ferry and his one-time Under-secretary of Fine Arts, Edmond Turquet, also advocated exhibitions of this sort: Debats, 5 July, 1881, p. 1264, and Turquet, "Discours de M. Turquet," Union central des arts décoratifs, Catalogue des oeuvres et des produits modernes exposés dans le palais de l'Industrie (Paris: A. Quantin, 1882), pp. 10-13.

⁹³Debats, 5 July 1881, p. 1264.

⁹⁴See Simon, Introduction, p. 251; Proust, "Ministère des arts," 1:196-200, 2:235.

⁹⁵See Lockroy, "Préface," p. xxiv.

⁹⁶Although it seems the selection of Eiffel's project was a foregone conclusion, other proposals were submitted. Competitions were a traditional method employed by French governments to stimulate innovative design. By announcing competitions, the Republicans at least gave lip service to independent competition. The announcement of the "concours" for the Eiffel Tower was published in the J. O., 2 May, 1886. See Joseph Harriss, The Tallest Tower (Boston: Houghton-Mifflin Company, 1975), pp. 10-11.

⁹⁷Picard, Exposition universelle, 2:292.

⁹⁸La Tour Eiffel en 1900 (Paris: Librairies de l'Académie de Médecine, 1902), p. 1.

⁹⁹Simon, Introduction, p. 358.

¹⁰⁰See Simon, Introduction, pp. 91 and 159. Adolph Démy, Essai historique sur les expositions universelles de Paris (Paris: Librairie Alphonse Picard et fils, 1907), pp. 176-437, gives a detailed history of expositions in the latter part of the century. Lockroy, "Préface," pp. xv and xxx refers to novelty of the 1889 plan and to the ideas of LePlay and his followers concerning expositions--which at this late date this group of economists no longer favored. Also consult Le Temps, 29 May, 1889, n.p., which carried an article explaining "Pourquoi l'exposition est comme elle est," that is, the ideas behind Proust and Dutert's plan.

¹⁰¹See Simon, *ibid.*, and Lockroy, *ibid.* Illustrations of the plans are to be found in Giulio Roisecco, Jodice Romano, and Vannelli Vater, L'architettura del ferro: la fraccia (1715-1914), L'Architettura del ferro (Rome: Bulzoni, 1973), pp. 281, 287, 378-379.

¹⁰²Lockroy, "Préface," xv-xxvi.

¹⁰³Common to all these early educational theorists is the idea that moral and intellectual growth has to occur through experience, that is, through active engagement by the individual in the real world.

¹⁰⁴Hugo had not only read Condorcet, but had drawn extensively on his Vie de Voltaire for his own Sur Voltaire in Littérature et philosophie mêlées (1834), according to Anthony R. W. James in his critical edition of Victor Hugo, Littérature et philosophie mêlées, Séries Bibliothèque du XIX^e siècle, Directeur Léon Cellier, 2 vols. (Paris: Klincksieck, 1976), 1: xciii and 2: 337-345. Hugo had originally intended to refer to Condorcet in the Légende. See Oeuvres complètes, 18 vols. (Paris: Club français du livre, 1967-1970), 10:653, no. 40. Zeldin, France, 2:151, refers to the impact of Condorcet's ideas on all the Republicans, although he stressed the utopian element which I feel they modified.

¹⁰⁵Pertinent bibliography on Condorcet's educational writings is contained in Marie Jean Antoine Condorcet, Oeuvres de Condorcet, edited by A. C. O'Connor and M. F. Arago, 12 vols. (Paris: Firmin Didot Frères, 1847-1849), vol. 7.

¹⁰⁶Auguste Comte and Positivism: The Essential Writings, ed. trans., with an introduction by Gertrude Lenzer (New York: Harper & Row, Harper Torch Books, 1975), p. 349.

¹⁰⁷*Ibid.*

¹⁰⁸Cousin was Simon's mentor when the Republican was a young man. As for the impact of St.-Simon's ideas on Simon, it was not very extensive, judging by the fact that Simon never refers to him and his own inclinations are much too puritanical and restrained for the philosopher's hedonism. The relationship between the two men's ideas is probably simply due to the fact that Simon was drawn to progressive notions during a time when St.-Simonianism permeated the intellectual circles. In fact, all the Republicans were hard pressed to distinguish themselves from the laissez-faire liberalism of St.-Simon's industrial adherents. See Chapter II above for further discussion.

¹⁰⁹I am trying to suggest that Simon viewed art education as a means of infusing daily life with a spiritual significance and a common set of values in a way organized religion in France could no longer do. When it is remembered that he was engaged at this time in pursuing a policy of religious toleration, my argument becomes all the more plausible, and the political dimension of Republican art education all the more significant. The best example of Simon's effort to bring morality into everyday life and at the same time to spiritualize it can be found in his discussion of the design and decoration of the home in his Introduction, p. 235. The most recent study of Simon's religious

politics is by Philip Anton Bertocci: "Jules Simon, 1814-1896: A Study of Republican Religious Politics in France," (Ph.D. dissertation, Yale University, 1970). He focuses attention on political maneuverings within the Chambre over the issue of religious orders running schools. Zeldin, France, 1: 628-629, recognizes that the Republicans' morality was not radical; but he, too, separates their aesthetic from their religious and political concerns.

110 Introduction, p. 214.

111 Le Travail (Paris: A. Lacroix, Verboeckhoven et Cie., 1866), p. 49-56.

112 Victor Cousin (Paris: Hackette, 1887); Bertocci, "Jules Simon," pp. 291-338.

113 For Diderot's ideas on education see the "Discours Préliminaire" to the Encyclopédie, and on art education see the plan of a university for Catherine the Great of Russia which he drew up about 1775-76. This plan is included in F. de la Fontainerie, ed. and trans., French Liberalism and Education in the Eighteenth Century: The Writings of La Chalotais, Turgot, Diderot, and Condorcet on National Education (New York: Burt Franklin, 1932; reprint ed., 1971), especially pp. 224-225 and 260. On Pestalozzi, Gerald Lee Gutek, Pestalozzi and Education, Studies in Western Educational Tradition, consulting ed. Paul Nash (New York: Random House, 1968). Louis Legrand, L'Influence du positivisme dans l'oeuvre scolaire de Jules Ferry (Paris: Librairie Marcel Riviere et Cie., 1961), p. 176, indicates that at least for Ferry, Pestalozzi's works provided a guide in pedagogical method, that is, the content and procedure, while Comte provided the contextual framework.

114 On Pestalozzi's method, see Gutek, *ibid.* On the method of teaching proposed for the public schools, see Zeldin, France, 2:189-191, 448-449, and notes.

115 Maurice Gontard, Les écoles primaires de la France bourgeoise (1833-1875) (Toulouse: Centre regionale de documentation pedagogique, 1964), p. 6, discusses the law and the place given to drawing education. Félix Pecaut, Deux ministres pédagogiques: M. Guizot et M. Ferry (Paris: Delagrave, 1887), traced Ferry's educational reforms and method back to the July monarchy, observing that differences were due primarily to the growth of industrialization which had taken place in the interim. Interest in teaching drawing as a means of perceptual and moral education in the schools continued on into the twentieth century, according to H. Gossot, F. Brunot, and S. Herbinière-Lebert, L'Enseignement du premier degré de 1887 à 1962: De la théorie à la pratique (Paris: Librairie Istra [1961?]), p. 526.

¹¹⁶See Prosper Bailly, "Les écoles de dessin à Paris," Gazette des Beaux-arts, 1(1869): 197-200; Philippe Burty, "Coursen-taires de dessin et d'ornement admis dans les écoles communales de la ville de Paris," Gazette des Beaux-arts 3(1870): 68-78; Picard, Exposi-tion universelle, 4:127. Also, Zeldin, France, 2:443-451, for a some-what confusing discussion of the evolution and purpose of drawing instruction.

¹¹⁷On this subject, the following are useful: Faure Dujarric, "Chronique," Le Moniteur des architectes, 12(1878): 188-189; Proust, L'Art sous la République, pp. 125, 154-191; Monod, Exposition de 1889, 1: 622-263; Picard, Exposition universelle, 4:131.

¹¹⁸See Proust, "Ministère des arts," 2:235; Viollet-le-Duc, "De l'enseignement des arts: Il y a quelque chose à faire," Gazette des Beaux-arts, 12(May 1862): 393-402; 12(June 1862): 525-534; 13(July 1862): 71-82; 13(Sept. 1862): 249-255. Eugène Lami and A. Tharel, Dictionnaire encyclopédique et biographique de l'industrie et des art industrielles (1881-1888), s. w. "apprentissage," "apprenti."

¹¹⁹On the founding of the Institut and the Ecole des Beaux-arts, the following works are useful: Jules Simon, Une Académie sous le Directoire (Paris: Calmann Levy, 1885); Jacques Godechot, Les In-stitutions de la France sous la Révolution et l'Empire (Paris: Presses Universitaires de France, 1951). Also of some help is my forthcoming article, "The Republicanization of French Art in the Aftermath of the Revolution," Revue de l'Institut Napoléon. Diction-naire de l'Académie des Beaux-arts, 6 vols. (Paris: Firmin-Didot, 1858-1900), s. v. "Académie."

¹²⁰This was not precisely Rousseau's point in his letter, but he was well aware--as he showed in Emile--that it is possible to influence individuals' behaviour through indirect means.

¹²¹I am referring here to Turgot's article "Foires," which he submitted to the Encyclopedie. Two excellent histories of French expo-sitions are: Adolph Démy, Essai historiques, and Raymond Isay, Pano-rama des expositions universelles, 6th ed. (Paris: Gallimard, 1937).

¹²²On the change in attitudes towards art from the seventeenth to the eighteenth century, see Remy G. Saisselin, "The Transformation of Art into Culture: From Pascal to Diderot," Studies on Voltaire 52(1970): 193-218.

¹²³Proust, "Ministère des arts," pp. 234-236; Lockroy, "Préface,".

¹²⁴Introduction, p. 495.

¹²⁵Mémoires d'un compagnon, Introduction by Alain Faure, ed. Louis Constant, Colleciton mémoires du peuple (Paris: François Maspéro, 1977), pp. 10-11. On the Republicans' acquaintances with Perdiguier, see Agricole Perdiguier, Correspondence inédite avec Georges Sand et ses amis, ed. with an intro. by Jean Guquet, preface by André Maurois (Paris: Librairie Klincksieck, 1966), p. 123, note 4. Hugo mentioned him by name in Histoire d'un crime.

¹²⁶Zeldin, France, 2:603-604. David Thomson, Democracy in France since 1870, 5th ed. (London: Oxford University Press, 1969), pp. 119, 126-27, and Chapter IV, "The National Vision." The tendency to see individualism and authoritarianism as oppositions in French national life which the Republicans fostered with tragic consequences later on has tended to overlook the fact that they recognized the existence of these opposing forces, accepted them as a source of friction that could be put to good use. The ideal of unity cherished by the individual could motivate the individual to work; while his self-consciousness and sense of self would keep him from relinquishing his identity entirely. Work was the means of maintaining an equilibrium between the two.

CHAPTER V

A VISION OF THE NEW ORDER THROUGH AN "ART NOUVEAU"

Introduction

By style is meant the constant form--and sometimes the constant elements, qualities, and expression--in the art of an individual or a group. The term is also applied to the whole activity of an individual or society, as in speaking of a "life style" or the "style of a civilization."¹

Meyer Schapiro

To the Republicans style was an outgrowth of the consciousness of a group at a particular historical moment. In a general sense, for them, a style was the most highly articulated expression of both the outward appearance and latent values shared by the members of the group. This meant that style was different, but not separable from, their concept of art. The first chapter of this section characterized the Republicans' view of art as one centering on a concern with the entire object and its mode of fabrication. Style, as distinct from art, was for them limited to the outward appearance of the object, the series of highly refined visual cues that suggest what lies beneath the surface. It constituted the "physiognomy" of the object, and like human physiognomy, they considered it an outward expression of the inner physical and moral character of the product. Because style was an externalization of the values and customs of a group, when applied to the object it provided that group with a kind of mirror image of

itself in the appearance of its material culture. When making the major art forms of a culture, artists took these values and customs, cultivated, refined, and clarified them into a style, bringing what was latent in the material and the culture to fruition. Style as Lockroy expressed it "se dégage" from this dialectical process.²

This is not to say that the Republicans considered all styles of equivalent value. They harbored a notion of an ideal style, one which was integrated, harmonious, and balanced in character. The rationalism of Greek, Renaissance, and Medieval art exercised a strong influence over them, and they found such styles inherently attractive, compelling, and emotionally and aesthetically satisfying, and they viewed the emergence of a new rational style as the initial step in bringing the middle classes together. Concerned by mistrust and disunity in the middle classes, the Republicans proposed a new style as a means of recalling to them the values they all shared. The challenge was to affirm the general character of commercial and industrial life and to make it appear harmonious and attractive.

The Republicans hoped such a style would not only affirm the value of what they asserted was imminent in the lives of middle-class Frenchmen, but it would reinforce certain inclinations towards coherent thinking and action that were morally and socially beneficial. If, as Simon declared,

Il faut bien entourer l'homme, il faut toujours tendre à l'élevé. Il faut compter sur sa raison pour lui rendre raisonnable, et sur son goût, pour lui donner du goût

through the patterns which characterized this style, the middle classes would affirm their values as the predominating ones in the Republic, and at the same time find personal satisfaction in them.⁴

Clearly, for the Republicans the success of their ideology as a solution to France's problems seemed to hinge to a not inconsiderable extent on the appearance of the new style. Their writings and statements concerning the arts during this period are marked by a combination of anxious searching for evidence of it, an aggressive push to encourage its development, and hopeful affirmation of its emergence. Proust's Salon review of 1882 is mainly concerned with pointing out which artists' work showed "un respect plus grand du milieu dans lequel nous vivons."⁵ Simon felt the need for it so strongly that he declared in 1878, "Si nous sommes incapable de trouver une forme nouvelle, soyons modestes, faisons nous copistes."⁶ Ferry tried a more subtle psychology by asserting that the role of the state in encouraging its cultivation was "le plus ingrat, mais le plus élevé."⁷

By 1889 Lockroy felt that the new style had definitely begun to emerge and to make its influence felt. Speaking of the iron architecture and ceramic decorations at the Exposition, he declared:

Peu à peu le style modern se dégage, et il se formera à mesure que l'industrie et la science mettront à notre disposition de nouvelles ressources et de nouveaux matériaux. De plus en plus la fonte, le fer, l'acier, joueront un rôle dans nos constructions, et l'on obtiendra grâce à leur secours des effets inattendus et inconnus jusqu'à présent . . . Des formes apparaissent déjà qu'on ne connaissait pas; les lignes se combinent autrement qu'autrefois: on voit que l'art du XIX^e siècle, on pourrait dire du XX^e [sic] va naître.⁸

It seemed that the creation of a new style might be used as a carrot on the stick of progress.⁹

The Description of the New Style

Although the actual development of the style had to be left to artists who elected to pursue the task, the Republicans laid down guidelines for it and presented a clear idea of its character. There were two major areas on which they wished artists to concentrate. When Proust complained, "Notre siècle est fort lent à s'accommoder de sa propre physionomie," he established the first necessity in the creation of the new style: the identification of the salient features of modern middle-class life.¹⁰

The second necessity was the creation of an harmonious system of organization. The Republicans claimed it was an expression of the latent sensitivity to order and to harmony possessed by every Frenchman. What Simon called "le goût" and Proust "le sentiment du décoratif" could provide the basis for a system of formal organization that would dignify cultural values weaving them into a unified sequence and enabling them to constitute an environmental ensemble.¹¹ The system of ordering appropriate to modern existence was to be one based on the laws of proportion and mathematical principles of harmony.

The Republicans place primary emphasis on the need for images for the new style derived from the life experience and culture of the middle classes. Although only Simon presents anything like a list, comments of the others reveal similar preferences. Proust in his review

of the 1882 Salon, for example, commends younger artists, such as Jules Bastien-LePage, (1848-1884), Léon Lhermitte (1844-1925), and Henri Gervex (1852-1929), for their use of contemporary figures, whether peasants or charcoal carriers, and he makes special mention of Alfred Roll's (1847-1919) depiction of the Fête du 14 juillet, 1880, a subject which seems to have been suggested to the artist by Jules Ferry. Popular theater and entertainment, such as the café-concert, were also considered valid images. As for architecture, both Simon, Hugo, and Lockroy preferred forms that were freed of references to past styles in their decoration and were in appearance closer to contemporary factories, "les gares de chemin de fer," "les serres splendides," "le palais de crystal," and the restrained neo-classic forms of Jacob Hittorf (1792-1867) and Henri Labrouste (1801-1875). One of the most important images for them was the keystone of modern middle-class experience, "le home." Both Simon and Proust made special mention of their wish that developers of this new style concern themselves with the domestic interior in which individuals lived and worked.¹²

These images were not arbitrarily selected; for the Republicans associated them with the two central and interrelated activities of ideal middle-class existence: work and leisure, the means and ends of life in a modern commercial and industrial society. Such images were valued because they easily fixed themselves in the consumer's mind and encouraged him to associate the activities with the images. Simon prophesied that upon seeing the new rational architectural style: "On comprenait bien qu'il fût possible de vivre dans ces maisons, d'y

travailler, de s'y plaire." While Proust gravitated to such images in the Salon, pointing out that leisure activities when depicted in the art of the past were approved by the public, Ferry's major compliment to Henner was the painter's ability to ennoble the pastime of reflection.¹³

Certain types of entertainment and labor were not acceptable for presentation, however. Simon rejected the cabaret out of hand, on the grounds that it was immoral, a form of escapism from a poor environment. Lockroy also seems to have disapproved of cabarets and especially of the Folies-Bergère, at least he complained they were out of place at the Exposition universelle, being too purely commercial in character.¹⁴ Hugo denounced images which degraded the worker's character by presenting visions of exploitation. As an antidote, he offered in his own poetry images of labor that are uplifting and positive, and he openly argued the benefits of such an approach.¹⁵

Their preference for such images was accompanied by a downgrading of allegory as a means of expression. They did not exclude it altogether; but Proust's comment on this type of conventionalized emblem is revealing of their wish to have the new style concentrate on forms derived from modern experience.

Pour ma part, je suis fort éloigné de proscrire l'allégorie, je n'ai garde de méconnaître le mérite qu'il peut y avoir à retracer des scènes historiques . . . j'ai une prédilection pour les choses vues et cela pour deux motifs: d'abord parce que l'art doit toujours s'attacher à rechercher l'expression vivante, et ensuite parce qu'il me paraît profondément regrettable que nous ne laissions aucun témoignage sincère de notre époque.¹⁶

Proust's comment also mentions the Republicans' preference for contemporary images that offered an insight into the attitudes and patterns of modern existence from which a new stylistic ordinance could be derived. Encapsulated in modern attitudes was the structure of "l'expression vivante" to which Proust referred. The forms of activity and of material culture which the middle classes had created for themselves were animated by rhythms which the new style was to bring to the surface, to articulate clearly.

This meant that in presenting these images artists were to concentrate on simplifying forms and on ordering them in a rational manner appropriate to modern activity. Offering Puvis' work as a general prototype for the new style, Proust described the artist as one of those "chercheurs du style, les amoureux de grandes et belles lignes . . .," one of those who had a "passion des beaux arrangements."¹⁷ Images were to be reduced to systems of line and color in which silhouettes predominated, these being closely interlocked into a total design which suggested the ordered character of the activities depicted. In accordance with such a move, the linear and tonal qualities of the materials used, whether in painting or in architecture, were to be stressed so that the images were easily apprehendable as abstract forms. Lockroy admired the handling of the iron in the Galerie des machines and the Eiffel Tower because it allowed them to be read first as iron structures and then as the abstract linear movements of forces exerted by the structural members.¹⁸

The reference to Puvis as a "chercheur du style" points up the fact that the Republicans were insisting that the character of this new ordering have a precision and clarity hitherto unknown in art. Being based on mathematical principles which described both the operations of the human mind and those of external nature, it would be stiffer, more self-conscious, and mechanical in the relationships created than the art of the Greeks, for example.¹⁹

There was one other quality this ordinance had to possess. It was to give the impression of an orderly and steady motion. There was a particular sort of visual arrangement of the silhouettes and of tonal juxtapositions which the Republicans felt conveyed such an impression. Statements such as that of Proust concerning the work of the prolific portraitist Bonnat, a favorite of Republican officials, provide a description of it: This artist achieved his effects by a "recours à une opposition violente" between the tonal value of his background ("le fond") and the value of the figure ("le silhouette").²⁰ Simon's comment on the Palais du Champ de Mars at the 1878 Exposition is even clearer on this point: Calling the Palais "ce joyeux et immense vestibule," he claimed it owed its lively effect

à cette lumière et à cette légèreté [to which] on donne habilement le support de quelques massifs qui reposent et arrêtent la vue.²¹

The point both Republicans make is that opposing or contrasting elements are arranged so as to convey the impression of balance without being static, because they produce equivalent, although qualitatively different, visual responses in the consumer. Balance is implied by the

consumer who weighs the effects and responds to them kinesthetically. These forces are not resolved in the work. Rather than the axially symmetrical compositions in which a dominant central figure establishes a sense of balance, this sort of ordering placed the burden of resolution on the consumer standing outside the work, compelling him by this controlled ordering of his visual experience to respond in a particular manner, an experience which the Republicans felt endowed the effect of change with the pleasant and undeniable ring of truth. It was through this ordinance that the artist's personality, and, therefore, the human quality of the style was established.²²

This sort of compositional ordering was strongly tied to the Republicans' conception of space and to the manner in which they wished it to be presented. Space for them was a panorama-like field created through the medley of forms and colors that engaged one another.²³ Silhouettes of images and the area around them worked together to form a visually active and controlled system in which the background imposed itself and aggressively limited the viewer's depth of vision. Something of their notion of three-dimensionality and volume can be gleaned from Simon's description of the Palais du Trocadéro and its surroundings. It was placed

. . . au dessus des berges du fleuve, qui est de tous côtés entouré de vastes espaces, de cascades, de jardins embaumés, de chalets, de statues, et qui domine une vue magnifique sur la ville, la rivière et la campagne . . .²⁴

The Palais established the keynote of the panorama to which all else below it is connected in a continuous series of parallel images leading from the top of the hill down to the river. Simon's image is first

presented as if one is looking up at the Palais which circumscribed one border of this area with its curving galleries and forced the eye to move down in measured steps to the point where the viewer stands. Then he places the reader up at the Palais and the eye moves out across to the initial point of view. It is a panorama which instigates a dialogue with the viewer, setting the terms of that dialogue but insisting that the viewer actively counterbalance the Palais. One's vision is not allowed to go back beyond the Palais to imagine what is on the other side, but encouraged to organize the experience in terms of the initial point from which the Palais was viewed.

Hugo's image of the balloon in flight makes this notion of space as a palpitating field even clearer and points up the positive role which what might be termed the backdrop plays in the total visual effect.²⁵ The sky is not an endlessly receding distance, but azure colored matter, in the form of light that presses in upon the experience of the viewer with the same force as that exerted by the balloon to hold itself aloft in this medium. This was the impression of space which Proust and Simon advocated the visual arts and architecture create, a space that was compressed by the juxtaposition of background and foreground and by the manner in which the forms were made to push outward towards the viewer with equal force.²⁶

This is not to say that the third dimension was to be eliminated in the new style. Hugo, Proust, and Simon did not advocate the total flattening of the image; to do so would make it too abstract. Lockroy's description of the Eiffel Tower is enlightening here, for it

clarifies the interplay they desired between the representation of the abstract and the concrete character of space. The phrase he uses in reference to this three-dimensional monument is "une spirale démesurée," emphasis on the linear movement which circumscribes a space, but is not in itself volumetric.²⁷

The Republicans did not reject the laws of perspective which Renaissance artists had discovered, but they were not interested in exploiting them for illusionistic effects of volume and deep recession. As has been discussed earlier on, such trompe l'oeil effects were suspect because they tended to draw the the viewer outside himself entirely.²⁸ The creation of three-dimensional space was not an end in itself for them; but the salient features of objects and matter (silhouette and color) made the space and volume they defined means of engaging the subject in an active effort to relate these phenomena to his own experience. In this way exterior space became associated with interior psychological space, one considered an extension of the other, and together circumscribing the limits of human existence.

To the extent which the notion of space in any artistic style can be considered an expression of the concept of universal order and of social order, the Republicans' characterization of it is compatible with their view of the ideal physical and economic system.²⁹ Their prescription for the characterization of space was the visual equivalent of that dynamic equilibrium which they believed prevailed in the universe and which they wished to create in the minds and social patterns of middle-class life. Moreover, their formulation of its

appearance, insisting as it did on the participation of the viewer, made this type of ordered, aggressive space the ultimate instrument through which this group could gain access to such a condition.

Proust's appreciative comments on Roll's painting La Fête du 14 juillet, 1880 summarize the salient features of the style and emphasize that the painting's virtue lies in giving coherent visual expression to the innate character of the social group it depicts. The artist, Proust maintained,

. . . a entrepris de donner l'impression d'une foule dans le tableau qu'il a composé sur ce thème. J'ai entendue dire que l'idée générale n'était pas rendue, mais que l'on recon- trait dans cette composition des morceaux d'une exécution remarquable et d'un arrangement heureux. Je ne professe pas cette opinion sur l'oeuvre de M. Roll, . . . je ne crains pas d'affirmer que l'on n'a peut-être jamais mieux enveloppé dans une lumière d'une intensité voulue un ensemble dont la facture soit plus harmonieuse et dont l'aspect soit plus vraie.³⁰

The Republicans concentrated almost exclusively on architecture and painting in their discussions of style, only mentioning one sculptor, Antonin Mercié (1845-1916). These artistic forms which more than any others were capable of creating a total environment were considered the source of stylistic models for industrial design. An examination of works by architects and painters whom the Republicans cited as exemplary reveals a definite relationship between the prescription for the new style and the products themselves. In the analysis of works by Manet, Cazin, Henner, Puvis de Chavannes, Roll, Eiffel, Davioud, Dutert, and Mercier to which the following discussion is devoted, certain developments in their style will be stressed that indicate the artists' responsiveness to Republican suggestions.

The modern images and themes, the emphasis on silhouette at the expense of internal details and applied ornament, the segmentation of the composition into discrete units, and the open identification of structural materials, as well as the rational organization of the composition into discrete units, are all present in these works, as is the peculiar compressed space which gives them their effective power. During this period the major works of these artists centered on middle-class activities and institutions which the nineteenth century had endowed with social and moral significance. Labor and relaxation, the family, the home, the café-concert, and popular festivals not only appear as themes in the figurative works of artists approved by the Republicans; but in architecture, the forms of the buildings are those which had become hallmarks of commercial urban culture in the industrial period. The Palais du champs de mars and the Galerie des machines have antecedents in the Crystal Palace, the railway station, and the public market (Figs. 1-5); the rotunda of the Trocadéro Palace in the circus and the panorama, its colonnades in the arcades of the edifice erected on the Champ de Mars for the first national exposition in 1798 and in the structure on the same site built for the Fête de la nation later that same year (Figs. 6- 10).³¹ Moreover, these images are directly associated with work and leisure activities, either through the behavior of the individuals depicted or through the function the architecture served.

The example of Edouard Manet (1832-1883) is interesting, for although he treated some of these themes in his work in the 1860s, in the later '70s up until his death in 1883, they appear more frequently. In those later paintings, he scrutinizes more closely the modern setting in which his sitters are shown and the social and psychological dimensions of their behavior. Works such as In the Conservatory, The Journal Illustré, The Gare St. Lazare, La Modistes, The Railroad, and of course the Bar at the Folies-Bergère and other café-concert scenes which were favorably received by Salon critics during these years provide good examples of this trend in his late work (Figs. 11-13).³² His choice of settings where work and play intermingle corresponds to the sort of images openly supported by the Republicans. In addition, the attractive coolness of his presentation and lightened tonalities emphasize to a greater extent the decorative and symbolic qualities which had always been a characteristic of his art. This shift is particularly evident in Autumn (Fig. 14) where the sitter is part of an ambiance created by the tone and cut of her fashionable dress and the design of the wallpaper behind.

Roll, the son of a cabinet-maker, seemed to gravitate naturally towards themes of labor.³³ Even in portraits such as that of M. Alphand, Chief Engineer of the 1889 Exposition (Fig. 15), of Jules Simon, or of himself in shirt sleeves, the individual's identity is tied to his particular métier. In the large-scale works painted on speculation that date from l'Inondation of 1877, followed by La Grève des Mineurs (1880), and the Chantier de Surènes (1885)

Fig. 16), Roll established his reputation as a painter of "la vie moderne."³⁴

Jean Cazin (1841-1901), too, seems to have come into his own about 1876 with works centered on the theme of labor. Le Chantier (Fig. 17), a poetic image of workers in a small shipyard, first brought him to the attention of the critics. His other major work of the period, the Souvenir de Fête de 1880 (1882) (Fig. 18) combines allegorical figures representing labor and science, placed on an architectural scaffolding, with a panorama of the Luxembourg gardens and the dome of the Observatory in the distance. Here popular festival and labor are associated with science and constructive activity. Other works of his completed before he left Paris in 1884, although taken from the Bible, present the figures as working people whose simple dress and surroundings and restrained demeanor endow them and their activities with a noble integrity.³⁵

Aside from their portraits and Henner's picture of a woman reading entitled La Liseuse, Puvis and Henner's works of this period do not include contemporary images.³⁶ Yet thematically their works are celebrations of the activities the Republicans valued most highly. Puvis chose to make work and play the central activities of ancient Picard society when he was commissioned to do a series of decorations in 1880.³⁷ The very title of his decoration for the Municipal museum at Amiens, Ludus pro patria (Fig. 19) emphasizes not only their patriotism, but the social usefulness of play. In Doux pays, a commission from his friend Bonnat, the idyllic existence is presented as a

satisfying integration of productive work and leisure activity in the lives of the group (Fig. 20). In The Poor Fisherman (Fig. 21), Puvis inverted the perspective on this theme: A sense of tragedy and despair arises from the fruitless activity of the laborer.³⁸

Henner's works are almost entirely concerned with the depiction of poetic idyls in which nude women quietly enjoy themselves by engaging in thoughtful meditation or quiet bathing, or in playing and listening to music. These leisure time activities all center on the restrained and reflective sort of pleasure which Ferry heartily approved.³⁹ Eglogue (1879) (Fig. 22) is a typical example of Henner's themes during this period. Nothing is abrupt, and the power of the arts to provide pleasure of a noble and satisfying kind is openly affirmed. As for Mercié, perhaps because of the demands for public sculpture which depicted nationalistic themes, it is not until 1885 that he submitted an important piece to the Salon which did not center on war and patriotic duty. This was Le Souvenir (Fig. 23), a tomb sculpture depicting that reflective activity which the Republicans felt ought to constitute the essence of immortality in a society no longer believing in an after-life. Only in Quand même of 1882 did he use contemporary dress, and, as will be seen, it is not so much in his themes but in the other elements of style that Mercié shows himself to have been sensitive to the Republicans' call for change.⁴⁰

These works are also characterized by the clear articulation of their structural components, their division into discrete, segmented parts. In Henner's Eglogue (Fig. 22), for example, not only are

figures distinguished from the surroundings through the strong outline of their bodies, but the entire picture surface is segregated into different zones of sky, trees, and figures, with corresponding differences in tonal ty. The same is true of Puvis' work of this period and of Cazin's as well. In Roll's Fête (Fig. 24) the tonal areas, while less generalized and controlled than in the Henner, are also clearly distinguished and more or less identified with separate entities. In Manet's work the backgrounds are more strongly emphasized as organized, positive surfaces than was formerly the case.

The segmentation which occurs in these works is not qualitatively different from the manner in which the sculptor and the architects handled their structural elements. Mercié's Quand même (Fig. 26) presents two discretely articulated figures whose limbs and bodies are treated as related but separate units. Even the Rifle which forms the formal and narrational liaison between them retains a certain independent existence. As for the Palais du Trocadéro and the Palais du champ de mars (Figs. 6, 7, 8, 1), these structures are divided into units with clearly articulated wings, domes, galleries and pavilions. This divisionism is extended in the Palais du champ de mars and the Galerie des machines (Fig. 3) to the level of the most basic structural elements, and it can be found in the treatment of the enamel tiles applied to the dome of the Palais des Beaux-arts at the 1889 exposition (Fig. 28).

While such segmentation maintains the integrity of the part within the whole, these elements are arranged so that an interplay based on oppositions is created among them. Thus, in the Ludus pro

patria (Fig. 19) individual figures coalesce into small groups often psychologically isolated from one another. Even though the family group at the far right turns inward, and is set off as a pictorial unit by the curves of the backs of father and mother, they are made part of the larger group by the way in which Puvis has repeated and then reversed the curve of the father's back in the figures of the young girl and the old man seated at the left and facing in the opposite direction. The elements of the landscape and architecture also help to unify the composition by echoing the stance of the figures, as with the dead tree and the old man at the far right: or by counterpointing them, as do the erect trees behind the seated group. In Manet's work this tight integration is lacking. There is in The Bar at the Folies-Bergère especially, but even in In the Conservatory (Figs. 13, 11), an almost willful refusal to bring the forms into logical conjunction with one another. In both works the turn of the bodies, the silhouettes of the man and woman and the length of the interstices keep them separate physically and psychologically. The result is that the figures and the space do not balance against one another to create a logical system of interdependent parts. It was Manet's inability or refusal to provide this integrated ordering that led Proust to deny him the status of genius. So far as Manet's compositions present an image of social relationships, these can only be described as tenuous and ambiguous, closer to the reality of French society than to the ideal the Republicans desired.⁴¹

Such groups are also knitted together through the skillful alternation and the adjustment of the intensity of light and dark areas.

When one looks at Roll's sketch for the Fête (Fig. 25), it is clear that the painter thought of the compositional structure partly in terms of such tonal arrangements. The extreme difference between light and dark tones gives equal weight to both. The difference between the Roll and Puvis' sketch for the Ludus, as well as Cazin's Fête, is that the harmonies and contrasts of the latter two works are subtle, the tones being kept within a limited range of muted brown, green, blue, and rose. In this manner each area of color retains its own character and is equivalent in weight to the others, while a kind of dynamic unity is established by the way in which this alternation extends through the compositions.

This tension binding individual elements together is a stylistic feature of the architecture as well. In the Palais du Trocadéro, the overall form of the building is achieved through the juxtaposition of contrasting elements. The wings do not flow from the center and are much lower and slighter in proportion to the central bay. There is also an interplay between the concave and convex curves of the wings and the central bay. The rationalism of the facade facing the Place du Trocadéro (Fig. 8b) results from the manner in which a certain symmetry and balance have been achieved in the arrangement of unequally weighted elements, notably the thin vertical rectangles of the towers and the horizontal rectangle of the central portion. The curve of the arcades which sweep back from the main section of the facade seems to have been intended to stabilize these rectangles and relieve their awkwardness; although the extreme disparity in height undermines their

effectiveness. Even the way in which the Palais is related to its sight on the hillside above the Seine relies on a play of similarities and contradictions for its unified effect. The geometric forms of the building embrace the sloping land and at the same time contrast their smooth regularity with the irregularity of the geology.

The same sort of balancing of contrasting elements occurs in the Galerie des machines (Fig. 3). The thrust of the girders which comprise its structural skeleton actually is both outward and downward and inward and upward against one another. Visually, the curve of one girder plays against that of the one to which it is attached. Because of their shape, there is a linear movement down from the top and upward from the narrow point at which each meets the ground. These vertical movements are stabilized by the dark band that runs horizontally along the bottom of both sides of the building. In between the girders are bands composed of glass panes which allow light to pass through and act as visual counterpoints to the opaque iron. Yet, as the photograph of the Galerie indicates, the openings in the girders allow this light passage through the iron forms so that light becomes a positive element in the structure of the composition. The repetition of these bands of light and dark carry the rhythm from one set of girders to another and bind these segments together. The elements which the plastic conception of architecture developed in the Renaissance dictated be used to create the impression of volume are treated as visual equivalents that engage with one another, resulting in an overall system of patterning that is both two- and three-dimensional, both abstract and concrete.

This same sort of interplay and equilibration of contrasts occurs in the handling of the materials. For example, both the physical and representational attributes of the materials are asserted in Henner's Self-Portrait (Fig. 29). The thinly applied paint allows the texture and tone of the canvas to show, so that the artist's materials hover between what they are (colored pigment and cloth) and the light and shadow which denote the surface of the face, the beret, and the background. This duality is also found in Manet's handling of his materials in the Bar at the Folies-Bergère and in Roll's Fête (Figs. 13, 24), although in these cases the paint is applied in a heavy impasto. In architecture, iron and glass used to construct the Galerie des machines are openly admitted to be the construction materials. At the same time, the dark opacity and crispness of iron and the translucency of glass can be read as abstract light and dark forms creating a meaningful visual pattern or as two states of matter.

Mercié treats his materials in the same way. This dualism is not as pronounced in the statue of David (Fig. 30) from the Salon of 1872 as it is in Le Souvenir exhibited thirteen years later (Fig. 23). In the earlier work the coloration of the bronze and its handling are more representational. The bronze gives the illusion of flesh and bone, of rounded limbs without calling attention to its being a metal with certain properties of its own. In Le Souvenir, on the other hand, the marble is declared to be both stone and something else. In the lower half of the monument the smooth whiteness of the material is affirmed and at the same time suggests the existence of a figure

beneath heavy, fluid veils. The upper half of the monument is both a stippled slab of marble in which the marks of the sculptor's tools create an abstract texture and the palpitating atmosphere into which the figure is set. It is a dualism which is both evocative and appropriate to the psychological activity represented.

The controlled contrast in ordering forms and in handling materials endows these works with a symbolistic character. They appear to hover between two states of existence: matter and form, the real and the ideal. By refusing to resolve the contrasts the artist suggests that there is an order and meaning beyond what is represented that has to be deduced from it. At the same time the rational control evidenced in the handling gives the impression that the image itself is in the process of evolving from one stage to another, from raw matter to ideal form under the impulse of the tensions generated within the work.

The treatment of space and volume help to suggest the way in which this symbolistic dimension should be interpreted, that is they define the character of the ideal environment towards which the material reality in the works is tending. None of the works discussed is entirely flat, the sense of space is compressed, as is the volume of the figures. Through the reduction of chiaroscuro and shadow and the granting of equivalent value to formal elements, forms are flattened; yet a certain hierarchy of relationships is maintained so that size and placement indicate that one form exists in front of or behind another.

In architecture this point can be clarified by comparing the Galerie des machines to the Opéra, completed just fourteen years

earlier (Figs. 3, 31, 32). An examination of the façades of the two buildings is enlightening. The architect Charles Garnier clearly organized the Opéra facade into a system of horizontal and vertical units by means of semi-detached columns and overhanging cornices. These create strong areas of light and deep pockets of shadow, broken by the numerous swags, rondels, and busts in high relief applied to the surface. These plastic elements diffuse the light, making it flow over and around them so that they are read as positive tactile forms against negative spaces. Thus, the character of the facade's pattern derives from the interlocking projections, and hollows.

The facade of the Galerie on the other hand, is organized by the linear movement of the iron forms barely projecting from the walls of glass which fill in the spaces. Applied decoration is minimal and what there is of it is flattened, while the glass panes, although reflecting what lies beyond the building in the viewer's space and allowing a glimpse of the interior, condense these views into a single image on its surface. The colored glass designs help to focus attention on the surface as well, so that the sense of depth in the façade is very shallow with its extension backward into depth abruptly limited. The glass and iron both tend to push the reflections and the glimpses of the interior forward into the viewer's consciousness.

Much the same differences are apparent in the treatment of the interior spaces of the two buildings. The Opéra space unfolds in bursts as one passes through a series of galleries, foyers, anti-chambers, and finally into the main auditorium. Through the use of

processional stairways and controlled lighting effects, a sense of limitless and palpable volume is created. Architectural forms such as the arcades embellished with paired and semi-detached columns articulate this volume without delimiting it. In the Galerie, on the other hand, the entire form is visible immediately, its beginning and end clearly marked out by the procession of arched girders and glass. Moreover, repetition of forms and even intensity of light bind the front of the building to the back so that they read as one continuous surface radiating out from a central crescent and at the same time as repeated forms receding in depth. The sense of space is quite different from that found in the Opéra, where it expands outward so that one moves from confinement to release. In the Galerie space seems to flow upward towards the light, but its movement is controlled by the curve of the girders and held in check by the light itself, which filters down and forward through the glass. The Opéra makes no reference to the outside world, the individual being cut off from it in an artificial environment lit solely by artificial means. In the Galerie man-made space and the natural world are recognized as analogous and interdependent systems, and space is a palpitating field rather than an enclosed volume.⁴²

Formally these works of the 1880s present a type of composition whose unity and harmony are implied rather than overtly stated. The composition is not an independent organic whole in which the elements flow together naturally. Rather a sense of balance emerges in a linear and mechanistic fashion over time as each part is perceived to be

engaging and playing with or against another. When coupled with the manner in which the materials are treated, the style can be characterized as one that schematizes the process of transforming raw material into organized form. That is, it appears that the paint or the iron and glass or stone move from their natural state to a higher state of organization, while at the same time the tensions which arise from their rational arrangement create a sense of moving from a state of mental disorder to order via a dialectic between the artist and his materials. It is in this manner that the style becomes a means of conveying an idea and at the same time of marrying that idea to the process of commodity production.

Another notable aspect of this style is the emotional overtone. If the equilibration of the formal elements conveys a sense of an emerging idea, that idea cannot be disassociated from the physical character of these works. The choice of tonalities, the degree of accentuation given to contrasts in color, proportion, silhouette, and the direction and quality of line soften or exaggerate the tensions so that the work gradually assumes a personality and conveys a mood. Thus, in Puvis' Ludus and other decorative works of the period, the narrow range of tones, the long horizontal format, the restrained movements of the figures, the delicate, regular flow of line, and slightly curved angles of the silhouettes create an effect of controlled calm which is pleasantly melancholy, yet not without liveliness.

Roll's Fête, on the other hand, is quite the opposite in effect, yet the means are the same. The strong coloration and

exaggerated contrasts between light and dark tones, the vigorous gestures of figures in the crowd and of the band master, and the uneven line of heads, create a sense of pleasant vivacity, dynamic energy. The same result is obtained in the Palais de Trocadéro, with its outlandish disproportions and brilliant touches of color on the domes of the pavillions.

To stop the analysis here would ignore the important social and psychological dimensions of this style. Its ability to function as a communication system is dependent upon two characteristics which all these works possess: the clearly stated formal elements and the choice of images. In the first case, stylistic elements are treated as palpable physical presences. In Henner's Eglogue (Fig. 22), for example, the work depends for its effect on the appealing tone and texture of the figures and their placement on the horizontal field of the canvas. The work invites engagement and meditation on the nature of the experience through an exploitation of the affective properties of its formal elements. The slightly grainy quality of the paint, the harmonious tonal arrangement of the colors, and the fluid contours of the figures and landscape root more abstract rational associations in the physical reality of the work.

The significance of paint and canvas, color and form for the viewer, that is their role as signs of an external reality and an internalized mental state, cannot be communicated without the contribution made by the compositional arrangement, the poses and actions of the figures. By setting the figures at either end of the long

rectangular format, Henner has created an active sort of balance dependent for its effect partly on the assumption that the consumer's eye will tend to find a stable resting point between the two figures. The artist has associated these visual patterns with musical and bodily rhythms through the agency of the figures, and the viewer is engaged through the intensity of the listener's concentration and the slight imbalance of her pose. In this manner, the consumer is led to make in his own mind the associations between music and physical movement that the artist asserts in the work and to experience the emotion which this sort of harmony and balance convey.

These images when placed in conjunction with the physical and emotive character of the formal composition are imbued with their palpable qualities and seem to be inseparable from them. Puvis' conception of the social life of the Picards, for example, is fully in accord with the compositional order, the color scheme, and the general sense of subdued harmony that infuses the painting. Indeed, the feeling of calm and order arising from the work seems to be an outgrowth of this sort of social order and activity. Thus, the particular ideal sentiment Puvis expresses through his medium takes on a social dimension that binds psychological feeling to an external reality, endowing it with new levels of meaning. To the extent which form and content coincide in these works, meaning seems to arise naturally so that one intuitively grasps their moral and social significance.

The clarity and precision with which the forms are defined and arranged raise intuited knowledge to the level of conscious

understanding. They compel the consumer to move through the compositions according to a pre-established order and to make certain logical connections between the various elements of the work and the final form. The pedagogical aspect of this style is best exemplified by Roll's Fête (Fig. 24), for the extroverted character of the figures, the strong contrasts of color, and the lack of finesse in the integration of the compositional elements are more obvious than in the architecture or in Puvis' work.

It is through the arrangement of the composition that the meaning of the work is conveyed. The painting is divided horizontally into two regions: that of the brilliant yellow-white sky which enfolds the statue of the Republic and that of the colorful crowd. The figures are grouped into two triangular wedges, separated from one another by the diagonal strip of light on the ground moving from the lower right towards the upper left. These groups are further distinguished by differences in dress and behavior, denoting differences in social status. The lower middle classes (tradespeople, and artisans) are on the left, members of the upper echelons on the right. Separation of these sectors of the "working classes" is not complete, however, for some of the left hand group can be found on the right and some of the figures on the right move or face towards the left. Moreover, the young vendor of commemorative buttons and the distinguished figure in white create a vertical central axis uniting the two social groups and creating a bridge between them and the upper region of the painting. The elements along this axis, including the flag pole with the plaque inscribed

"Pax" and the statue of the Republic, in fact, sum up what is implied in the arrangement of the images: that the initiative and energy of the lower middle classes will unify the people and provide the impulse for attaining the ideal Republic.

Because of their physical appearance, their frontality, and their relatively isolated position in the crowd, these juxtaposed images assume the character of emblems. They confront the viewer, demanding that he unravel the central idea of the painting by identifying the images, categorizing them, interpreting the cues given by the artist in the form of anecdotal details, groupings of images, and their juxtapositions. Through a conscious intellectual effort certain connections between the images can be deduced, and the relationship between the idea expressed and the compositional order can be understood. For example, simply by conflating the pictorial order with the social ordering in the painting, Roll is able to suggest to the viewer that this method of achieving pictorial harmony is also the way to social harmony. Moreover, since this method involved organizing visual signs into patterns that do not correspond to actual social practice but function rationally within the composition, this style gives the suggestion the ring of a real possibility. The artist, one may conclude, intended to lead the consumer to believe that general adoption of such a system of ordering experience will produce similar effects in real society.

The work also offers another illusion: that of a gradually emerging pictorial order. The band master is the key figure in the

creation of this effect. By dramatically silhouetting his head, arm, and baton against the light and placing him high up on the left, Roll uses him as the principal means of "orchestrating" the work. Numerous figures are shown responding to this gesture and to the rhythm it implies, while elements such as the canopy poles, flag poles and viewing stand repeat or counterpoint it. In this way the artist marks a path across the painting from left to right, back to the center, culminating in the high keyed upper range of the composition. The eye of the viewer is engaged by the gesture of the band master and picks out the forms that echo it, so that these unconnected images are gradually woven into a unified pattern, one that is perceived by the consumer, but in this case does not exist in the work itself. One is thus given the impression of moving from a realm of disordered matter to a more organized and higher form of material existence, an impression made more convincing by the fact that the physical properties of the pigment are fully exploited.

When Roll accepted the commission for this painting, he apparently wished to use it to call attention to the social value of art and the artist.⁴³ He did so by establishing an analogy between the band master unifying the crowd and directing its attention to more abstract ideal and the function Roll himself performs for the consumer of the work by composing it as he did. His painting, as a product with a particular aesthetic character and content, alters the consumer's experience, making his existence seem capable of being more logical, more satisfying, and more integrated, and promising that such an altered state will benefit society.

This same sort of stylistic illusionism prevails in the architecture of the universal expositions, although the social dimension and the artist's presence as a manipulator are only implied. The Eiffel Tower (Fig. 35) and the Galerie des machines differ in that they clearly reveal the relationship between the final form of the work and the arrangement of the structural elements. Asymptotic curves of the tower and arched girders of the Galerie seem to grow out of and summarize the compositional process. The cohesive pattern which the consumer had to extract from the Roll and synthesize in his mind is objectified in these edifices, so that their forms seem to clearly mark the fusion of mind and matter in material culture, which the Republicans desired the new style to represent.

The similarity between the Republicans' prescription for the new style and the actual products of artistic effort is not fortuitous. There is reason to believe that the Republicans exercised a direct influence over these artists at this time and that their vision helped to influence the development of their styles. For example, Manet, who was a friend of Proust's, wrote to the Prefect of the Seine in April 1879 asking to paint a series of murals for the new Hôtel de Ville. These would depict ". . . les diverses corporations se mouvant dans leur milieu, la view publique et commerciale de nos jours." The subjects to be treated were listed as: "Paris-Halles, Paris-Chemins de fer, Paris-Port, Paris-Souterrains, Paris-Cours et jardins."⁴⁴ Both the date and the wording of Manet's proposal are very interesting. He proposes to present the middle classes conceived as an interdependent congeries

of "corporations" engaged in the working and lesiure time activities which generate and sustain this way of life. Given Manet's association with Proust, his Republican sympathies, and his interest in the figure of Henri Rochefort about this time, it would seem that the Republicans' expressed support for themes which had always attracted him encouraged him to suggest this mural series and entertain the hope of being commissioned to execute it.⁴⁵ Such support may also have restimulated his emphasis on the decorative aspects of his work. For artists such as Puvis and Roll the connection is much firmer. Their major works being commissioned, some accommodation between artists and the Republican's taste had to be made. Even in works which Roll did on speculation, such as the Grève des mineurs and the Chantier de Surènes, he must have had an eye on the government as a prospective purchaser, for only a limited number of buyers could afford or would be interested in works of this size devoted to such themes. As one writer on Roll noted, the cost of such works was considerable, and the artist painted them with the expectation of recouping his investment and making a profit as well.⁴⁶ The same sort of argument would hold true for Mercié's work, his major Salon entries during these years being intended for public display and appreciation.⁴⁷

As for the architects, their works by definition had to take into consideration the needs and tastes of the patrons. The structures designed and built for the universal expositions were conceived in response to the Republicans call for edifices destined for specific purposes. Anyone hoping to have his plans accepted had, therefore, to

take the prescriptions of the Republicans seriously, using them as guidelines for the design.⁴⁸ Eiffel is a somewhat different case according to Lockroy. Apparently, the Tower was an idea he undertook to develop on his own, recognizing that its symbolic meaning and its structural form would interest Hugo deeply.⁴⁹

There is also reason to believe that these artists were naturally in sympathy with the Republicans' values, finding in their concept of style a means of giving expression to ideals and experiences shared by artists and politicians. Many of them were the sons of artisans, small-scale entrepreneurs, businessmen, and manufacturers or professional men, that is they came from the same middle classes that had spawned the Republicans.⁵⁰ Many of them also, like the Republicans, had found themselves in opposition to the educational system in the 1860's and had come to rely on their own efforts as much as formal schooling for their education.⁵¹ It was their own lifestyle and their own social group which they were offered the opportunity to celebrate and to keep as the dominant mode of existence in the Republic. The developments in their styles may, therefore, reflect the strong emotional attraction which the Republicans' concept of the new style exercised over them. Artists' interest in these ideas and reasons for accepting them will be discussed in greater depth in the chapters which follow.

The Character of the New Style: Symbolistic or Synthetic?

Earlier on, the style was characterized as emblematic or symbolistic. Some qualification of this term is needed, for it calls

attention to an attribute which is not really the most distinctive nor the most fundamental characteristic of the new style. Other styles in the history of art are emblematic and treat their formal components as symbols. Indeed, it is this characteristic which made it possible for Hugo to use the art of the past as he did. The styles which immediately follow this one in historical time, Art Nouveau and Modernism, are also such styles. While the Republican style had affinities with both and might be considered a source for them, it differed in ways which help to point up the inadequacy of the designation: emblematic or symbolistic.

In the case of Art Nouveau, this later style sacrificed the signs of ordered labor and the compressed, forward pressing space in favor of fluid line, flat surfaces, asymmetrical arrangements and linear treatments not necessarily expressive of structural organization and often gratuitously playful.⁵² Art Nouveau, as it is found in the works of Alphonse Mucha (1860-1953) or Hector Guimard (1867-1942) (Figs. 36, 37) in the 1890's eliminated stylistic factors that in the Republicans' view would show the middle classes how to clarify and structure their thought and behavior patterns and bind people together.

As for Modernism in painting, the Republican style differed from it primarily in the nature of its imagery, and, then too, in the degree to which the structural elements in design departed from normal visual experience.⁵³ The cultural forms, i.e., themes, shapes, etc., and compositional forms fundamental to the new style because of their strong social implications are missing from Modernism. In the art

which Matisse and the Cubists were to do twenty years later, the imagery is related to intimate, psychological experience and to universal forces. The artist's studio, his life, his fantasy, and creative experience are removed from contemporary society which exists outside the world of art.⁵⁴ Whatever this difference may suggest about the change in the relationship between the function of the artist and his work on the one hand, and middle-class society on the other in the decade preceding World War I, the sort of mocking, half-serious juxtaposition of real objects and painted ones in Picasso's collages (Fig. 38) suggest the artist no longer believed that the union of modern industrial culture with the reality designed by the artist would provide the basis for a new social order, or at least social "engagement" had become peripheral as an impulse to fabricating art.

The same does not hold true for French architecture of this period. At least the works of Auguste Perret (1874-1954) offer a continuation of efforts to provide rational, functional designs for modern commercial society and to exploit the possibility of new materials to these ends.⁵⁵ The character of the architectural forms and interior spaces may have become more angular in 25 bis rue Franklin, built in 1903 (Fig. 39); but the same structural principles and aesthetic values which underlie the Eiffel Tower are found in the style of the design. There is thus a parting of the ways of architecture and painting that occurs later on, separating into related but distinct streams what the Republican style had united into a coherent system.

The style in question most closely resembles the mode developed in the 1880's known as Symbolism. Works supported by the Republicans possess characteristics which a recent writer has noted constitute the essential elements of Symbolist painting:

Trois composantes du tableau sont ainsi considérées: celui-ci doit tout d'abord raconter, c'est-à-dire rendre clair un contenu. Deuxièmement, il ne doit pas s'épuiser inutilement dans la narration d'un fait anecdotique, mais inciter à réfléchir, créer un cheminement de pensées qui dépasse le contenu visuel. Troisièmement, les composantes musicales de l'oeuvre d'art, métaphore kinesthésique que de nombreux artistes symbolistes ont souvent mentionnée. Celle-ci traduit le caractère obscur et inexplicable de l'oeuvre d'art qui fascine le spectateur, elle est la suggestion poétique. La musicalité de l'oeuvre symboliste est mentionnée par contraste avec l'idée qu'elle contient et ne peut en être séparée. A la compréhension intellectuelle doit s'ajouter une compréhension intuitive afin que le tableau soit perçu comme une entité et prenne tout son sens.⁵⁶

According to this definition the differences that exist between the works preferred by the Republicans and those which are considered Symbolist have more to do with the fact that the former wished to associate a psychological state with a social condition and to limit the range of experience conveyed by works for general consumption to those sentiments and experiences that were not only universal, but could be turned to positive social, economic, and moral ends. Labor, leisure, affection, the experience of reflection itself, enthusiasm, and devotion were presented in an optimistic context. For this reason an artist of the stature of Puvis de Chavannes could be accepted into the Republican camp on the basis of his large scale decorations and into the Symbolist camp on the basis of his Pauvre pêcheur (Fig. 21), when stylistically both sorts of work are not fundamentally different from

one another.⁵⁷ In this respect the Republicans' style might be placed into the category of what has been termed "symbolistic art," or the category of Symbolism might be expanded to include this style.⁵⁸

Certainly the Republicans' efforts to encourage the development of this style, beginning as early as 1876 and probably earlier, predates the full flowering of Symbolism.⁵⁹ While it is difficult to argue that Symbolism was a direct outgrowth of these efforts, it can be claimed that the Republicans contributed to its development through their insistence that the subject of a work was the emotional and intellectual content conveyed through formal elements and the physical character of the images, rather than through anecdotal detail and applied ornament. Also not to be overlooked here is their argument that science and technology could contribute to art by offering a new approach to the handling of materials, a new concept of matter, and a more precise and sensitive way of analyzing form and ordering composition. Even if Symbolism represents an exploration and evocation of private and subjective states cut off from conventional social intercourse, those states and the means of evoking them reveal the artist's knowledge of the modern industrial world, its values, and character. They rely for their impact not on rejecting the concept of matter and methods of analysis and synthesis proposed by the Republicans, but on what the Symbolist poet Gustave Kahn called "annulling the pattern of a forced and spiritual modernism."⁶⁰

Kahn's comment pinpoints the issue at hand in defining the character of the new Republican style, that is its relationship to modern

commercial and industrial society. It seems, therefore, more appropriate to consider the style from the point of view of its function vis-à-vis the market place. Conceived as a means of enabling commodities to transform human beings' material and emotional existence for the better, the salient feature of this style is not so much that its mode is symbolic but that it possesses the ability to suggest a particular sort of reality. It, therefore, makes more sense to call it a synthetic style, in order to give full consideration to the social, moral, and economic function it was intended to perform. This synthetic realism in fact provides the spine of the style from which symbolic meanings radiate like ganglia.⁶¹

There are several ways in which these works may be categorized as synthetic. First of all, by their very nature one is made aware that the various stylistic elements are not organically related, but wrought into a whole through a rational system of ordering which involves an act of will on the artist's part. The highly self-conscious delineation of forms and arrangement of them, the sophisticated regulation of harmonies and proportions, and the choice of themes and images testify to efforts to find the common denominator that will correlate disparate types of sensory stimuli and bind them together. This common basis is the conception of these elements as physical entities with powers of mutual attraction and repulsion that allow them to be brought in to a dynamic equilibrium.

These are also synthetic works in that the artist produces, through the arrangement of the material constituents and their

correlation with certain familiar images, physical effects seemingly analogous to those produced by natural phenomena. The result is a sort of paradox, for although the style is an artificial, i.e., a manufactured system and openly declares itself so, it appears to be a natural one because of the relationship between the arrangement of forms, their material character, and the effect they produce.

The final way in which these works are synthetic has to do with the act of consumption. The manner in which the materials are handled and the individual elements organized elicits an intuitive kinesthetic and reflective intellectual response from the consumer. The presence of a subject is not only presumed, but the works assert themselves into the viewer's consciousness and demand his attention. He is engaged by these palpable elements and their patterning in a dialectical process of reflecting on the meaning of the imagery and understanding the manner in which the artist objectified his idea. The consumer mentally reenacts the creative process and resynthesizes the stylistic elements into a meaningful psychological order. Herein lies what the Republicans saw as the means to a synthesis or union of separate individuals into a new social body. It is also this sort of synthetic experience certain Republicans, notably Hugo, Lockroy, and Simon, hoped would generate new ideas and encourage useful invention.

It is not surprising to find that this style has much in common with the art of advertising which was rapidly developing during the 1880's.⁶² As a model for the design of a host of consumer products, the style was conceived as a label or container immediately

communicating information about the nature and quality of the product. The style of the modern poster, for example, which began to come into its own at this time, is very similar in character to that of the Republicans'.

One of its earliest historians, Ernest Maindron (1838-1907), an official in the national bureau of public instruction and *Chêf du service du catalogue* for the 1889 Exposition universel, defined the essential elements of advertising in his seminal work Les Affiches illustrées (1886).⁶³ Citing the work of the prolific poster designer Jules Chêret, Maindron first emphasized the fact that Chêret's images were taken from modern life, and especially leisure activities associated with the theater, the *café-concert*, and popular *fêtes*. Moreover, they were intimately related to modern commercial enterprise.

Elles ont été dessinées toutes pour des établissements bien connus et qui sont à la tête du mouvement commercial.

Although he noted Chêret used them to evoke a feeling of movement, this motion was closely tied to the essential character of the culture and of the particular activity which constituted the real subejct of his work. Chêret presented, he argued, "une idée nette et précise d'un sujet moins vaste et sur lequel il veut plus spécialement appeler l'attention."

The means of conveying this idea in advertising were the same as those reocmmended by the Republicans. Maindron's characterization of Chêret's handling of line and oclor is strikingly close to the Republicans' prescriptions. Not only did Chêret eliminate superfluous

detail and rely on clearly articulated line, he also used color in a way they would have approved.

Pour la couleur, et c'est le pont capital, M. Chéet arrive toujours à des effets décoratifs d'une grande puissance; il procède par masses, à l'aide de vigoureuses oppositions savamment harmonisées par des fonds gradués d'un coloris délicat.

Finally, these means were inexorably tied to the same immediate ends the Republicans had advocated, that is, to the necessity of communicating impressions and ideas about the product to the consumer:

Toutes ces conditions étant remplies, . . . il est impossible de voir l'une de ses productions sans saisir immédiatement le caractère de l'ouvrage qu'il patronne. Si l'oeil est satisfait, l'esprit ne l'est pas moins. Ses affiches sortent du mur et commandent l'attention. C'est là le résultat essentiel.⁶⁴

The similarities are striking. Like modern advertising this new style possessed the ability to create a sense of reality, to suggest that satisfaction was to be found in the products of modern industry and commerce. Like the poster and the label, it made use of new developments in technology to produce these effects. But certain important differences also exist between the two. Unlike modern advertising, the reality the new style purveyed was that of a universal system that encompassed man. And unlike modern advertising, the product the new style purveyed was not a particular theatrical production, circus, department store, book, or brand of furniture. It sold a particular lifestyle, a set of moral, social and economic behavior patterns governed by principles that transcended the search for profit and pleasure. These products meant to reintegrate man into the system of nature had to be announced by a style which had certain constraints placed on its artificial character.

It was modern science which the Republicans felt would enable the style to direct human attention and activity towards ends beyond simple self-indulgence by presenting an image that not only appeared real, but was real. Thus, in order to fully understand the synthetic character of this style, it is necessary to look at it in light of the nature of science and developments in physics, chemistry, psychology, and aesthetics during the latter part of the nineteenth century.

The relationship between the synthetic nature of the Republicans' style and science which is discussed below is not a fortuitous one. The scientists, psychologists, and aestheticians who will be mentioned were well-known to the Republicans, as was their work. In several cases, that of Pierre Eugène Berthelot (1827-1907), Paul Bert (1833-1886), and Charles Blanc (1813-1882), these men travelled in the same political circles and held positions in the government; while in others, particularly that of Michele Eugène Chevreul (1786-1889), they were universally known and admired at the time. Chevreul was in fact a public figure of the stature of Hugo, what the Japanese would call a living national treasure. An avid supporter of the Eiffel Tower who held a prominent place in the panorama of French science painted for the 1889 Exposition, his one hundredth birthday was celebrated as a public festival in 1886. Moreover, many of these individuals and their ideas were known to the general public and to artists through public lecture series on science and art presented at the Collège de France and through reports on their work in the popular press.⁶⁵

At the heart of the kinship between the new style and science lies an acceptance of scientific procedures as the basis for artistic

composition. The scientific method which relies on the analysis of phenomena and the synthesis of this information into a coherently formulated law describing their activity in general terms is analogous to the way in which the works under discussion are constructed. In them the essential characteristics of the structural elements are identified and arranged so as to express their relationship to one another. Through these relationships the general principles which unite them are implied. Just as scientists use mathematical equations to express such relationships in highly symbolic form, the new style offered another means of accomplishing the same ends, although one less abstract in its choice of symbols.⁶⁶

But this methodology does not operate in a vacuum. It is guided by a particular notion of what phenomena are acceptable subjects of analysis and of what constitutes an acceptable synthesis.⁶⁷ During the latter half of the nineteenth century the focus of attention in art as in science shifted to the study of natural phenomena and the process of change. Among scientists and philosophers, the growing acceptance of the physical theory of matter and the laws of thermodynamics associated with this theory opened the way to the conception of all phenomena, including light and the human organism as different aspects of the same internally motivated, dynamic system, continuously engaged in the process of self-construction and organization.⁶⁸ So far as the formal elements in the works interlocked with one another producing a coherent ordering, the style is not simply a paradigm of this system but an aesthetic expression of it.

That this was in fact the case, at least for architecture, is born out by Eiffel and Dutert's reliance on physical laws of stress in designing the Tower and the Galerie. Davioud turned to the science of acoustics, that is, the laws governing the motion of sound waves, for the design of the dome of the Trocadéro.⁶⁹ Although it is not always known, as it is in the case of Davioud and Eiffel, that the figurative artists used mathematical equations describing these universal relationships to establish proportions and adjust their compositional schemas, the types of imagery found in their works indicate that music and architectural construction provided them with a way of visualizing rational harmonies that were too abstract when reduced to purely mathematical terms. Cazin as early as 1876 in his Chantier (Fig. 17) not only depicted a scene in which a number of boats are shown in various stages of completion, but the play of curves and horizontals establish patterns and rhythms through which the structural coherence of the work gradually emerges. The connection between the two is even clearer in his Souvenir de fête (Fig. 18) in which the scaffolding of a building in the lower right corner is the form which locks the sky and landscape together and balances the asymmetric arrangement by stabilizing the opposing movement of the fireworks.⁷⁰

Music rather than architecture is the overt organizing mechanism in Henner's Eglogue (Fig. 22).⁷¹ The opposition of performer and listener, separated by a long horizontal interval of landscape, establishes a relationship between the activities of the figures, the sound of the music, and the compositional arrangement. There is

an equation of psychological, visual, and oral experience which makes the rhythm of the work doubly palpable. Moreover, the activities of the figures inject a pulse and flow of energy which is absorbed and reflected back in an endless interplay. If not consciously applying discoveries in the science of optics and acoustics made over the previous century and a half, Henner certainly accepted the fact that certain analogies exist between the physical properties and actions of light and sound and that they both operated according to rational mechanistic principles.

The second sort of artistic synthesis, that is the creation of an artificial reality that appeared to possess the physical properties of a natural system, has its parallel in discoveries made by organic chemists and pragmatic inventors during the second half of the century. Scientific ideas and experiments on changing matter through energy transfer opened up the possibility of artificially producing natural compounds and of creating new ones that were not found in nature. It was in fact Berthelot who first applied the term "synthèse" to the production of organic compounds by this means.⁷² Like the compounds synthesized by Berthelot and Chevreul, or the electric light and the phonograph to which Simon referred in his Introduction, the new style seemed to produce effects that imitated real (natural) phenomena much more convincingly than other styles of the past.⁷³ Works of art created in this style could claim to be valid substitutes for nature because they were equally "real."

Some scientists did argue that their discipline could help artists perfect such effects. Prominent among them was the chemist

Michel Eugène Chevreul, head of the Gobelins Tapestry works and Director of the Musée d'histoire naturelle. Just as science had made it possible to artificially produce natural compounds in the laboratory and create previously unknown ones, Chevreul argued that science and technology could offer artists the means of synthesizing natural effects in their own work. He actually combined his research in color theory and textile dyes with efforts to define the specific ways in which they could profit from such discoveries.

Much of what he had said about color over the years was echoed by the Republicans. Chevreul felt that his law of the simultaneous contrast of colors held the key to producing natural effects in works of art. That law rested on the idea that different color tonalities in nature are produced by different wave lengths of light vibrating at different frequencies. These vibrations, Chevreul contended, create different colored effects depending on the tones which are juxtaposed next to one another.⁷⁵ On the basis of this law, Chevreul proposed a system for simulating colored effects in nature and producing new ones of equivalent intensity. As he told the photographer Nadar in a famous interview of 1886:

Quant aux peintres, la connaissance de la loi du contraste simultanée des couleurs est de première nécessité. Ne savez-vous donc pas que, mathématiquement, pour copier fidèlement le modèle coloré, il faut en faire la copie autrement qu'on le voit?⁷⁶

In addition, Chevreul pointed out what the Republicans had also argued would be the benefit of such control: the creation of an artificial environment that was coherent in its organization and at the same time natural in its effects and underlying premises.⁷⁷

The third kind of synthesis, that which takes place in the mind of the consumer, was also related to the scientific paradigm of a physical system in dynamic equilibrium. The Republicans' style not only presented an image of the natural system, and, therefore, of the ideal economic system, but through its affective power it integrated individuals into that system and empowered them to influence its development. Underlying this view was the assumption that the external world and the mental and physical world of the individual operated according to the same principles.⁷⁸ The style, in offering a picture of this system, struck a resonant chord in the consumer, stimulating his mind and body to organize themselves in accordance with the experience. Ernst Gombrich's description of the theory of perception which he uses in Art and Illusion is helpful in explaining this relationship. He defines the process, which he notes is an educational one, as follows:

. . . All cognitive processes, whether they take the form of perceiving, thinking, or recalling, represent "hypothesis" which the organism sets up They require "answers" in the form of some further experience, answers that will either confirm or disprove them.⁷⁹

Because of the underlying assumption, it was possible to conceive of the process that would transform the mental and physical state of the individual as analogous if not identical to that used to transform raw matter into synthetic compounds. Certain scientists and aestheticians not only conceived of the effects which external stimuli had on the individual in terms of a synthesis of this sort, but were interested in exploring the role which art could play in organizing

human perception and stimulating activity. They, like the Republicans, advocated the development of a new style that utilized their findings for purposes of moral and social reform. Physiologists such as Claude Bernard (1813-1878) and his disciple Paul Bert investigated the physical effects of external stimuli on living organisms, effects which Bert termed "work." Their work was related to that of the German Hermann von Helmholtz (1821-1894), who studied the relationship between the physical sensation provoked by particular stimuli in the nerve receptors and the individual's evaluation of these sensations, limiting his a posteriori conclusions to evaluations of the pitch, color, and weight of the stimuli. These researchers did not, however, concern themselves with the emotional and more complicated cognitive processes that were elicited by external phenomena. They backed off from the study of areas of experience which were only indirectly observable and difficult to quantify.⁸⁰

This area of inquiry was pursued by a number of Frenchmen, notably the aesthetician, Charles Blanc and the psychophysicist Charles Henry (1859-1926), who was for a short time research assistant in Paul Bert's laboratory. Chevreul too, although he confined his research to chemistry and the physics of optics, fully supported this line of inquiry and saw it as related to his own interests. All three men attempted to account for alterations in perception and understanding and for the moral and social consequences of these alterations. They also proposed ways to apply this information to psychological and social situations. The research of Chevreul and Charles Henry can be

said to have complemented Blanc's efforts. By attempting to quantify and clarify the relationship between any given stimuli and a given response, they hoped to provide a firm empirical basis for philosophical theories concerning the affective power of art. For example, working from the same premise put forth by Blanc in his Grammaire des arts de dessin, e.g., that diagonal lines above a horizontal were energizing and stimulated feelings of happiness, they measured the angles of incline and tried to determine the optimum angle for the most stimulating effect. The same correlations were attempted with color and sound.⁸¹

Such research continued a tradition which had its roots in Plato and Aristotle. It had long been recognized that color, linear motion, and patterns of visual and auditory stimuli were associated with emotional states and the expression of psychological character.⁸² These nineteenth century psychophysicists and philosophers pursued this line of inquiry further, examining, among other phenomena, the effects of specific optical stimuli, e.g. colors, lines, and patterns on the human organism, and clarifying psychological and physiological responses to such effects. The assumption behind this research was that the more ordered the presentation of the stimuli, the more ordered and morally beneficial the response. As Charles Blanc noted:

Deux choses sont à observer et à concilier dans l'ordonnance: sa beauté optique, celle qui répond au plaisir des yeux, et sa beauté morale ou poétique, celle qui touche aux sentiments.⁸³

One sort of ordering was considered more pleasant than others: that based on the laws governing natural phenomena. Such ordering

produced the pleasingly intangible feeling that the external world and the internal worlds were brought into conjunction. Such ordering made sense out of the stimuli, enabling the individual to mentally digest them with ease and to find satisfaction in the experience. Chevreul's comment on the misuse of the law of simultaneous contrasts reveals the degree to which these men felt the psychological equilibrium of the individual and of social relationships depended upon the proper adjustment of sensory experience.

Que d'inconvénients en tous ordres et dans toutes les conditions de [sic] par l'ignorance ou la méconnaissance de cette loi? . . . c'est un ménage qui sera rompu pour le choix malencontreux d'une toilette.⁸⁴

Fatuous as it may seem in our culture jaded by Madison Avenue techniques, Chevreul seriously argued that an arrangement of colors that was not true to nature could destroy one of the foundation stones of liberal democratic society. Chevreul's description of his purpose in introducing artists to the law of simultaneous contrasts is equally helpful in understanding the purpose which art could serve for the consumer:

. . . il faut faire voir. Il faut que vous voyez, il faut que je vous fasse voir. Parce que c'est quand je vois que je crois.⁸⁵

What one "saw" according to Chevreul was a vision of the mechanized universe in the form of an experience of perfect harmony. For Chevreul this experience was a positive stimulus to believe in a better life and to strive to make it accessible to others.

Charles Henry was more precise about how the corrected vision, made possible through the artist's use of scientific analysis to

control line and color, could produce the behavior necessary for social harmony.

Ce que la science peut et doit faire: c'est répandre l'agréable en nous et hors de nous et à ce point de vue sa fonction sociale est immense en ces temps d'oppression et de collisions sourdes. Elle doit épargner à l'artiste des hestiations et des essais inutiles, en assignant la voie dans laquelle il peut trouver des éléments esthétiques toujours plus riches . . .

Henry proposed that artists use "le schéma de l'expression de plaisir" which science had developed, as the basis for the design of an artificial environment. Expanding on Paul Bert's view that the product of physical stimuli on the living organism was labor, he explained that the character and ordinance of everything in this man-made system from architecture to landscaped gardens to furniture would stimulate each individual to "réaliser le maximum de travail" while channeling their labor into paths that were beneficial to others. The end result of this effect would be the union of all individuals into an ordered, rhythmic system, the creation of a synthetic entity which Henry called "the reality of a superior coordination of the virtual movements of individuals."⁸⁶

Accompanying their efforts to define the essential elements of style and their proper ordinance was the recognition that the desired psychological and social synthesis could not be effected unless the stimuli assumed an appearance that was recognizable and meaningful to the consumer. Beginning with the study of Greek art by Winklemann and of Egyptian hieroglyphs by men like Thomas Young and the archaeologist Antoine Mongez in the eighteenth century, these images were considered to be mental signs or hieroglyphs arising spontaneously from the psyche

of individuals in a society and encapsulating certain concepts and emotional states in forms that were understood by the members of that society.⁸⁷ Such single motifs formed the primordial visual vocabulary of a society, and the rules governing the ordering of their parts constituted a system by which their meaning could be communicated to others in the group. In his well-known book Le Grammaire des art de dessin, first published in the 1860s, Charles Blanc suggested that the origins of these motifs and the significance attached to them lay in the impression which natural phenomena had made on man. Religious architecture, temples, and towers, for example, were modeled on mountains and their designers strove to imitate the physical effect of these impressive natural features. In so doing they purposely imitated the harmonious system of nature which lay behind appearance, knowing that these forms and their ordonnance would exercise a particular influence over the population.

Pursuing ideas which Hugo also supported, Blanc developed the notion that the images embodied in art created an emotional and intellectual bond between individuals. His description of the intentions of the builders of the Tower of Babel provides a stunning insight into the psychological effects which Blanc felt certain archetypical motifs could have on a group of individuals.

Venez, batissons-nous une ville, se disent les descendants de Noe, et acquérons-nous de la renommée, de peur que nous ne soyons dispersés sur toute la terre. Ainsi, dans la crainte d'un nouveau déluge ou de quelque autre catastrophe, les Noachides élèvent la tour de Babel, soit comme un point de ralliement, soit pour transmettre aux générations futures, avec un témoignage de la puissance humaine . . . ⁸⁸

There is virtually no difference between the social aims Blanc attributed to the noachides and those of the Republicans in erecting the Eiffel Tower. The knowledge of the expressive character of images, that is their power to move the consumer emotionally, came from man's familiarity with himself, in particular with the human body and face. These constituted the aspects of nature with which he was best acquainted and which he projected onto the rest of the universe. Thus, it was also a fundamental premise of Blanc's that certain basic forms and arrangements of forms a priori signified certain moral ideas and emotional states to the consumer.⁸⁹

Although in his Grammaire, Blanc separated this moral function of artistic style from industrial design, in his writings of the late 1870s and early 1880s, most notably in the Grammaire des arts décoratifs and his review of the arts at the 1878 Exposition universelle, he came to see that the function of beauty and that of utility could be united. If in the late '60s he felt that, "on admire les créations de l'art, on consomme les produits de l'industrie," ten years later he could see that the process through which the artist synthesized his form and the viewer resynthesized it involved the physical process through which consumption of the object took place.⁹⁰

Speaking of the new style which he saw emerging in the architecture at the 1878 Exposition, he declared that it would satisfy the needs of the "multitudes qui veulent se réunir." It would

répond à des sentiments qui n'existe qu'en germe dans l'humanité, à des besoins qu'elle n'avait pas connus jusqu'ici, à des idées qui se développeront à l'abri même de ces temples.

Such a style "révèle et consacre un nouvel ordre de choses."⁹¹

His description of the edifice which would embody this style is interesting for what it suggest about the relationship between the synthetic character of the new style and contemporary science and aesthetic theory. Built out of iron and glass, its form would be that of a temple, covering "des espaces immenses sans les encombrer de points d'appuis intermédiaire." The interior walls would be pushed "sur les limites du batiment où ils n'ont plus à remplir que la fonction de clore . . ."⁹² Blanc could be describing the Galerie des machines and its effect on the spectator eleven years before it was built!

Given the close association between the Republicans and scientists and aestheticians during these years and given their mutual interests and concerns, Blanc's prescription is more than a mere coincidence. He performs the function of identifying the salient features of the new style, condensing them into a vivid image, and pointing the way for artists and architects to use research such as Chevreul's and Henry's for the public good, a service completely in accord with his position as a public servant in the employ of the Republic.

Of all the works by Republican approved artists, the Galerie and the Eiffel Tower best meet the qualifications the officials laid down. Other works discussed, that is painting and sculpture, suffer from too overt an attachment to images drawn from the past, or from an awkwardness and inconsistency in the handling and arrangement of formal elements, or from a failure to adequately simplify and economize their forms. Such impairments interfere with the ultimate psychological and social function they were to perform. The Galerie along with the Tower

not only externalized the Republican's ideology and clarified its main lineaments into a style, but they seem to promise that social harmony and personal adjustment will be possible through a material culture designed in accordance with its patterns.

It is impossible to view the Tower at close range as an object isolated from the viewer's world in the way that a Byzantine Icon is (Figs. 33-35). Moreover, it is not related to the viewer as a Renaissance or Baroque work. That is, it does not posit an effortless continuation of the viewer's three dimensional space. The clear articulation of the parts, the lack of internal detailing or ornament, the careful adjustment of the relationship of one part to another, and the scintillation of the elements against the light, impinge themselves on the viewer, draw one into conversation with the structure and establish the terms of that dialogue. As the eye is moved upward by the latticework of iron struts, all placed on an ascending diagonal, the mind constantly responds to and integrates the forms into a systematic order. Essentially one is led to abstract from this data a concept of the principles which Eiffel used in constructing the tower. Although what is seen first appears disjointed, often disorganized, and contradictory, the manner in which the elements are arranged in a repeated pattern forces one to recognize a dynamic and logical connection among them. Moreover, the relationship of the parts to the silhouette of the tower is such that in perceiving both, one has the sensation that they are intimately connected. The movement of the diagonals seems to resolve itself into the form of the tower, while personal

identification with this process makes it appear as if the principles governing this transformation are responsible not only for the final resolution of the elements into the upward thrust of the edifice's curving sides, but of one's own feelings into a similar sort of energized direction. Lockroy, Eiffel, and even the petitioners against the Tower all agreed that the structure was unique in the degree to which it performed this function for the viewer.⁹³

Conclusion

Lockroy's assertion that the new style was capable of cultivating a new social order raises the question of the extent to which it could provide individuals with a solution to their psychological, social, and economic problems. Although the style did prove that the Republicans' ideology offered a viable system for incorporating scientific discoveries into a harmoniously designed product, there is no reason to believe that success of this sort would necessarily lead to the desired psychological, economic, and social equilibrium. In fact, certain problems within this line of reasoning argue against the new style's power to do so.

The first problem has to do with the assumption that the particular sort of rational ordering, imagery, and handling of materials would be irresistible to the middle classes. There is no reason that the austerity of such a style, nor its imagery, its particular dynamic, and its restrained and canalized emotional tenor should be more inherently satisfying to the consumer than kitch or tromp l'oeil realism for

example. The fact that the consumer can comprehend it and be moved by it does not mean that he finds it pleasing, even if its character is an expression of scientific truth and the human reasoning process. Those who petitioned against the Eiffel Tower grasped the character and significance of its style without any problem, but were repelled rather than attracted by it. It may have carried them along logically through the dialectical process, but it did so against their will.

The comments of Ferry, Simon, Lockroy condemning alternative styles suggest they were well aware that the new style and the life-style associated with it were not universally compelling. Their arguments in its favor all turned on the fact that its attractiveness lay in what it promised beyond itself, not in its power to be satisfying in and of itself. The limited nature of its appeal is confirmed by the fact that both its development and its proliferation depended to a great extent on the influence wielded by these five Republicans. With the change in the political situation about 1886, government support for it began to decline as Lockroy's complaints about the exposition of 1889 indicated:

L'idée a été abandonnée après le changement de ministère. On ne s'est plus occupé que du côté matériel, tantôt en essayant de supprimer la Galerie des Machines ou la Tour Eiffel, tantôt en exagérant un peu le nombre des cafés et des concerts, des théâtres et des baraques. Si, en effet, quelque chose peut être reproché à l'Exposition, c'est d'avoir par trop rappelé les foires d'autrefois . . . et aussi . . . [les] Folies-Bergère.⁹⁴

The weakening of these five men's influence on public taste towards the end of the 1880's--to which this quote attests--had perhaps begun about the time of Hugo's death in 1885 and worsened with the

relegation of Ferry to the Sénat in 1886 and Lockroy's dismissal as Minister of Commerce in 1887.

Behind the shift in governmental policies and the commercialization of the fair lay the changing economic situation and concomitant changes in the public's attitude towards the lifestyle and culture promulgated by the Republicans. By 1886 the economic crises which had given a boost to their development and helped maintain the Republicans in power began to dissipate.⁹⁵ The renewed growth of café life and spread of music halls and café-concerts into the working class neighborhoods, that is, the commercial entertainments that mark Parisian life at the end of the 1880's and during the '90's, was one of the most visible signs of the easing of the economic situation.⁹⁶ The other was the shift of the support of commercial interests from one group of Republicans to another more interested in guarding the profits of larger businesses than in encouraging small firms and independent producers to modernize.⁹⁷ Thus, whatever support the style and its proliferation may have had from businessmen and industrialists who needed social solidarity in the uphill fight against economic depression and declining markets was eroded by increasing demands for inexpensive consumer products and larger profits.

Labor in growing numbers also began to move away from liberal democratic Republicanism towards socialism and anarcho-syndicalism, as unions came to use strikes to gain a share of increasing profits.⁹⁸ Ideologically, the anarchism of Kropotkin offered an attractive alternative to artisans and skilled workers whose sense of independence had

made them sympathetic to Republicanism. By affirming the value of similar economic and aesthetic ideals and production methods, it too promised that the products of labor would influence the development of society in favor of the working classes, albeit this group was now much more narrowly defined.⁹⁹

With business and labor heading in a different direction it is fair to say that the style had lost much of its *raison d'être* by 1890, save for those sectors of the working classes whom the Republicans had placed in the avant-garde of society and who continued to be on the defensive. In sum, the failure of the style in the market place testifies to the limitations of the Republicans' ideology. It was only compelling as a general solution to social dissolution under certain economic conditions.

The second problem concerns the promise that such a style would be a mark of quality and a guarantee of lasting satisfaction because it was an outgrowth of the process used in manufacturing. But this, too, is not a necessary relationship. It is possible that products could be modeled on the style and be poorly made. The art critic Arsène Alexandre, a strong supporter of the new style in the 1880s noted a growing discrepancy between the "look" of products and their real moral and economic worth as commercialization grew around 1886. In 1895 he reiterated Maindron's complaint made nine years earlier against publishers who tried to sell poorly written books by packaging them in attractive covers designed by good artists: " . . . c'est une simple trompérie . . . sur la qualité de la marchandise vendue." This

practice thoroughly disgusted them and forced them, reluctantly, to feel that the fine arts and crafts should be separated from the market place.¹⁰⁰ Moreover, serious criticisms were leveled against the architecture and urban renewal which had been carried out under the guidance of M. Adolphe Alphand. While Maïndron and Alexandre lamented only its austere grey coloration, the critic and novelist J.-K. Huysmans denounced its rationality and severity, which, along with the open spaces created by the new boulevards, he found spiritually deadening.¹⁰¹

The style had turned out to be as false an illusion as the "trompe l'oeil realism." The synthetic reality it announced, which the Republicans argued would be the source of human felicity, turned out by the 1890s to be no more satisfying in its character than other styles. Perhaps even less so, since it placed greater demands on the consumer and promised him so much more in his everyday life, its failure to deliver seems to have been all the more disappointing. Thus, a new form of frustration was introduced into the consumer's life, one that led him to separate art from public life, the aesthetic experience from social activity. The response of Alexandre marks a withdrawal from the social arena by those outside government who had hoped the new style would make the ideal Republic a reality. Rather than increasing social solidarity and inspiring consumers to action, the adaptation of the style to commercial purposes undermined the social impulses which had given birth to it and denigrated the social value of the artist and the style which were to uplift commercial activity. As popular culture

turned into mass commercial culture in the 1890's, the hope for maintaining the salutary influence of art over its form, content, and use, dwindled.

When the ramifications of the Republicans' claims for the new style are considered from the producers' point of view, they too can be seen as a potential source of new problems for artists and the government. The character of the style and its function limited the manner in which the artist could create. Required to formulate his personal ideas and his feelings in images that could be easily grasped by a large audience, the artist had to find archetypes for his own experience that were also those of the middle classes. He also had to conceive of his work as a structure he was building and of his materials as matter signifying physical, social and psychological systems that lay beyond the work of art. Thus, he was supposed to determine what were the most elemental characteristics of his art and to consistently emphasize these. Moreover, he was required to think of the compositional process as an equilibration of opposing forces, which was communicated to the consumer in the form of energy transfer. He thus had to reduce his idea and his experience to a system of universal signs and harmonies seen in balanced opposition to one another.

Even with science as a guide, this was a difficult task which not every artist could fulfill, as Ferry and Hugo admitted. It demanded a subordination of the artist's ego to the interests of the community. Those who did not conceive of the artist's business in this manner were considered socially irrelevant and morally wrong. Judging from the

comments of Chennevières and Robert-Mitchell, as well as certain Symbolist artists, those who saw art as a means of evoking unique feelings and experiences were forced into a position of opposing the mainstream of democracy in France and devoting themselves to exploring its underside and its fringes.¹⁰² In this way, the Republicans' efforts to develop a new style that would bind society together could cause rifts among the very group on whom they depended for its invention.

For those artists who did pursue this path, however, the Republicans offered no guarantees that arriving at the desired synthesis would bring them more than moral satisfaction and a sense of self-worth. Although the Republicans suggested that the style would be irresistible to the public, by their own admission it was never overwhelmingly popular in the open market place. It is, therefore, possible that artists who followed the Republicans' directives could find themselves confronted by a new set of contradictions, that of believing they were worthy of being rewarded for their effort and public service while feeling frustrated because they were not. The very method of cultivating style from the artist's experience could contribute to this dilemma. Because the Republicans encouraged artists to accept a course of action whose primary reward was public acclaim, these elected representatives placed themselves in the position of being blamed by artists for any failure to win recognition. Their plan for social solidarity had the potential of creating new sorts of friction between artists and the government.

Another possible source of contention lay in the government's wish to commission buildings and purchase works for public monuments, classrooms, and museums as part of their education program. Such activity contradicted their own position on not interfering with the free play of the market, and it left them open to criticism from those whose works were purchased and from those whose works were not. Even Puvis de Chavannes, who never lacked official commissions during this period, complained the government did not pay him the price which Bouguereau received from private patrons of the Salon. At the same time he recognized that his integrity as a painter did not allow him to pander to this market.¹⁰³ In this case the Republicans could serve as a useful scapegoat for artists' frustrations and almost as an excuse for withdrawal from democratic society. As for those whose works were not purchased by the government, the Republicans left themselves open to criticisms that their concept of the new style was too narrow, that they failed to recognize real integrity, or that their choices were as politically motivated as their effort to woo the workers. Thus, the commitment of artists who accepted the Republican ideals could lead to dissatisfaction with the present society or with the men who failed to bring the promise to fruition. Artists could feel this way while maintaining confidence in the aesthetic ideal and social vision which the appearance of the new style confirmed as a real possibility. In proposing their ideology as a means of resolving certain contradictions within competitive industrial economy, the Republicans created a situation in which the latent contradictions within liberal democratic ideology began to emerge.¹⁰⁴

Yet, through the back door as it were, the Republicans' art policy was not without its positive effect. A new style was developed, and many of the objects created remained to form part of the material culture that gave the period its special character. The Eiffel Tower and other works remained as symbols embodying values which would influence design in years to come.¹⁰⁵ While the effect such a style had on the general public's behavior, morals, and sentiments is difficult if not impossible to measure, the fact that a number of artists and artisans close to the five Republicans did cooperate in its development singles out these members of the officially designated avant-garde as being the most strongly influenced or encouraged by the Republicans' ideals.

FOOTNOTES

¹"Style," Anthropology Today, ed. A. L. Kroeber (Chicago: University of Chicago Press, 1958), p. 287. Because of its clarity and flexibility, I have chosen to use this definition as the basis for my discussion of style.

²Edouard Lockroy, Preface to L'Exposition universelle de 1889, grand ouvrage illustré, historique, encyclopédique, descriptif, by Emile Monod, 3 vols. (Paris: E. Dentu, 1890), 1: xxvi.

³Jules Simon, Introduction. Rapports du jury international, Exposition universelle internationale de 1878 à Paris (Paris: Imprimerie nationale, 1880), p. 252. Also see Antonin Proust, "Les Travaux des commissions de la société de l'union central des arts décoratifs. Rapport de M. Antonin Proust, etc.," Revue des arts décoratifs 10 (1889-90): 193, 196.

⁴Ibid., p. 234.

⁵"Le Salon de 1882," Gazette des Beaux-arts 25(June 1882):534.

⁶Introduction, p. 250.

⁷Jules Ferry, "Partie non officiel," Journal officiel de la République française, 23 April, 1883, p. 2010.

⁸Preface, 1: xxvi.

⁹The call for a new style symbolizing and serving a new age was not unique to the Republicans of the 1880s. One can trace it back to David and the intellectual circles connected with the Institut during the First Republic, and beyond them to the utopian architects of the French Enlightenment. As Tsheudi Madsen points out in his book on Art Nouveau, the English beginning with Pugin and Ruskin advocated the development of a new style, and at mid-century the French art critic Thoré-Berger also expressed a similar desire. The call may, in fact, be regarded as an expression of its proponents awareness that technology made human experience different from that of other eras. While the quest for a new style began in earnest at mid-century, I would argue that the Republicans were able to clarify the basis on which the new style would be built and to formulate a satisfactory adjustment between its character and the art of the past. They turned the art of bygone eras which they admired into historical antecedents of their stylistic ideal, which was itself the result of an evolutionary process in which certain aesthetic values had gradually emerged into prominence. The Centennial Exhibition of French Art organized by Proust at the 1889 exposition was a celebration of the past hundred years and at the same

time a means of presenting the history of art as a continuous and logical development of certain realist and idealist impulses found in the art of David and Ingres. Proust gave to Courbet, Manet, and Bastien-Lepage--all deceased by 1884, the place as immediate precursors of the new style.

For information on the history of the idea of fabricating a new style, the following works are useful, although all save the Roisecco fail to touch on the economic values and considerations involved: Miriam R. Levin, "David, de Stael, and Fontanes: Some Intellectual Controversies in the Napoleonic Era," Gazette des Beaux-arts, forthcoming. S. Tschudi Madsen, Art Nouveau (Paris: Hachette, 1967); reprint ed., trans. R. I. Christopher (New York and Toronto: McGraw Hill, World University Library, 1973), p. 28; Sigfried Giedeon, Space, Time and Architecture: The Growth of a New Tradition, 3d ed., enl. (Cambridge: Harvard University Press, 1959); Peter Collins, Changing Ideals in Modern Architecture: 1750-1950 (London: Faber and Faber, 1965), pp. 128-148; Bernard Marrey and Paul Chernetov, Familièrement inconnues . . . Architectures, Paris 1848-1914 (Paris: n. p., for the Secrétaire d'Etat à la culture, 1976); Giulio Roisecco, Romano Jodice, and Vater Vannelli, L'Architettura del ferro: la francia (1715-1914), L'Architettura del ferro (Rome: Bulzoni, 1973); Antonin Proust, L'Art français depuis 1789 (Paris: n. p., n. d.), n. p. See also the report of a speech given by Proust to inaugurate the Centennial Exhibition of French Art: Arsène Alexandre, "L'Exposition centennale," Paris illustré, no. 20 (1889), p. 614. The comments Proust made in 1889 on the development of art in the nineteenth century delineate a progressive movement towards "la verite que la nature nous montre en pleine campagne." Indicating the limitations of Manet, Courbet, and Bastien-Lepage, he felt their merit as artists lay in their moving art away from the Platonic ideal towards direct confrontation between the artist and his milieu.

¹⁰"Le Salon de 1882," pp. 533-534.

¹¹Introduction, p. 495; Proust, "Le Salon de 1882," p. 539.

¹²For their preferences see the following works: Proust, "Salon de 1882," pp. 534-546 passim. J. Valmy-Baysse, Alfred-Philippe Roll: sa vie, son oeuvre, Peintres d'aujourd'hui, no. 1 (Paris: Librairie Félix Juven for the Société d'Édition et de publication, 1910), n. p., records Ferry's role in the choice of subject and in the selection of Roll for a commission. Proust, L'Art sous la République (Paris: Bibliothèque Charpentier, 1892), p. 79. Simon, Introduction, pp. 220, 221, 235. Hugo made good use of such images in his own works, including not only the Légende, but Les Misérables and L'Homme qui rit (1863) in which the virtuous figures belong to a group of travelling players.

¹³Simon, Introduction, p. 235. Proust, "Le Salon de 1882," p. 546. He compares Roll's depiction of popular pleasures to Dutch kermesse scenes of the seventeenth century. Ferry, "Discours au banquet d'Henner," (15 April, 1889), Discours et opinions de Jules Ferry, ed. Paul Robiquet, 7 vols. (Paris: A. Colin, 1893-98), 6: 348.

¹⁴Lockroy, Preface, p. xxvii. His full comment is as follows:

L'imitation de Tantha, de Nijni-Novogorod et de Beaucaire était trop visible, et aussi celle des Folies-Bergère. Ces acrobaties excessives s'accordaient mal avec le grand anniversaire que la France était censée célébrer. On eût souhaité parfois plus de décence.

¹⁵See Alfred Barbou, Victor Hugo et son temps (Paris; Charpentier, 1881), pp. 293-4.

¹⁶"Le Salon de 1882," p. 546.

¹⁷Ibid., p. 548.

¹⁸Preface, p. xxiv.

¹⁹See Simon, Introduction, pp. 181, 211, 212, 358. On p. 181 he describes the situation as the result of historical change.

. . . les deux éléments de la civilisation, qui sont la science et la poésie, ou l'art, ont suivi une marche contraire. La poésie a éclaté dès le début, pour aller ensuite en s'affaiblissant, tandis que la science avance d'un pas lent et sûr, augmentant chaque jour ces conquêtes et remplaçant la fiction par la vérité.

²⁰"Le Salon de 1882," p. 550.

²¹Introduction, p. 221.

²²See Proust, "Le Salon de 1882," pp. 543, 548. On p. 543 he defends the lack of verisimilitude in Puvis' rendering of color and form because it allows for certain exaggeration and a simplified arrangement.

Ce que l'on est également forcé de reconnaître, c'est que l'allure générale de la composition est le plus souvent d'une incomparable grandeur et qu'elle est toujours juste.

On p. 548 Proust supports the emphasis on ordonnance in certain artists' works as the primary factor in "style." It affirms the existence of a human presence in the work of art.

Les chercheurs de style, les amoureux des grandes et belles lignes seront-ils cloués au pilori? Ceux qui sont demeurés fidèles aux grandes et sévères doctrines, ceux qui ont la passion des beaux arrangements ou des consciencieuses recherches seront-ils excommuniés? . . . Quelles que soient les transformations de l'art, le génie ne perd pas ses droits. Et il faut, ainsi que je le disais tout à l'heure, toujours préférer quelqu'un à quelque chose, si attrayant que puisse paraître ce quelque chose.

²³The discussion of space in this chapter relies heavily on the ideas presented in E. H. Gombrich, Art and Illusion: A Study in the Psychology of Pictorial Representation, Bollingen Series XXXV, vol. 5 (New York: Pantheon Books, 1960), chap. 8. Gombrich explores the role which perception plays in our sense of space and the way in which the choice of signs and their arrangement appeal to the human imagination, creating through visual means different sorts of illusions and imaginary structures, that is different concepts of space.

²⁴Introduction, p. 222.

²⁵I am thinking particularly of the last stanzas from "Pleine ciel."

Il laboure l'abîme; il ouvre ces sillons
Où croissaient l'ouragan, l'hiver, les tourbillons,
Les sifflements et le huées;
Grâce à lui, la concorde est la gerbe des cieux;
Il va, fécondateur du ciel mystérieux,
Charru auguste des nués.
.
Faisant à l'homme avec le ciel une cité,
Une pensée avec toute l'immensité,
Elle abolit les vieilles règles;
Elle abaisse les monts, elle annule les tours;
Splendide, elle introduit les peuples, marcheurs lourds
Dans la communion des aigles.

²⁶See Simon, Introduction, pp. 221-222, and Proust, "Le Salon de 1882," pp. 535, 540. Their concept of space is embedded in their way of speaking about how art functions, particularly in the vocabulary they use. Simon describes the Pallas de Champs de Mars as a "vestibule" in which the objects on display "se tenaient à l'aise." It is an "ensemble qui frappe," providing a "point de vue." As for Proust, his continual reference to ensembles which surround the individual and interact with him are accompanied by a sense of space that is related to the stage. He speaks of the design of city streets and parks as needing the talents of those familiar with "l'art de la mise en scène." In particular, his choice of words in describing needed additions to the Parisian landscape develop an image of a contrived panorama characterized by fixed points which limit and turn the viewer's attention back on itself and the pleasure such ordered space gives.

S'il est, par exemple, une promenade essentiellement parisienne, c'est la promenade du bois de Boulogne, et s'il est un lieu auquel il serait désirable que l'on restituât le caractère français, en y introduisant le mode de décoration que nous aimons, c'est assurément celui-là. Je me suis toujours demandé comment on n'avait point eu déjà la pensée de jalonner les Champs-Élysées et l'avenue qui y conduit par des groupes décoratifs placés au rond-point de Marigny, par le couronnement attendu de l'arc de triomphe et par d'autres groupes qui marqueraient l'entrée du bois.

²⁷Preface, p. xxv.

²⁸Simon, Introduction, p. 246. Proust, "Le Salon de 1882," p. 548. Also see n. 22 above. Ferry, "Discours au banquet d'Henner," 6: 348.

²⁹Modern exponents of this view include Pitirim Sorokin, Social and Cultural Dynamics, rev. ed. in 1 vol., Extending Horizon Books (Boston: Porter Sargent, 1957), pp. 7-11, 397-98. Pierre Francastel, La Réalité figurative: Eléments structurels de sociologie de l'art, bibliothèque de sociologie de l'art (n. p.: Editions Gontier, 1965), pp. 139-142, 183-193 especially. Sigfried Giedeon, Space, Time and Architecture, pp. 16-31. Peter Collins, Changing Ideals, pp. 26-28 especially. Collins criticizes, and rightly so, Gideon's ill-defined notion of space-time and his attempt to tie the experience of space in modern architecture to Einstein's theory of relativity. Where Collins would say Gideon is mistaken, however, I would argue he is suggestive but too vague and too ideological to be convincing. Alois Riegl, the German art theorist working at the turn of the nineteenth century, conceived of the nature and function of space in similar although more metaphysical terms. For a discussion of Riegl's ideas on space as an imaginary structure composed of intangible relationships see Henri Zerner, "Alois Riegl: Art, Value, and Historicism," Daedalus (Winter 1976), pp. 177-188.

³⁰"Le Salon de 1882," p. 546.

³¹The histories of iron architecture which have proved most useful here are Giedeon, Space, Time, and Architecture, and Roiseco and others, L'Architettura del ferro: la Francia. So far as I am aware, no studies of Davioud's Palais exist. It does not seem implausible for him to have known and studied the designs for the two 1798 structures on the Champ de Mars when planning an edifice intended for an exposition celebrating technological and intellectual progress since 1789. In any case, as the illustrations show, there is a strong similarity between the earlier structures and the Palais.

Two histories of Parisian festivals provide useful surveys and illustration of the celebrations held on the Champ de Mars: Ernest

Maindron and Camille Vire, Le Champ de Mars, 1751-1889 (Lille: Danel, 1889), and Georges Pillement, Paris en fête (Paris: Bernard Grasset, 1972).

³²Changes in Manet's themes and in critical attitudes towards his work are discussed in the following works, both by Anne Coffin Hanson: Edouard Manet, 1832-1883 (Philadelphia: The Falcon Press, 1966), chronology and pp. 153, 175; Manet and the Modern Tradition (New Haven and London: Yale University Press, 1977), p. 313 and chap. 8. Although Hanson notes that the themes in Manet's late works lack the aggressive, confrontational quality found in his modern subjects from the 1860's, she fails to explore the new content and new handling which accompany the changes in his treatment of contemporary subjects. It is this aspect of Manet's later work which interests me here. For a critique of Hanson's 1977 study, see Gabriel Weisberg, "Books in Review," The Art Journal (Spring 1979), pp. 212-213.

³³The bibliography on Roll is slim, yet his work merits further study by virtue of the attention he received from Proust in his 1882 Salon review, his friendships with Cazin, Puvis, Jules Dalou, and his sympathy for the philosophy of Zola and the art of Manet, as well as for the government officials he painted, the commissions he received, and his role in founding the "National" in 1889. Although his work is uneven and often awkward, he would seem an important figure whose impact on the period may have been underestimated. Works on Roll include the biographical sketch in Louis Hourtigue, Encyclopédie des Beaux-arts: architecture, sculpture, peinture, arts décoratifs, s. v. "Alfred-Philippe Roll;" J. Valmy-Baysse, Alfred-Philippe Roll: Sa vie, son oeuvre, Les Peintres d'aujourd'hui, no. 1 (Paris: Librairie for the Societe d'edition et de publication, [1910]); André Michel, "Alfred Roll (1846-1919)." Gazette des Beaux-arts, ser. 5, 1 (1920): 106-126.

³⁴See Michel, "Alfred Roll," pp. 110-111.

³⁵The bibliography on Cazin is as small as that on Roll, and he, too, merits the attention of scholars, particularly because of the high quality and poetic beauty of his works. A quiet man who retired from the Parisian art scene in the late 1880's, little is known of his personal life. The son and brother of physicians, Cazin studied painting with Carrier-Beleuse. He taught art at Tours and then at the school at Sydenham in England, where apparently he was introduced to the ideas of Ruskin. Information on Cazin can be found in: Paul Desjardins, "En Mémoire de Jean-Charles Cazin," Gazette des Beaux-arts, 26 (September 1901): 177-191; Hourtigue, Encyclopédie, s. v. "Jean-Charles Cazin."

³⁶Puvis' only work from this period in which the figures are clothed in modern dress is the decoration for the Musée de Rouen entitled Inter artes et naturum (1888-1891). It was hailed by the younger generation of painters who admired Puvis, among them Vincent

Van Gogh who recognized in it Puvis' union of the present with the classical past through the intermediary of nature. For discussions of this work and bibliography on it see: Richard J. Wattenmaker, Puvis de Chavannes and the Modern Tradition, rev. ed. (Toronto, Ontario: Art Gallery of Ontario, 1976), pp. 78-79; Louise d'Argencourt et al., Puvis de Chavannes (1824-1898) (Paris: Editions des Musées nationaux, 1976), pp. 210-212. Henner's work La Femme qui lit, or La Liseuse, exhibited in the 1883 Salon did not, curiously, elicit comments on the contemporaneity of the theme and subject; but rather on the evocative effect of the woman and the ambiance on the viewer. See Anonymous, Le Salon de 1883 (Paris: Goupil et Cie., 1883), p. 115.

³⁷D'Argencourt, Puvis, p. 126.

³⁸For discussion of Le Pauvre Pêcheur and bibliography, see d'Argencourt, Puvis, pp. 17, 159-164; and Wattenmaker, The Modern Tradition, p. 69.

³⁹See Ferry, Discours, 6: 348.

⁴⁰Mercié was both a painter and a sculptor. Bibliography on him is almost non-existent. What is known is summed up by Hourtigue, Encyclopédie, s. v. "Antonin Mercie." Dying in the years of World War I, the Gazette des Beaux-arts did not run a commemorative article on him. Its pages for 1916 were devoted to war damaged monuments and tributes to artists killed in battle. The other published source of information on him is Emmanuel Bénézit, Dictionnaire critique et documentaire des peintres, sculpteurs, dessinateurs et graveurs, new ed., 8 vols. (France: Librairie Grund, 1966), s. v. "Antonin Mercie." Two recent books provide short biographies and excellent reproductions of some of his works: Maurice Rheims, Nineteenth Century Sculpture, trans. Robert E. Wolf (New York: Harry N. Abrams, 1977), p. 333 and no. 19 (Le Souvenir); and Jeremy Cooper, Nineteenth Century Romantic Bronzes: French, English, and American Bronzes (1830-1915) (London: David and Charles Newton Abbot, 1975), p. 144 (David).

⁴¹A similar interpretation of the "Bar," including the commercial aspects of the social relationship depicted, has been put forth by Timothy J. Clark, "The Bar at the Folies-Bergères [sic]," The Wolf and the Lamb: Popular Culture in France from the Old Regime to the Twentieth Century, ed. Jacques Beauroy et al. (Saratoga, Calif.: Anna Libri and Co., 1977), pp. 233-252. Another view of the character of the composition, one which depends on the viewer continuously shifting position (mentally) to accord with one or another point of view in the work is suggested by Anne Coffin Hanson, Manet and the Modern Tradition, pp. 204-205. For a century in which art theorists and artists conceived of art as culture reflecting in its organization the degree of harmony and order extant in the society which produced it, it would seem that my interpretation and that of Clark is more satisfactory. After all, it was the world around the individual which was fractured

and in transition, while the individual remained a stationary point on which the environment impinged and from which it was viewed.

Proust's criticisms of Manet's work for being "incomplete," accompanied by comments on Puvis' works as being harmoniously integrated compositions in which such discrepancies were resolved, support the interpretation in the text. See also Proust "Le Salon de 1882," pp. 547-48; and the report of a speech given in 1889 by Proust in Arsène Alexandre, "L'Exposition centennale," Paris Illustré 86 (1889), p. 614.

⁴²This manner of conceiving architectural space is discussed by Peter Collins in a section of his book criticizing both Henry Russell Hitchcock and Sigfried Giedeon's approaches to the subject. Collins makes the parallax effect the essence of modern architectural aesthetic, but by this he seems to mean twentieth century architecture with its free form/plan and lack of a central axis: Changing Ideals, pp. 26-28 and Chap. 24.

⁴³A. Michel recounted that this was the general motivating principle behind all Roll's works having contemporary themes: "Alfred Roll," p. 110-111. Also see J. Valmy-Baysse, Alfred-Philippe Roll, sa vie, son oeuvre, Les Peintres d'aujourd'hui, no. 1 (Paris: Librairie Félix Juven for Société d'Édition et de Publication, [1910]), n. p.

⁴⁴Quoted in Clark, "The Bar," p. 234.

⁴⁵See Hanson, Edouard Manet, pp. 180-183, for discussion and bibliography on Manet's interest in Rochefort and his portrait of this Republican politician and journalist. Manet had known Proust since about 1850, when both were students in the atelier of Thomas Couture. Proust seems to have been responsible for introducing Manet to a number of Republican politicians and it was he who was instrumental in having Manet awarded the Legion of Honor and for the retrospective exhibition of his work held in 1884. See Hanson, Manet and the Modern Tradition, pp. 124 and 126, and Antonin Proust, Edouard Manet, Souvenirs, with a Preface by A. Barthelemy, Ecrits d'amateurs et d'artistes (Paris: Librairie Renouard, 1913), pp. 110, 155, 168.

⁴⁶Michel, "Alfred Roll," p. 111; Valmy-Baysse, "Roll, sa vie, son oeuvre, n. p.

⁴⁷All the art which is being discussed here is essentially public art, made for public spaces. These are not limited to the street, the museum, and government owned buildings, but to those spaces in the home such as the parlour, the workshop, study, the dining room, which constitute public areas where individuals entertain and produce for others.

For Mercié's works of this period see Hourtigue, L'Encyclopédie, s. v. "Antonin Mercié;" Jeremy Cooper, Nineteenth Century Bronzes, pp. 144, 333; Alphonse Roux, "La Chapelle de la famille d'Orléans a Dreux et ses monuments funéraires," Gazette des Beaux-arts (Aug.-Sept. 1920), pp. 189-194. The effigies of Louis Philippe and Marie Amélie done in 1886 are stylistically similar to the Quand Même.

⁴⁸So far as I know, no study has been done on the competitions for architectural designs for either universal exposition of the period. Such studies would make useful contributions to the politics of taste in the 1880's.

⁴⁹The Eiffel Tower seems to have been chosen as the centerpiece for the exposition even before the competition was announced. See Joseph Harris, The Tallest Tower: Eiffel and the Belle Epoque (Boston: Houghton Mifflin, 1975), pp. 8-19; Lockroy, Preface, p. xxv; Jacques Morlaine, La Tour Eiffel inconnue (Paris: Hachette, 1971), p. 17.

⁵⁰See notes 33, 34, and 40 above and G. Benezit, Dictionnaire. Puvis was the son of a mining engineer, Roll of a furniture maker, Cazin of a physician, and Mercie of a carriage maker. Henner came from the small peasantry. Only Manet's family belonged to the haute bourgeoisie--his father was a magistrate who served in the judiciary during the reign of Napoleon III. This difference in background perhaps has something to do with the reserve and detachment and lack of idealization in Manet's treatment of themes of modern life. I have been unable to uncover any information about the family histories of Davioud and Dutert, although some information aboutr Davioud's early career and his education and reformist ideas can be found in Louis Hautecoeur, Histoire de l'architecture classique en France, 7 vols. (Paris: Editions A. et J. Picard et Cie., 1957), 7: 90-91; and "Nécrologie," Le Temps, 4 June, 1881, p. 2.

⁵¹See notes 33, 34, 40, and 50 above, as well as Hanson, Manet and the Modern Tradition, chap. 1. The careers of all these men are marked by a restlessness and an independent attitude. At one time or another they either changed career goals, their teachers, and/or the artistic sources from which they drew. Moreover, they studied both the old masters and the world around them and learned as much from one another as from the past. They were not opposed to rationalism or to classical principles, but rather to formulas that were irrelevant to the way in which the middle classes thought and organized their lives. Davioud, for example, during the 1860's lectured at the Union Central on the need to renew architectural decoration and the decorative arts. He declared in an essay that won him first prize from the Académie des Beaux-arts in 1873:

Quand on observe avec attention les produits actuels de l'industrie et qu'on les examine avec un esprit empreint de l'étude des grande époques on reconnaît que la tradition du goût est rompue, que l'art n'apparaît que dans les produits de luxe et comme un ornement superposé, volontairement ajouté, qui ne participe pas de l'essence même du concept de l'ensemble . . . Nos industriels, ignorant ou dédaignant la forme expressive qui traduit simplement nos besoins et les spiritualise par la recherche du caractère et de la beauté, puisent dans des imitations surannées des époques qui ne sont plus les éléments et les modèles de leurs produits.

(Quoted by Louis Hautecoeur, Histoire de l'architecture, 7: 390-91.)

The similarity of ideas is not totally coincidental. Some of the connections between the Republicans and the artists can be traced in Proust's work Edouard Manet, Souvenirs; others from Ferry's speeches honoring Mercié and Henner. They can be inferred by facts such as the central importance which Puvis gave to Victor Hugo in his mural for the Hotel de Ville in Paris (1892-95) or Roll's membership in the Association littéraire et artistique internationale, founded by Hugo in 1878, and his portrait of Jules Simon of 1878. Dutert's appointment by the Gambetta ministry as Director of Drawing Instruction and Davioud's affiliation with the Union Central places them within the same intellectual milieu as that of Proust. Eiffel's own account of his intentions in designing the Tower reveal that he shared the aesthetic ideals of the Republicans and was perspicacious enough to take his plans to them, sensing that they would welcome the ideas: Gustave Eiffel, quoted in Monod, L'Exposition de 1889, I: 201.

Mercié is the exception in the group. Bénézit, Dictionnaire, notes his being a person entirely content with life. Early on in his career he found Florentine Renaissance art congenial to his personality as a sculptor and his works in bronze and stone all more or less attach themselves to this tradition. He was also a painter, although less recognized for these works than for his sculpture. Moreover, unlike the other painters, he remained a member of the Société des artistes français.

⁵²See note 2. The standard text for Art Nouveau is S. Tscheudi Madsen, Art Nouveau. Recently other studies have begun to appear, revising and clarifying Madsen's ideas, particularly in the area of the aesthetics of the style and the nature of its abstraction. The essays and full bibliography in a recent catalogue for an exhibition of Art Nouveau are very helpful in distinguishing it from other styles of the period and describing its distinctive character. It is especially good on architecture, which has been neglected due to the conception of as limited to the decorative arts: Yvonne Brunhammer et al., Art Nouveau: Belgium, France (Houston: The Institute for the Arts, Rice University, 1976).

My own view of the difference between the synthetic style and Art Nouveau is supported by an article from an important contemporary review which notes that between the 1880's and the 1890's the Union central changed the emphasis in its exhibitions from production procedures and new technology to superficial stylistic features. Lucien Falize, "Une exposition de la plante: Projet présenté au Conseil d'administration de l'Union central," Revue des arts décoratifs II (1890-91): 1-7.

⁵³See Gombrich, Art and Illusion, pp. 278-287.

⁵⁴For discussions of the drift of artists in the avant-garde away from socially relevant subject matter see Catherine C. Bock, "New Light on Matisse's Neo-Impressionist Sources, 1904-05," Abstracts of Papers delivered in Art History Sessions, 66th Annual Meeting, College Art Association of America, January 25-28, 1978 (n. p.: n. p. 1978), n. p. Collins, Changing Ideals, pp. 271-284, noting the formalist dimension of modern abstract art is critical of its influence on architecture during the first half of the twentieth century. He feels it is responsible for the failure of architectural design to respond to real emotional and practical human needs, isolating people from the environment. Also Robert Rosenblum, Cubism and Twentieth Century Art (New York: Harry Abrams, Inc., 1959, rev. ed. 1966), p. 9, presents the view that this is the central philosophical meaning of Synthetic Cubism, an open affirmation of alienation and angst. Where Rosenblum sees in the Synthetic Cubist collages of Picasso an ambiguity in the artist's attitude towards reality and art, it seems equally plausible that the choice and handling materials represents Picasso's wholehearted acceptance of the synthetic, i.e., artificial reality of commercial culture and its processes as compatible with the ends and means of art. The witty playfulness of these works is fully in keeping with such an interpretation.

⁵⁵The bibliography on Perret includes Gideon, Space, Time and Architecture, pp. 326-330; Collins, Changing Ideals, pp. 214-16, 296-300; and Concrete (London: Falm and France; 1959); Nicolaus Pevsner, The Sources of Modern Architecture and Design (London: Thames and Hudson, 1968, reprint ed. 1975), pp. 152, 153-55, 162, 200; Ernesto N. Rogers, Auguste Perret (Milan: Il Balcone, 1955); Marrey and Chemetov, Familièrement inconnus, pp. 118, 127, 138, 161.

⁵⁶The quotation is from Hans Hofstadter, "L'Iconographie symboliste," in Le Symbolisme en Europe, ed. by J. C. Ebbinge Wubben et al. (Paris: Editions des Musees nationaux, 1976), p. 12. In addition to this work which is a catalogue of an exhibition held in 1976-1976, other works on Symbolism (including literature) which have proved helpful are: Martin Eidelberg, "French Decorative Arts and the Symbolist Movement," Paper delivered at the College Art Association Annual Meeting, February 2, 1976; James L. Kugle, The Technique of Strangeness in Symbolist Poetry (New Haven: Yale University Press, 1971);

Mark Roskill, Van Gogh, Gauguin and the Impressionist Circle (Greenwich, Conn.: New York Graphic Society, 1970), pp. 207-245; Richard Shiff, "The End of Impressionism: A Study in Theories of Artistic Expression," The Art Quarterly n. s. 4 (Autumn 1978), pp. 338-378; Roland W. Stromberg, Realism, Naturalism, and Symbolism: Modes of Thought and Expression in Europe, 1848-1914 (New York: Harper and Row, 1968); Roland Barthes, Writing Degree Zero: Elements of Semiotics, trans. by Annette Lavers and Colin Smith (Boston: Beacon Press, 1970), pp. 1-10.

Gabriel Weisberg, "Fantin-Latour's Studio in the Batignolles: A Symbolic Interpretation," Paper delivered at the College Art Association Annual Meetings, February 1976, stretches back the dates for the origins of the movement to the late 1860's and also expands the definition of the term tying it to the efforts to reform the decorative arts. So far as I know, there are no studies of Symbolism as an architectural style; however, Collins' discussion of the French utopian architects and their concept of "architecture parlante" in Changing Ideals, pp. 21-28, suggests that the elements that constitute the Symbolist aesthetic and are identified in the quote were already present in architectural theory of the eighteenth century. The work of Rémy Saiselin on art criticism and architectural theory of the eighteenth century tends to bear this out too: "Architectural and Language: The Sensationalism of LeCamus de Mesières," British Journal of Aesthetics (Summer 1975); and "The Eighteenth Century Salons and the Creation of Critical Space," Paper delivered at the College Art Association Annual Meeting, February 1978. What the research of Collins, Weisberg, Saiselin suggests, is that the source of Symbolism lies in theories associated with architecture and design, not in painting, for it was these arts which first and most naturally could be thought of as conveying non-literary ideas.

Charles Blanc's description of the significance of architectural form and of design in the decorative arts make it clear that by the 1860's the basis at least in theory, for Symbolism in all the arts had been established: See Charles Blanc, Architecture, new ed. (Paris: Librairie Henri Renouard, n. d.), pp. 1, 11-17; Grammaire des arts décoratifs; décorations intérieure de la maison, 2nd ed. (Paris: Librairie Renouard, 1882), pp. 11, 224, 486-87. For example, Blanc states on p. 15 of Architecture:

Il y a donc dans le dessin des contours et des surfaces quelque chose qui semble couvrir une intention, un dessin de la nature, j'allais dire une pensée. Intelligence aveugle, muette, la nature ne se peut s'exprimer que par des formes matérielles. C'est à l'esprit de l'homme qu'il appartient de nommer ce que la nature lui montre, et d'évoquer ainsi les pensées dont elle contient le germe obscur, en leur donnant une forme morale qui est la parole.

He goes on to say that what is communicated is also the feelings and convictions of the architect, all through the "combinaisons de lignes et de surfaces, de pleins et de vides, qui devront éveiller dans l'âme du spectateur des impressions . . . " (pp. 20, 1).

⁵⁸This term is used by Roskill, Van Gogh, Gauguin, as I understand him, because it allows for the inclusion of a broader range of works than the more narrow definition of Symbolism would allow. It is also useful in that it emphasizes the active, affective character of the works. Recent scholars, however, have preferred to retain the better known terms "symbolist" and "symbolism," while stretching and modifying the definition to include the sorts of works which Roskill accepts.

⁵⁹See note 56 above.

⁶⁰Quoted in H. R. Rookmaaker, Gauguin and Nineteenth Century Art Theory, 2nd ed. (Amsterdam: Swets and Zeitlinger, 1972), pp. 71-72.

⁶¹Rookmaaker, *ibid.*, pp. 55-58 and p. 79, overlooks these dimensions of Synthetism in his definition of the term, in his discussion of Ruskin's art theory and of the rejection of Synthetism which he feels occurs about 1890. To do this, to my mind, is to leave out that aspect of the style which makes it a uniquely modern phenomena in art, one intimately associated with modern industrial experience.

⁶²The best general history of the growth of advertising and its relationship to social and economic change is Max Gallo, The Poster in History, Alfred and Bruni Mayor trans. (Middlesex, England: Hamlyn Publishing Group Limited, 1974). Especially useful is the essay by Arturo Quintavalle which is included in the book: "The Development of Poster Art," pp. 297-318. Quintavalle notes on p. 299 that in Cheret's works of the '70s and '80s not only are word and image treated as pictorial elements, but the character of the composition is essentially "academic," e.g., conforms to the notion of rendering, of size and placement of figures that stresses "strong colors, bold lines, and foreshortened figures in the foreground, and in the background [they are] simply sketched in."

⁶³Charles-Ernest Maindron was one of those individuals whose interests and activities combined science and art. Nephew of the sculptor Etienne Maindron, Ernest was at one time personal secretary to the chemist J. B. Dumas, who was at the time Perpetual Secretary of the Académie des sciences. He was also a member of the secretariat of the Institut, before becoming an official in the ministry of Public Instruction. He published works on science including: J. B. Dumas et son oeuvre, 1886; Les fondations de prix à l'académie des sciences, n.d.; and a number of documents in the Revue scientifique and Nature. He also published works on popular art, most notably the Murailles politiques, 2 vols., 1874, and Les Affiches Illustrées, 1886, which

appeared as an article in the Gazette des Beaux-arts 30 (1884): 419-433, 535-547. For biographical information see La Grande Larousse du 19^e siècle, vol. 17, s.v. Ernest Maindron.

64Pp. 134-141 passim.

65For biographical information on Bert, Berthelot, and Chevreul see The Dictionary of Scientific Biography and the Grande Larousse, vol. 17; on Chevreul, see also the following: Eugene Lami ed., Dictionnaire encyclopédique et biographique de l'industrie et des arts industrielles (n.p., Paris, 1881-1888); "Report of the Council," Journal of the American Academy of Sciences, 28 May, 1889, pp. 452-457; Nadar, "L'Art de vivre cent ans," Journal illustré, 5 September, 1886, pp. 282-288; Pierre et Paul, "M. Eugène Chevreul," Les Hommes d'aujourd'hui 227 (1886), entire issue, which appears to be a synopsis of the Nadar article. Mme. de Champ [sic], Michele Eugène Chevreul, vie intime, 1786-1889 (Paris: Editions Spes, 1930). Information on Charles Blanc can be found in the Grand Larousse, vol. 17; A. Lefranc et al., Le Collège de France (1530-1930), 2 vols. (Paris, Les Presses universitaires, 1932), I:102. Lefranc's information is drawn from an article by A. Michel published in the Revue Bleu of 1920.

66See Simon's comments on mathematics in his Introduction, p. 538.

67See chap. 2. On science and aesthetics see Judith Wechsler, ed., On Aesthetics in Science (Cambridge, Mass.: The MIT Press, 1978). She notes on pages 3 and 4 of her introduction that the difference between art and science lies in the focus of the latter on predictability and explanation, while the former is concerned with the process of cognition by which the product is arrived at. For the Republicans, however, the new style was to be a means of guaranteeing certain moral and social results, one which they predicted would occur with its realization. And, too, it was to provide an explanation of certain structural relationships existing in the physical world which ideally would exist in the mental and social worlds as well. Only after this decade does Wechsler's distinction hold true.

For a critical study of Taine's theory and its relationship to scientific thinking see Sholom J. Kahn, Science and Aesthetic Judgement: A Study in Taine's Critical Method (New York: Columbia University Press, 1958). Especially useful is Chap. 13, "Critique of Aesthetic Judgement," in which Kahn points out the subjective character of Taine's theory of artistic creation, which tends to limit its parallels with science.

68The most useful source is John Theodore Merz, A History of European Thought in the Nineteenth Century, 6 vols. (London: William Blackwood and Sons, 1904-1912; reprint ed. New York: Dover Publications, 1965). Also very suggestive are Erwin N. Hiebart, "The

Uses and Abuses of Thermodynamics in Religion," Daedalus 95 (1966): 1046-1083; Charles Coulston Gillispie, The Edge of Objectivity, An Essay in the History of Scientific Ideas (Princeton, N.J.: Princeton University Press, 1960), pp. 352-493.

⁶⁹See Charles Blanc, "Les Beaux Arts à L'Exposition universelle: L'Architecture," Le Temps, 1 May, 1978, n.p.

⁷⁰Impressionist works of this period also show evidence of growing structure in the imagery and organization. See Roskill, Van Gogh, chap. 1.

⁷¹Paul Desjardins, "Cazin," pp. 185-186, notes both the (his terms) "architectural" and musical character of Cazin's compositional method. The analogy with musical harmony is one which the Symbolists were fond of stressing. Music has the property of being reducible to numerical notation and in this sense visually expressed proportions and relationships can also be reduced to the same system of notation.

⁷²For Berthelot's adoption of the term synthesis, see Dictionary of Scientific Biography and Merz, History of European Thought, I:418,454.

⁷³Simon, Introduction, p. 358-359.

⁷⁴For bibliography on Chevreul see n. 64 above. On the adoption of the color theory by artists in the avant-garde, see William Homer, Seurat and the Science of Painting (Cambridge, Mass.: Harvard University Press, 1964), passim; Jose A. Arguelles, Charles Henry and the Formation of a PsychoPhysical Aesthetic (Chicago and London: University of Chicago Press, 1972), pp. 94, 95, 116, 117, 164. That others were aware of Chevreul's work on the law of simultaneous contrast in color is likely, given Chevreul's own account in the Nadar article, the attention he received in the popular press, and the constant reference to the use of color contrasts in the writings on art from this period.

⁷⁵The bibliography on this subject includes the following by Chevreul: "Complément des études sur la vision des couleurs par M.E. Chevreul," Mémoires de l'académie des sciences, L'Institut de France, vol. 41 (Paris: Firmin-Didot et Cie., 1879), n.p.; Godefroy Malloizel, ed., Oeuvres scientifiques de Michel-Eugène Chevreul, doyen des étudiants de France: 1806-1886 (Paris-Rouen: Julien Lecerf, 1886). There is also the Dictionary of Scientific Biography and William Homer, Seurat.

⁷⁶Nadar, "Cent ans," p. 267.

⁷⁷In his interview with Nadar, Chevreul recounted a demonstration he made to the wife of the artist, Horace Vernet. His

purpose, he explained, was to show how the ordinary person could be turned into a work of art by coordinating the colors of her clothing and have them complement her complexion and coloring. He described his pedagogical method as operating "de façon à fair voir." "Cent ans," p. 267.

⁷⁸The philosophical concept that the external and internal worlds operate according to the same physical principles is at least as old as Descartes. By mid-nineteenth century, the relationship between the two was formulated as a dynamic potentially productive exchange of energy from one system to another. External stimuli elicited responses in the individual in the form of thought and physical activity, which in turn was directed outward towards organizing matter in conformity with these processes.

This view was not only accepted by the Republicans and other utilitarians such as Spencer, J. S. Mill, and Comte, but it formed the theoretical basis for much scientific research during this period. See Merz, 3:316-420, for a full discussion of the history of this idea and the contribution of the French thinkers of the seventeenth and eighteenth centuries to its development.

⁷⁹Art and Illusion, pp. 28-29.

⁸⁰Merz, 2:486; Dictionary of Scientific Biography, s.v. Paul Bert and Auguste Comte.

⁸¹Charles Blanc, Grammaire des arts de dessin, 2:25-26, 36; and idem, Grammaire des arts décoratifs, pp. 82-83, 226-235. On Charles Henry's theories, see Arguelles, Charles Henry. Both Blanc and Henry's ideas are discussed in Homer, Seurat and Science, passim.

⁸²This idea can be found in the art theory of French seventeenth century classicists such as Charles LeBrun, and it forms the basis of the science of aesthetics as it was formulated in the late eighteenth century by Diderot, Wincklemann, and Kant. Beginning with Cabanis and the Ideologues in the nineteenth century, the process of acquiring knowledge was conceived as an active and creative one, sparked by physical stimulation of the organism, in which the effects of the stimuli were synthesized through the action of the mind on physical sensations. See Merz, 3:489, 507; 3:339-341.

⁸³Grammaire de dessin, 2:534.

⁸⁴Nadar, "Cent ans," p. 286.

⁸⁵Ibid., p. 287.

⁸⁶Charles Henry, Le Cercle chromatique (Paris: Ch. Verdin, 1888), quoted in Arguelles, Charles Henry, p. 162.

⁸⁷Antoine Mongez, friend of the artist Jacques-Louis David, antiquarian and archaeologist, had published a number of works on art and iconography. On Mongez, see J. Fr. Michaud, Biographie universelle, ancienne et moderne, s.v. Antoine Mongez. His most famous work is the Dictionnaire d'antiquités, mythologie, diplomatique des chartes et chronologie, 15 vols. (Paris: n.p. 1786-1794). His writing also includes a critical study on the proper use of symbols in art, entitled Réflexions sur l'abus de quelques figures allégoriques employées en peinture et en sculpture (Paris: n.p., 1800). On Thomas Young, see Merz, 1:236; 2:24.

88p. 58.

⁸⁹Citing the work of Humbert de Superville, Les Signes inconditionnels de l'art (1827), Blanc affirmed on p. 16 of the Grammaire des arts de dessin:

Il se peut sans doute que d'une belle oeuvre d'art il ressorte une idée morale; mais la morale dépend du spectateur qui la degage; c'est lui qui la trouve et qui la prouve.

⁹⁰Grammaire des arts décoratifs. See also his two-part article published in Le Temps, 1 May and 11 June, 1878, n.p. An announcement of his new lecture series with a brief summary of the first lecture appeared in "Nouvelles du jour," Le Temps, 1 May, 1878, n.p. Blanc's accommodation to technology and applied science during the last years of his life was noted in the popular press of the day. See Auguste Baluffe, "Charles Blanc," L'Artiste 1(1882:164-171, 201-211. Pointing out that Blanc was never accepted by the faculty at the Université nor by the "positivists," Baluffe expressed his own preference for Taine; he does note, however, that Proust respected Blanc (p. 166. these articles in Le Temps were expanded into a book Les Beaux arts à l'exposition universelle de 1878 (Paris: Librairie Renouard, 1878).

⁹¹Les Beaux arts à l'exposition, pp. 40-41.

⁹²Ibid., p. 40.

⁹³One author, although unfavorable to Hugo, characterized his style in similar terms: Arthur Simons, Colour Studies in Paris (New York: E. P. Dutton & Company, 1918), p. 135-142. This is not only my interpretation. The tower did impose itself on the sensibilities of contemporaries and elicit response from them, that were both emotional and full of new understanding. The words in the protest petition testify to the Tower's affective powers while still in the planning stages: "chacun s'afflige profondément," "si légitimement

alarmé," etc., Le Temps, 14 February, 1887. Lockroy's own impressions of it constitute a positive response to the experience, while Eiffel later explained his intentions in designing the Tower as he had were to make a thing of beauty which would "frappe l'imagination de tous en leur inspirant le désir de visiter les merveilles de l'Exposition" and also

Etant la plus saissante manifestation de l'art des constructions métalliques par lesquelles nos ingénieurs se sont illustrés en Europe, elle est une des formes les plus frappantes de notre génie national moderne.

La Tour Eiffel en 1900 (Paris: Lemercier, 1900), p. 17. See also Roland Barthes and Andre Martin, La Tour Eiffel, Le Génie du lieu, No.5 (Lausanne: Delapire, 1964), p. 22, who speak of the Tower as "... la Tour est le seul point aveugle du system optique total dont elle est le centre et Paris le circonference." Seeming to give more weight to the object than to the observer, they go on to characterize the dialectic established between the two:

Cette position rayonnante dans l'ordre de la perception lui donne une propension prodigieuse au sens: la Tour attire les sens, comme un paratonnerre la foudre; pour tous les amateurs de signification elle joue un rôle prestigieux, celui d'un significant pur, c'est-à-dire d'une forme en laquelle les hommes ne cessent de mettre du sens. (p. 28)

The result is that the tower is able to "transformer le rite touristique en aventure du regard et de l'intelligence." (p. 38)

⁹⁴Préface, l:xxvii-xxviii. Lockroy served as Deputy from the eleventh arrondissement in Paris from 1881 to 1885 and deputy from the Seine from then until 1896. He sat with the Radicals from 1881 on and served as Minister of Commerce and Industry from January 7, 1886 to May 30, 1887, under Freycinet and then Goblet. Ousted by the Rouvier government, Floquet appointed Lockroy Minister of Public Education and Fine Arts on April 3, 1888, a post he held until February 22, 1889, when Tirard became President of the Council.

Although Tirard and Rouvier had served under Ferry and Lockroy had not, the shift in personnel reflects a shift in policy after 1885-6 from interest in education to a stress on commerce and finance in government.

⁹⁵For a review of the literature on this subject and pungent analysis and reevaluation of the economic situation and worker's lives during the 1880s, see Michele Perrot, Les Ouvriers en grève, Civilisations et sociétés, no. 31, 2 vols. (Mouton-Paris-The Hague: Mouton & Company and Ecole des Hautes Etudes, 1974), 1:151, 194-196.

⁹⁶For discussions of the changing aspect of Parisian life, including popular entertainments, see: Roger Shattuck, The Banquet Years, rev. ed. (New York: Vintage Books, Alfred Knopf and Random House, inc., 1960), pp. 5-12, 22-23; Clark, "Manet's Bar," which is a good bibliographical source; Symons, Colour Studies, pp. 89-101 devoted to Yvette Guilbert; Pierre Villoteau, La Vie parisienne à la Belle Epoque (Geneva: Cercle du bibliophile, 1968), pp. 46, 189, 373, 383-388 especially. Villoteau provides an insightful look into the tenor of the period 1871-1914 and into the social significance of changes in the type of popular entertainments which became fashionable around 1890.

⁹⁷For a discussion of the change in governmental policy which began in the late 1880s and blossomed in the 1890s, see the excellent account of Pierre Sorlin, Waldeck-Rousseau (Paris, Librairie Armand Colin, 1966), pp. 354-364. Some sense of the efforts of artists and writers to combat this trend with its concomitant stress on protectionism, monopolism, and profit seeking is recorded by L. Ratisbonne, Eugène Pouillet, and Jules Lermina, Association littéraire et artistique internationale: Son histoire-ses travaux, 1878-1889 (Paris:

Bibliothèque Chacornac, 1889). This association, founded by Victor Hugo, counted Ferry, Simon, Grey, Roll, among its members, as well as Zacharie Astruc, Octave Maus, and Samuel Big, a major force in the development and dissemination of Art Nouveau.

⁹⁸Examining the impulses behind the strikes, Perrot, En Grève, points out that economic factors plus the generally good relationship between labor and the Opportunists created an ambiance of good will between labor and capital. The changing economic situation at the end of the decade, especially after 1895, plus the growing repression of workers by the government, resulted in a change of climate and introduced more purely political motivations for strikes. (pp. 150-199.)

⁹⁹In André Reszler, L'Esthétique anarchiste, Collection SUP (Paris: Presses Universitaires, 1973), pp. 5-7, 44-58, the author characterizes the anarchist aesthetic in terms closer to Hugo's notion of the innate impulses of the individual. When coupled with Kropotkin's notion of the value of science and technology in helping workers to realize human needs, decentralization of capital, the role of the artist and art, one arrives at a concept of art and production very like that of the Republicans. The difference between them lies in the acceptance of government and administration by the Republicans and the rejection of any overarching authority by the anarchists. See Eugenia Herbert, Artists and Social Reform: France and Belgium: 1885-1900 (New Haven: Yale University Press, 1961), pp. 13-16; James Joll, The Anarchists (New York: The Universal Library, Grosset and Dunlap), pp. 149-173. Also on anarchist theory and art, see Reszler, pp. 45, 47-49, on Kropotkin with reference to Pelloutier and Anarcho-Syndicalism.

Monod, L'Exposition de 1889, 2:391, suggests that contemporaries accepted these as the essential, and not insurmountable differences between the two ideologies when he proposed that the way to counteract the appeal of anarchism was to get labor and management to cooperate and to introduce rational methods of production.

¹⁰⁰Maindron, L'Affiche, p. 133; Arsène Alexandre, The Modern Poster (New York: Charles Scribner's and Sons, 1895), pp. 1-3; Joris-Karl Huysmans, Certains (Paris: Tresse et Stock, n.d.), p. 52.

¹⁰¹See Chap. 3 and note 18 above. Also see the interpellation of Edmond Turquet by Robert Mitchell, Journal Officiel de la République française (Chambre), 19 May, 1880, pp. 5389-5396, especially pp. 5391-2. There is in this stance something of the exclusive spirit which marked one tendency in Symbolism of the late 1880s and 1890s, a strain which is captured in Albert Aurier's efforts to point out the special, unique, and personal qualities that distinguished certain works from the rest of the species.

¹⁰²Max Kozloff, "The Authoritarian Personality in Art," Artforum, 12 (May, 1974): 40-47. That other intellectuals suffered from this "catch 22" of democratic liberalism and blamed their frustrations on the Republicans is apparent from the remarks in Zeldin, France: 1848-1945, 2:1123-1125, 1:272-273.

¹⁰³On contradiction within liberal ideology, the following works have proved useful: George Lichtheim, "The Concept of Ideology," Journal of History and Theory, no. 2(1965), pp. 64-195. David E. Apter, Ideology and Discontent (New York: Free Press, 1964), pp. 47-76; David Thomson, Democracy in France since 1870, 5th ed. (London-Oxford-New York: Oxford University Press, 1969), pp. 116-134; Zeldin, France, 2:1123-1125.

Older scholars such as Thomson claim that there was an internal inconsistency in the logic of the ideological system. Thus, the individual and the society could not be reconciled. This was to view the system as an isolated, self-contained one. In fact, when one considers the circumstances in which the ideology was formulated and to which it was addressed, it can be seen that its contradictions are the result of a failure to take into account or to downgrade all the other factors which I mention in the text here. This is, as Lichtheim has pointed out, the major shortcoming of all ideologies.

¹⁰⁴I am referring here particularly to the theories of those connected with the early phases of the Bauhaus (until the early 1920s) and of the work of Le Corbusier, especially his apartment building, the Unité d'habitation.

CHAPTER VI

CONCLUSION

The consistency with which the Republicans developed their art theory offers a striking contrast to the sense of disorder that prevailed within French society. Its rationalistic character, intended to reconcile contradictions and incoherencies in French psychic and social existence, was a direct response to this state of affairs. Feeling that art could produce ordered change through its semi-mystical effect on human sensibilities, the Republicans saw in the intertwining of empirical and ideational qualities the perfect mechanisms for bringing order of a new kind to social relationships.

This rational view of the utility of art was by no means new by the late 1870s. What distinguishes the Republicans from their predecessors is the degree to which circumstances forced them to tailor the theory to fit the traditional mores of the French middle classes. Their search for a way to maintain the major portion of the population as an equilibrating force in French society led them to depend on the physical appeal of art to aggressively cultivate individual self-consciousness and tie it to middle-class values. At the same time, the need to counteract the tendency towards industrial concentration, forced them to stress the personally satisfying aspects of the rational accommodation of technology into individualistic aesthetic experience.

As their own comments quoted throughout this study indicate the key to the Republicans' choice of art for communicating with the public

is their diagnosis of the causes of two major problems faced by the middle classes: psychological alienation and intra-class conflict. Blaming both on the growing concentration of capital and the introduction of specialized production methods, the Republicans felt the traditional working relationship between art, manufacturing, and public and private needs of the middle classes could be used to tie the various sectors together. It was not simply a matter of using art to create a demand for certain types of goods manufactured and distributed by independent producers, nor of providing producers with integrated procedures. They felt art could give the producer and consumer a sense of spiritual satisfacton, while it generated real economic interdependency.

The theory and the application of it the Republicans proposed were not arrived at arbitrarily, as the discussions in Chapters II, III and IV, have indicated. Two aspects of the theory, in fact, reveal the logic on which it was predicated. First, the notion that art was a highly perfected commodity and, secondly, the insistence that science and technology could be adapted in such a way as to enhance the integrity of the individual and draw him into communion with others. The first concept allowed art to communicate with merchants, small producers, skilled laborers, and artisans in terms that were, or had been indigenous to their way of life. The aesthetic system embodied in artistic models was abstracted from their traditional values, while the forms were drawn from the rich mythology and everyday activities in which their emotional life had found satisfaction. The second

established the approach to technology which this group should accept. Technological innovation could not be ignored, but had to be turned to liberal democratic ends with the aid of science--here offered as a source of security on which the individual could rely for guidance as he broke away from the natural flow of industrialization and attempted to turn it to liberal democratic ends.

The degree to which the Republicans felt the insecurity of this position comes through in their images of floating in uncharted seas or skies, separated from the solidity of the ground. Hugo used the image of the balloon to celebrate the power of science to give some mental and emotional stability to a mode of existence which was being eroded away. Art could provide a tangible form in which to clothe the abstract system of relationships.

The success of their theory depended on the ability of the new style to make the illusion of a reformed community convincing and attractive. As conceived by the Republicans, the style had to function not simply as a model for the design and production of consumer goods, but as an end product, the master die for a synthetic environment erected through the labor of the middle classes to keep as a buffer between them and the rest of society.

As the discussion of their proposals for art education made clear, the middle classes were not to seal themselves off entirely from the rest of society. By making their culture available to those outside urban centers and outside the commercial middle classes through public exhibitions and public school curriculum, the Republicans hoped

to get peasants and proletarians and upper levels of the bourgeoisie to adopt these values and procedures (which were after all considered to be modifications of their traditional values). The Eiffel Tower was a project directed at achieving just such a result, and one must see the emphasis on architecture and painting to have been motivated by the need to make their point as boldly and directly as possible. The decorative arts contributed much to their concept of architecture and painting as abstract systems of design whose patterns symbolized systems of thought and of production. It was, however, these two major art forms, encompassing the others, and providing a total environment, which they felt offered the most easily comprehensible sense of the ideal system as an appealing and viable entity.

Works of art were considered material realities the artist made by reconciling, balancing, and equilibrating seemingly disordered and contradictory materials and forms. The Republicans pointed to the works in which the artist had more or less successfully synthesized these elements as tangible proof that others could reconcile the contradictions in their own working and emotional experience by emulating the artist's processes. For them, art in some magical way pinned the illusive, desired sense of harmony down to a graspable material entity that was part of the everyday world. In combining these two aspects of artistic reality, the Republicans attributed to art the power to transform a multitude of individual psychic realities into socio-economic realities.

Yet, this synthetic environment perpetuated an illusion of a middle-class composed of independent and self-motivated individuals. In part the Republicans failed to recognize this fact because they were interested in exploiting the power of art to purvey another illusion: that of order and harmony attainable in personal and economic interactions. What could be realized in aesthetic terms held promises for human society. Only Ferry and Lockroy admitted that whatever accommodation art could help individuals make to new circumstances of production, at best, art would only turn industry into the service of the liberal democratic ideal. Mass production and division of labor by task would not disappear, but only be made dependent on independent artists, designers, and craftsmen for its models.

There was, thus, an element of deception introduced by the Republicans. In part it is self-deception arising from their own feelings about art and their belief that it had helped them achieve their position as leaders of the middle classes. Hugo is a good case in point. His poems heroicize his own efforts to retain his integrity through inventive activity at the same time he depended on the development of cheap, mass production printing processes to give him the audience he needed to make him a popular leader. In the case of Ferry, artists like Henner were important to him because of the salutary effect of their work on his sensibilities. The very material source from which he drew energy to continue his activity as a political leader separated his interests from those of the artists. Moreover, the pleasing intensity of the effect led Ferry to generalize from

his experience. He believed such art would affect everyone the same way.

Such inconsistencies that I have shown existed in the formulation of the Republicans' art theory offer insights into possible sources of the frictions which developed at this time between the Republicans, on the one hand, and French intellectuals and skilled laborers on the other. Their active concept of the concrete and sensible nature of art provides a new perspective on the function assigned to liberal democratic ideology by the Republicans. Rather than thinking of ideology as a glue binding the citizens of the Republic together in a rigid and static unity, it seems more appropriate to use the metaphor of a power source whose energy starts the machine and keeps its parts moving. This source sets limits on, but does not predetermine the machine's ends. According to this dynamic interpretation, the Republicans relied on ideology to stimulate and maintain sociability for the sake of French economic life, not simply for its own sake. It was not that their non-Marxist approach to the problems caused by industrialization directly threatened the existing system of social ranking, nor the traditional values of the working classes. It did not. Rather, in the process of politicizing taste, the Republicans were more concerned about art than the individuals who made it. They disturbed the vested interests of those who headed the Académie des Beaux-arts, the Salon juries, and the Université and who were by and large committed to a more elitist form of liberalism. Moreover, because the means proposed by the Republicans did not necessarily produce even the limited the

pleasing intensity of the effect leads Ferry to generalize from his salutary economic and psychological results, those who pursued them could justifiably blame any failures on their elected officials.

It is the roots of this last complaint that have been illuminated most clearly by the examination of the Republicans' art theory. Although their plan was intended to recreate a sense of community among the middle classes, there was an unequal sharing of the initial burden of getting the system to work. Their plan made no direct claims on the upper echelons of the middle classes. It was, in fact, artists and skilled laborers who were given the greatest responsibility in calling the wealthy back to their origins and to the value of labor. It was artists and skilled laborers who were to risk their energies and commit their resources to developing the necessary products, with the moral support of the government and the hope of winning a market for the finished goods as the sole stimulant to their initiative. Not only could such a situation raise anxieties and lead to recriminations against the government, but the creative process prescribed by the theory could pose difficulties for those who adopted it.

It is possible to view the Republicans' efforts as simply a means of exploiting the producers of material culture for the benefit of those who exploited their efforts commercially. This is certainly the conventional interpretation. The strong undertones of anxiety in the face of unintegrated design and the genuine appreciation for workmanship, and the power of artists to bring order into existence argue against this easy explanation of economic self-interest and political

expediency. The Republicans identified with the working classes, not only by virtue of their ancestral roots and their familiarity with artistic procedures, but by their aspirations and the uncertainty of their own professional positions. The Republicans were in as defensive a position politically as their constituents were economically, and for both the threat and the solution to it were the same. Large corporate interests in the Chambre and in the economic system threatened to destroy middle-class society and the political mechanism on which it counted to maintain its interests. Moreover, the Republicans were engaged in political struggles that reflected the intra-class conflicts among the various groups who made up the spectrum of supporters of the Republic. That Ferry, Simon, Hugo, Lockroy and Proust opted to throw in their lot with the skilled workers, craftsmen, professionals, and tradespeople suggests that they still felt this progressive cultural tradition of the avant-garde was capable of integrating other points of view into its own through the power of its rhetoric.

Ferry and Lockroy in particular did not hesitate to tell small producers what sacrifices a commitment to their program would entail. Such a strategy--hardly designed to win the Republicans easy votes among members at the lower end of the middle class economic scale--placed artists in a particularly sensitive and difficult position. In asking them to emphasize certain value-laden factors in their art, the Republicans demanded that artists make their processes the subject of their work and the effects of these processes the content and indication of its worth. Such requests required art to turn in upon itself,

and to become more abstract at the very time it was affirming its material character as a superior commodity accessible to everyone. These were demands that could force the artist into a painful self-consciousness about his creative activity, isolating him from the very group to whom he addressed himself.

Whether or not artists who adhered to this theory found that it led to such psychological results remains to be examined in a future study. It should be noted, however, the Republicans to some degree sensed that in escaping from one kind of alienation, artists might stumble into another sort. Needing artists as they did, they countered this alienation by offering them a place as the leaders of the middle classes and pointed the way for them to come to grips with industrialization. Their characterization of art as a commodity defined the socio-economic context in which the artist was to operate and provided him with a way of thinking about the terms on which he could communicate with his audience, about the nature of his persona, and his social position. In making him a glorified worker, the Republicans offered the artist a methodology based on drawing which was empirical, analytical and synthetic; which had its roots in the craft traditions; and which accorded well with the materialism of the market place in which value and meaning were grounded in physical sensation.

Generally speaking, forms, rhythms of ordonnance, compositional organization, handling of materials, constitute the signs of the maker's creative process and the elements of style in all works of art and in handmade goods. While other characteristics can be considered,

those settled on by the Republicans were the ones most significant to the middle classes who considered them as a means of evaluating the object, communicating the integrity of its maker to the consumer, and indicating its purpose. There were also the signs that machine production was eliminating. In pointing out that science could make these characteristics more perspicuous by simplifying, rationalizing and objectifying them, the Republicans offered the artist a way to legitimate the creative experience of the individual in the eyes of a particular audience. In directing his attention to those images and sentiments that were of greatest social and economic import in maintaining the middle classes, they indicated how the artist might give them the legitimacy and character of his own experience. Finally, by encouraging artists to look at the art of the past as a progression of compositional organizations and images symbolizing both socio-economic systems and psychological states, the Republicans tried to indicate that they were working within a particular tradition and could use the past as a springboard for their own efforts to contribute to social development.

The accord between the Republicans' characterization of the new style and the works they supported indicates, if not always their direct influence on the art of the period, at least an exchange of ideas and aims among politicians and artists. This was not the first time during the century that Republican reformers had had some effect on the arts. The difference between the Republicans and their predecessors, such as Thoré-Burger, Champfleury, Castagnary, Michelet, and

Proudhon, was that they had moved from the position of journalists and teachers to that of political office-holders and in so doing had been able to institutionalize the idea of the group they represented. This shift in the status of Republican art theory is important, for it marks an alteration in the relationship between progressive art and politics which had generally endured outside and in opposition to official dogma.

Such a change raises a number of questions. First, there is that of how and why the Republicans' ideas influenced the artists in their entourage? Then, there is that of the relationship between the Neo-Impressionist avant-garde and Republican policy; and finally that of the broader stylistic development of Realism into Symbolism between about 1845 and 1876. The answers to these questions, which must await further study, are of some import, for it is possible to see the Republicans' theory and the circumstances to which it was addressed as a source of the attitudes and dilemmas of artists in the avant-garde and in government circles. Moreover, the degree to which the style known as Symbolism embodied aesthetic characteristics considered by contemporaries as expressions of middle-class life indicates that stylistic evolution may have come about as a direct response of artists to the Republicans' call for a new style to maintain the vitality of the middle classes. The hermetic quality of the style, the elusive aura that emanates from the formal elements constituting the focal point of the works may reflect a defensive move by artists to enshrine the vision of a group whose real economic influence and infra-structure had been slowly eroding away since the 1840s.

The remaining questions concern the continuity of the Republicans' theory. Certain similarities exist between it and the general aesthetic and socio-political orientation of individuals and institutions who come later and who are credited with a major role in the development of twentieth century modernism: Auguste Perret, Le Corbusier, Walter Gropius, Frank Lloyd Wright, Louis Sullivan, Picasso and Georges Braque, Antoine Bourdelle, the Bauhaus, and the Museum of Modern Art. To what extent did aesthetic formulation of Republican ideology exert an influence here, and if it did, how and under what circumstances did it do so? It seems significant that founders of twentieth century modernism were enemies or outlaws of totalitarian political systems which condemned their art as subversive. Even if the direct relationship is tenuous, this study suggests that there may be a connection between spurts of industrial growth, outbreaks of liberal democratic reform efforts, and significant developments in the evolution of modernist art. Because the artists in this tradition are part of the modern pantheon of heroes and because the artistic style has influenced the design of our cities, our domestic and public architecture, our consumer goods, and of the technology we use in our work, the answers to these questions would not only be enlightening for art history, but for cultural and intellectual history as well.

As part of the broad subject of the relationship between art and politics, what makes the Republicans' ideas on art so profoundly interesting today are the circumstances which led them to settle upon art as the medium in which the artist could assert, and the individual locate,

his identity as both an independent being and a member of a community. It is difficult now to believe in art as a way for individuals to control corporate and even governmental growth; yet, the fact that both private corporations and Western governments continue to use modern culture to purvey liberal democratic values in communist and Third World countries attests to the influence which these artistic illusions can still exercise over peoples' sense of self, and ultimately, over their aspirations and the aims of their economic activity. In this sense, an art which cultivates individuals' search for integrity may still be an effective way to keep alive the patterns and rituals of a way of life that supports this search. Insofar as the Republicans' theory was designed to help individuals deal with depressed economic situations, there may be a general revival of interest in their ideas as politicians look for ways to stimulate working peoples' initiative in a world where increasing production costs have raised the price of factory produced goods and reduced consumer demand. In this case, we can expect a revitalization and evolution of the modern artistic tradition as artists and government officials search out the forms in which the value and meaning of work have been preserved.

SELECTED SOURCES

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I. Chapter I

A. Secondary Sources of a General Character

- Boime, Albert. *The Academy and French Painting in the Nineteenth Century*. London: Phaidon, 1971.
- Clark, Timothy J. *The Absolute Bourgeois: Artists and Politics in France, 1848-1851*. London: Thames and Hudson, 1973.
- Elwitt, Sanford K. *The Making of the Third Republic: 1868-1884*. Baton Rouge: Louisiana University Press, 1975.
- Fried, Michael. "Absorbtion: A Master Theme in Eighteenth Century French Painting and Criticism," *Eighteenth Century Studies* 9 (Winter 1975-6): 139-177.
- _____. "Manet's Sources: A Study of an Aspect of His Art," *The Artforum*, VII, 7 (May 1969): entire issue.
- Greenberg, Clement. *Art and Culture*. Boston: Beacon Press, 1965.
- Herbert, Eugenia. *The Artist and Social Reform: France and Belgium, 1885-1898*. New Haven: Yale University Press, 1961.
- Herbert, Robert L. "Les artistes et l'anarchisme," *Le Mouvement Social* 36 (July-September 1961): 2-19.
- Leith, James. *The Idea of Art as Propaganda in France: 1750-1799*. University of Toronto Romance Series, no. 8. Toronto: University of Toronto Press, 1965.
- Levin, Miriam R., "David, de Staël, and Fontanes: The Leonidas at Thermopylae and Some Intellectual Controversies of the Napoleonic Era," *Gazette des Beaux-arts* 95 (January 1980): 5-12.
- Lövgren, Sven. *The Genesis of Modernism: Seurat, Gauguin, Van Gogh, and French Symbolism of the 1880's*. Bloomington, Indiana: University of Indiana Press, 1971.
- Meakin, David. *Man and Work: Literature and Culture in Industrial Society*. London: Methuen, 1976.
- Poggioli, Renato. *The Theory of the Avant-garde*. Translated by Gerald Fitzgerald. New York: Harper & Row, Icon Editions, 1971.
- Rewald, John. *Post-Impressionism from Van Gogh to Gauguin*. New York: Museum of Modern Art, 1959.

Roskill, Mark. Van Gogh, Gauguin, and the Impressionist Circle. Greenwich, Connecticut: New York Graphic Society, 1970.

Saisselin, Rémy G. "The Transformation of Art into Culture: From Pascal to Diderot," *Studies on Voltaire and the Eighteenth Century* 70 (1970): 193-218.

Scheurer-Kestner, Auguste. *Souvenirs de jeunesse*. Paris: Bibliothèque Charpentier, 1905.

Zeldin, Theodore. *France, 1848-1945*. 2 vols. Oxford: Oxford University Press, 1973-1977.

B. Sources on Individual Republicans

1. Jules Ferry

Dietz, Jean. "Jules Ferry et les traditions républicaines," *Revue politique et parlementaire* 160 (1934).

Ferry, Jules François. *Discours et opinions de Jules Ferry*. Edited by Paul Robiquet. 7 vols. Paris: A. Colin, 1893-98.

Rambaud, Alfred. *Jules Ferry*. Paris: Librairie Plon-Nourit, 1903.

Reclus, Maurice. *Jules Ferry: 1832-1893*. Paris: Flammarion, 1947.

2. Victor Hugo

Barbou, Alfred. *Victor Hugo et son temps*. Paris: Charpentier, 1881.

Daudet, Léon. *Ecrivains et artistes*. 8 vols. Paris: Editions du capitol, 1929. Vol. 5.

Gaudon, Jean. *Temps de la contemplation: L'Oeuvre poétique de Victor Hugo des "Misères" au "seuil du gouffre"; 1845-1856*. Paris: Flammarion, 1969.

_____. Yale University, New Haven, Connecticut. Interview, January 10, 1978.

Gaudon, Sheila. "Prophétisme et utopie: Le problème du destinataire dans les *Châtiments*," *Saggi e ricerche di letteratura franc 16* (1977): 403-426.

Hugo, Victor. *Correspondance (1836-1882)*. 2 vols. Paris: Calmann Lévy, 1898. Vol. 2.

_____. *La Légende des siècles*. Edited by André Dumas. Introduction by Jean Gaudon. Paris: Garnier Frères, 1974.

- _____. Oeuvres complètes. Edited by André Martel. Vol. 25. Actes et Paroles (1964-1885): Mes fils-Testament littéraire. Paris: André Martel, 1954.
- _____. Oeuvres complètes. 18 vols. Edited by Jean Massin. Paris, Club Français du livre, 1967-1970.
- Maurois, André. Victor Hugo. Paris: Librairie Hachette, 1965.
- "Nouvelles du jour," Le Temps, 18 April, 1876. Account of a speech delivered at the Château d'eau.
- "Nouvelles du jour," Le Temps, 27 March, 1877. Account of speeches delivered at the Château d'eau by Hugo and Louis Blanc to raise money for unemployed Lyons workers.
- "Nouvelles du jour,": Le Temps, 5 August, 1879. Speech at the Château d'eau on the problems of the working classes.
- Richardson, Joanna. Victor Hugo. New York: St. Martin's Press, 1976.
3. Edouard Lockroy
- "Artistes contre la Tour Eiffel," Le Moniteur de l'Exposition, 20 February 1887, p. 514.
- Daudet, Léon. Au temps de Judas: Souvenirs des milieux littéraires, politiques, artistiques et médicaux de 1880 à 1908. Fifth series. Paris: Nouvelle librairie nationale, 1920.
- Lockroy, Edouard. "Discussion générale des propositions d'amnestie, Les remarques du député Edouard Lockroy." Journal officiel de la République française, 17 May, 1876, pp. 3332-3349.
- _____. Preface to L'Exposition universelle de 1889, by Emile Monod, 2 vols. Paris: E. Dentu, 1890.
- _____. La Question sociale: Réponse à M. de Mun. Paris. Balitout, Questroy et Cie., 1883.
4. Antonin Proust
- Proust, Antonin. L'Art français depuis 1789. Paris: L. Baschet, 1890.
- _____. L'Art sous la République. Paris: Bibliothèque Charpentier, 1892.

- _____. "Le Ministère des arts," *La Revue politique et littéraire*, 4 February and 25 February, 1882, pp. 196-200 and 231-239.
- _____. "Le Salon de 1882," *Gazette des Beaux-arts*, 1882, no. 6, pp. 533-554.
- Volney, Jacques. "Antonin Proust," *Revue illustré*, June-December 1887, vol. 4, p. 308.
5. Jules Simon
- Bertocci, Philip Anton. "Jules Simon, 1814-1896: A Study of Republican Religious Politics in France", Ph.D. dissertation, Yale University, 1970.
- Séché Léon. *Jules Simon, sa vie et son oeuvre*. Paris: Dupret, 1887.
- Simon, Jules. *Dieu, patrie, liberté*. Paris: Calmann Levy, 1883.
- _____. Introduction. *Rapports du jury international. Exposition universelle internationale de 1878 à Paris*. Paris: Imprimerie nationale, 1880.
- _____. *Nos Hommes d'Etat*. Paris, n.p., 1887.

II. Chapter II.

A. Primary Sources

- Chennevières, Philippe de. *Souvenirs d'un directeur des beaux-arts*. Vol. 3. Paris: Aux bureaux de l'Art, 1883.
- _____. "Document pour l'histoire de la direction des beaux-arts: Lettre de démission de M. de Chennevières," *L'Art* 20 (1880): 244.
- "Chronique de l'Exposition: L'Achèvement de la tour Eiffel," *Le Temps*, 2 April 1889.
- Comte, Auguste. *Auguste Comte and Positivism: The Essential Writings*. Edited by Gertrude Lenzer. New York: Harper & Row, Harper Torchbooks, 1975.
- Eiffel, Gustave. *La Tour de trois cents mètres*. Paris: Lemercier, 1900.

Ferry, Jules. Address delivered at presentation of prizes for the Salon annuel, 1883. Journal officiel de la République française, Chambre des députés, 23 June 1883, 3126.

_____. Address delivered to the jury for "L'Exposition nationale des ouvrages des artistes vivants". Journal Officiel de la République française, 23 April 1883, 2010.

Monod, Emile. L'Exposition universelle de 1889, grand ouvrage illustré, historique, encyclopédique, descriptif. 3 vols. Paris: E. Dentu, 1890.

Hugo, Victor. Les Misérables.

Interpellation Turquet. Journal officielle de la République française, 19 May 1880, 5389-5396.

Picard, Alfred. Exposition universelle internationale de 1889 à Paris. 10 vols. Paris: Imprimerie nationale, 1891-92.

Proust, Antonin. Commission d'enquête sur la situation des ouvriers et des industries d'art, instituée par décret en date de 24 décembre 1881. Paris: A Quantin, 1884.

_____. Edouard Manet: Souvenirs. Edited by A. Barthelémy. Paris: H. Laurens, 1913.

Simon, Jules. Le Travail. Paris: A. Lacroix, Verboeckhoven et Cie., 1866.

B. Secondary Sources

Albouy, Pierre. "Raison et science chez Victor Hugo." Cahiers rationalistes, no. 125 (1952), pp. 1-22.

Abraham, Pol. Viollet-le-Duc et le rationalism médiéval. Paris: Vincent, Fréal et Cie., 1934.

Affron, Charles. A Stage for Poets: Studies in the Theatre of Hugo and Musset. Princeton: Princeton University Press, 1971.

Agulhon, Maurice. "Bartholdi et le soleil." Gazette des Beaux-arts, May-June 1977, pp. 187-191.

_____. "Esquisse pour une archaéologie de la République: L'Allégorie civique féminine." Annales 28 (1973): 5-34.

Alpers, Svetlana. "Is Art History?" Daedalus, Summer 1977, pp. 1-13.

- Aron, Raymond. "Société industrielle: idéologies, philosophie." *Preuves*, no. 167-169 (1965), pp. 3-13, 12-24, 23-41.
- Azéma, Jean Pierre and Michel Winock. *La Naissance et la mort: La Troisième République (1870-1940)*. Paris: Calmann-Levy, 1976.
- Barthes, Roland. *Writing Degree Zero and Elements of Semiotics*. Preface by Susan Sontag. Translated by Annette Lavers and Colin Smith. Boston: Beacon Press, 1970.
- Barthes, Roland. *La Tour Eiffel*. Collection *Le Génie du lieu*. Lausanne: Delpire, 1964.
- Benoist, Luc. *Le Compagnonnage et les métiers*. Série *Que sais-je?* Paris: Presses universitaires de France, 1966.
- Bercé, Yves Marie. *Fêtes et révoltes: Des mentalités populaires du XVI^e au XVIII^e siècles*. Essai. *Le Temps et les hommes*. Edited by Jean Delumeau. Paris: Hachette, 1976.
- Boime, Albert. "Entrepreneurial Patronage in Nineteenth Century France." In *Enterprise and Entrepreneurs in Nineteenth Century France*, pp. 137-207. Edited by Edward C. Carter. Baltimore: Johns Hopkins University Press, 1976.
- Charlton, Positivist Thought in France during the Second Empire, 1852-1870. Oxford: Oxford University Press, 1959.
- Collins, Peter. *Changing Ideals in Modern Architecture: 1750-1950*. London: Faber and Faber, 1965.
- Dubois, Jean. *Le Vocabulaire politique et social en France de 1869 à 1872*. Paris: Librairie Larousse, [1962].
- Eros, John. "The Positivist Generation of French Republicanism." *Sociological Review* n.s. 111 (1955): 255-277.
- Geertz, Clifford. "Ideology as a Cultural System." In *Ideology and Discontent*, pp. 47-76. Edited by David E. Apter. New York: Free Press, 1964.
- Gillois, André. *La France qui rit . . . La France qui grogne*. Paris: Hachette, 1966.
- Giedion, Sigfried. *Space, Time, and Architecture: The Growth of a New Tradition*. 3rd edition enlarged. Cambridge: Harvard University Press, 1959.
- Goldman, Lucien. *Structures mentales et création culturelle*. Paris: Editions anthropos, 1970.

- Guillemin, Henri. *L'Humour de Victor Hugo*. Neuchatel: Boudry, 1951.
- Harriss, Joseph. *The Tallest Tower: Eiffel and the Belle Epoque*. Boston: Houghton Mifflin, 1975.
- Lecoeur, Charles. *La Philosophie religieuse de Victor Hugo: Poèmes choisis sur la méthode philosophique du mot juste*. Paris: Bordas, 1951.
- Legrand, Louis. *L'Influence du positivisme dans l'oeuvre scolaire de Jules Ferry*. Paris: Librairie Marcel Rivière et Cie., 1961.
- Lichtheim, George. "The Concept of Ideology." *History and Theory* 4 (1965): 164-195.
- Morazé, Charles. *Les Bourgeois conquérants aux XIX^e siècle*. Paris: A. Colin, 1957.
- Morlaine, Jacques. *La Tour Eiffel inconnue*. Paris: Hachette, 1971.
- Mosse, George. "Caeserism, Circuses, and Monuments." *Journal of Contemporary History* 6 (1971): 167-182.
- Needham, H. A. *Le Développement de l'esthétique sociologique en France et en Angleterre au XIX^e siècle*. Bibliothèque de la Revue de Littérature comparée, vol. 5, no. 25.
- Palmade, Guy P. *French Capitalism in the Nineteenth Century*. Translated by Graeme M. Holmes. New York: Barnes and Noble, 1972.
- Pieper, Joseph. *In Tune with the World: A Theory of Festivity*. Translated by Richard and Clara Winston. Helen and Kent Wolff Book. New York: Harcourt, Brace and World, Inc., 1965.
- Perrot, Michelle. *Les Ouvriers en grève: France, 1871-1890*. 2 vols. Ecole pratique des hautes études, Centre de recherches historiques. Série Civilisations et sociétés, no. 31. Paris: Mouton, 1974.
- Rearick, Charles. *Beyond the Enlightenment. Historians and Folklore in Nineteenth Century France*. Folklore Institute Monograph Series, no. 27. Bloomington: Indiana University Press, 1974.
- Simon, William M. *European Positivism*. Ithaca: Cornell University Press, 1963.
- Soltau, Roger. *French Political Thought in the Nineteenth Century*. New York: Russell and Russell, 1959.

Sorlin, Pierre. *La Société française*. 2 vols. Paris: Arthaud 1969-71.

Thomson, David. *Democracy in France since 1870*. 5th edition. London: Oxford University Press, 1969.

III. Chapter III

A. Primary Sources

Bourde, Paul. "Chronique de l'Exposition: Pourquoi l'Exposition est comme elle est." *Le Temps*, 29 May, 1889.

Chennevières, Philippe de. *Souvenirs d'un directeur des beaux-arts*. 5 vols. Paris: Aux bureaux de L'Artiste, 1883-89.

Ferry, Jules. *Discours et opinions de Jules Ferry*. Vols. 6 and 7. Edited by Paul Robiquet. Paris: A. Colin, 1893-98.

Hugo, Victor. "Plein Ciel." *La Légende des siècles*.

"Interpellation Turquet." *Journal Officiel*, 19 May, 1880, pp. 5389-5396.

Lockroy, Edouard. "Discussion générale des propositions d'amnestie." *Journal officiel*, 17 May 1876, pp. 3332-3349.

_____. Preface to Emile Monod's *L'Exposition universelle de 1889*. Vol. 1. Paris, E. Dentu, 1890.

_____. *La Question sociale*. Paris: Balitout, Questroy et Cie., 1883.

Proust, A. "Le Salon de 1882." *Gazette des Beaux-arts* 25 (1882): 533-554.

Simon, Jules. *Une Académie sous le Directoire*. Paris: Calmann-Lévy, 1885.

_____. *Le Libre-échange*. Paris: Librairie internationale, 1870.

_____. *Le Travail*. Paris: A. Lacroix, Verboeckhoven & Cie., 1866.

B. Secondary Sources

Agulhon, Maurice. "Le Problème de la culture populaire en France autour de 1848." *Romantisme* 9 (1975): 50-64.

- Albouy, Pierre. "Raison et science chez Victor Hugo." *Cahiers rationalistes* 125 (1952): 1-22.
- Barrère, Jean Bertrand. *Victor Hugo à l'oeuvre: Le poète en exile et en voyage*. Paris: Librairie Klincksieck, 1965.
- Benoist, Luc. *Le Compagnonnage et les métiers. Séries Que sais-je?* Paris: Presses universitaires de France, 1966.
- Coornaert, Emile. *Les Compagnonnages en France du moyen age à nos jours*. Paris: Les Editions ouvrières, 1966.
- Duits, Charles. *Victor Hugo: Le Grand échevelé de l'air*. Paris: Pierre Belfond, 1975.
- Elbow, Matthew. *French Corporative Theory, 1789-1948: A Chapter in the History of Ideas*. New York: Octagon Books, 1966.
- Elwitt, Sanford. *The Making of the Third Republic: Class and Politics in France, 1868-1884*. Baton Rouge: Louisiana State University Press, 1975.
- James, Anthony, R., editor. *Victor Hugo, Littérature et philosophie mêlées*. 2 vols. Paris: Klincksieck, 1976.
- Lock, Robert R. *French Legitimists and the Politics of Moral Order in the Early Third Republic*. Princeton: Princeton University Press, 1974.
- Manuel, Frank. *The Prophets of Paris*. Cambridge: Harvard University Press, 1962.
- Naudon, Paul. *La Franc-maçonnerie*. 5th edition. *Séries Que Sais-je?* Paris: Presses universitaires de France, 1974.
- Perrot, Michelle. *Les Ouvriers en grève: France, 1871-1890*. 2 vols. Paris: Mouton, 1974.
- Reclus, Maurice. *Jules Ferry: 1832-1893*. Paris: Flammarion, 1947.
- Scott, John A. *Republican Ideas and the Liberal Tradition in France, 1870-1914*. *Studies in History, Economics, and Public Law*. London: Oxford University Press, 1951.
- Tournier, Maurice. "Le mot 'peuple' en 1848: Désignant sociale ou instrument politique?" *Romantisme* 9 (1975): 6-20.

IV. Chapter IV

A. Primary Sources

Barbou, Alfred. Victor Hugo et son temps. Paris: G. Charpentier, 1881.

Bruno, G. (Marguerite Fouillé). La Tour de France par deux enfants. 120th ed. Paris: Vve. Eugène Bélin et fils, 1884.

_____. "Les Ecoles gratuites et La Musée céramique de Limoges." Gazette des Beaux-arts 3 (1870): 68-78.

Comte, Auguste. Auguste Comte and Positivism: The Essential Writings. Edited with an introduction by Gertrude Lenzer. New York: Harper 7 Row, Harper Torchbooks, 1975.

Congrès international des architectes (2^e) tenu à Paris, du 29 juillet au 3 août, 1878. Paris: Imprimerie nationale, 1881.

Guillaume, Eugène and Jules Pillet. "L'Enseignement du dessin." Recueil des monographies pédagogiques publiées à l'occasion de l'Exposition universelle de 1889. Vol. 4.

Hugo, Victor. Littérature et philosophie mêlées. Edited by Anthony R. W. James. 2 vols. Paris: Editions Klincksieck, 1976.

_____. Les Misérables.

Monod, Emile. L'Exposition universelle de 1889. 3 vols. Paris: E. Dentu, 1890.

Perdiguier, Agricol. Correspondance inédite avec Georges Sand et ses amis. Edited with an introduction by Jean Briquet. Preface by André Maurois. Paris: Librairie Klincksieck, 1966.

_____. Mémoires d'un compagnon. Introduction by Alain Faure. Paris: François Maspéro, 1977.

Picard, Alfred. Exposition universelle internationale de 1889 à Paris. Rapport général. 10 vols. Paris: Imprimerie nationale, 1891-92.

Proust, Antonin, L'Art sous la République. Paris: Bibliothèque Charpentier, 1892.

- _____. "Les Travaux des commissions de la société de l'Union centrale des arts décoratifs. Rapport de M. Antonin Proust. *Revue des arts décoratifs* 10 (1889-90): 192-197.
- _____. "Le Dessin." *Le Temps*, 3 April 1879.
- _____. Commission d'enquête sur la situation des ouvriers et des industries d'art. Paris: A. Quantin, 1884.
- Scheurer-Kestner, Auguste. *Souvenirs de jeunesse*. Paris: Bibliothèque Charpentier, 1905.
- Simon, Jules. Introduction. *Rapports du jury de l'Exposition*. Paris: Imprimerie nationale, 1880.
- Simon, Jules. Victor Cousin. Paris: Hachette, 1887.
- Taine, Hippolyte. *De l'idéal dans l'art*. 2nd ed. Paris: Baillière et Cie., 1879.
- Turquet, Edmond. *Journal officiel de la République française, Débats de la Chambre des députés*. 5 July 1881, p. 1264.
- _____. "Discours de M. Turquet." *Union Centrale des arts décoratifs. Catalogue des oeuvres et des produits modernes exposés dans le palais de l'industrie*. Paris: A. Quantin, 1882, pp. 10-13.
- Viollet-le-duc, Eugène Emmanuel. "De l'enseignement des arts: Il y a quelque chose à faire." *Gazette des Beaux-arts* 12 and 13 (1862).
- _____. *Histoire d'un dessinateur*. Paris: Hetzel, 1879.

B. Secondary Sources

- Agulhon, Maurice. "Bartholdi et le soleil." *Gazette des Beaux-arts*, May-June 1977, pp. 187-191.
- Bertocci, Philip Anton. "Jules Simon, 1814-1896: A Study in Republican Religious Politics in France." Ph. D. Dissertation, Yale University, 1970.
- Démy, Adolphe. *Essai historique sur les expositions universelles de Paris*. Paris: Librairie Alphonse Picard et fils, 1907.
- Fontainérie, F. de la. Editor and translator. *French Liberalism and Education in the Eighteenth Century: The Writings of La Chalotais, Turgot, Diderot, and Condorcet on National Education*. New York: Burt Franklin, 1932.

- Gontard, Maurice. *Les Ecoles primaires de la France bourgeoise (1833-1875)*. Toulouse: Centre régional de documentation pédagogique, 1964.
- Gossot, H. and F. Brunot and S. Herbinière-Lebert. *L'Enseignement du premier degré de 1887 à 1962: De la théorie à la pratique*. Paris: Librairie Istra, [1961?]
- Grablic, Suzi. *Progress in Art*: London: Thames and Hudson, 1976.
- Gutek, Gerald Lee. *Pestalozzi and Education*. New York: Random House, 1968.
- Hiebert, Erwin N. "The Uses and Abuses of Thermodynamics in Religion." *Daedalus* 95 (1966): 1046-1083.
- Lecoeur, Charles. *La Philosophie religieuse de Victor Hugo: Poèmes choisis sur la méthode philosophique du mot juste*. Paris: Bordas, 1951.
- Pécaut, Félix. *Deux Ministres pédagogiques: M. Guizot et M. Ferry*. Paris: Delagrave, 1887.
- Price, Aimée Brown. "L'Allégorie réelle chez Puvis de Chavannes." *Gazette des Beaux-arts* 89 (1977): 27-40.
- Vaisse, Pierre. "Charles Blanc und das 'Musée des Copies'" *Zietschrift für Kunstgeschichte*. 39 (Jan. 1976): 54-66.
- Zeldin, Theodore. *France, 1848-1945*. Vol. 2. Oxford: Oxford University Press, 1977.

V. Chapter V

A. Primary Sources:

- Alexandre, Arsène. "L'Exposition centennale." *Paris illustré*, no. 84 and 86 (1889), pp. 583-3 and 614.
- Blanc, Charles. *Les Beaux-arts à l'exposition universelle de 1878*. Paris: Renouard, 1878.
- _____. "Exposition universelle." *Le Temps*, 1 May and 11 June 1878.
- _____. *Grammaire des arts du dessin*. 2 vols. 2nd edition, Paris: V. J. Renouard, 1870.
- _____. *Grammaire des arts décoratifs; décoration intérieure de la maison*. 2nd ed. 2 vols. Paris: Librairie Renouard, 1882.

Eiffel, Gustave. *La Tour de trois cents mètres*. Paris: Lemerrier, 1900.

Henry, Charles. *Éléments d'une théorie générale de la dynomogénie autrement dit du contraste, du rythme et de la mesure avec applications spéciales aux sensations visuelles et auditives*. Paris: C. Verdin, 1889.

Maindron, Ernest. *Les Affiches illustrées (1886-1895)*. Paris: G. Boudet, 1896.

_____. *Le Champ de Mars, 1751-1889*. Lille: Danel, 1889.

Michel, André. "Alfred Roll (1846-1919)." *Gazette des Beaux-arts* 1 (1920): 106-126.

Nadar and Michel Eugène de Chevreul. "L'Art de vivre cent ans." *Le Journal illustré*, 5 September, 1886, pp. 282-288.

Pierre et Paul. "M. Eugène Chevreul." *Les Hommes d'aujourd'hui*, no. 227 (1886).

Proust, Antonin. *Edouard Manet: Souvenirs*. Edited by A. Barthelémy. Paris: H. Laurens, 1913.

Simon, Jules. *Introduction. Rapports du jury international. Exposition universelle internationale de 1878 à Paris*. Paris: Imprimerie nationale, 1880.

B. Secondary Sources

d'Argencourt, Louise. *Puvis de Chavannes (1824-1898). Exhibition catalogue*. Paris: Editions des musées nationaux, 1976.

Arguelles, Jose. *Charles Henry and The Formation of a Psychophysical Aesthetic*. Chicago: University of Chicago Press, 1972.

Barthes, Roland. *La Tour Eiffel*. Collection *Le Génie du lieu*. Lausanne: Delpire, 1964.

Brown-Price, Aimée. "L'Allégorie réelle chez Puvis de Chavannes." *Gazette des Beaux-Arts*. January 1977, pp. 27-40.

Brunhammer, Yvonne; Weill, Alain; Watelet, Jacques-Grégoire; Culot, Maurice; Loyer, François; Blondel, Alain; Plantin, Yves. *Art nouveau: France, Belgium. Exhibition catalogue*. Houston: Institute for the Arts, Rice University, 1976.

Clark, Timothy J. "The Bar at the Folies-Bergères [sic]." *The Wolf and the Lamb: Popular Culture in France from the Old Regime to*

- the Twentieth Century. Edited by Jacques Beauroy, Marc Bertrand, Edward T. Gargan. Saratoga: Amma Libri and Co., 1977.
- Collins, Peter. *Changing Ideals in Modern Architecture: 1750-1950*. London: Faber and Faber, 1965.
- Cooper, Jeremy. *Nineteenth Century Romantic Bronzes (1830-1915)*. London: David and Charles Newton Abbot, 1975.
- Desjardins, Paul. "En Mémoire de Jean-Charles Cazin." *Gazette des Beaux-arts* 26 (1901): 177-191.
- Francastel, Pierre. *La Réalité figurative: Eléments structurels de sociologie de l'art*. [Paris]: Bibliothèque de Sociologie de l'art, 1965.
- Gallo, Max. *The Poster in History*. Translated by Alfred and Bruni Mayor. Middlesex: Hamlyn Publishing Group Ltd., 1974.
- Giedion, Sigfried. *Space, Time, and Architecture: The Growth of a New Tradition*. 3rd edition enlarged. Cambridge: Harvard University Press, 1959.
- Gillespie, Charles Coulston. *The Edge of Objectivity: An Essay in the History of Scientific Ideas*. Princeton: Princeton University Press, 1960.
- Gombrich, Ernst H. *Art and Illusion: A Study in the Psychology of Pictorial Representation*. New York: Pantheon Books, 1960.
- Hanson, Anne Coffin. *Manet and the Modern Tradition*. New Haven: Yale University Press, 1977.
- Hautecoeur, Louis. *Histoire de l'architecture classique en France*. 7 vols. Paris: Editions A. & J. Picard et Cie., 1957.
- Herbert, Eugenia. *The Artist and Social Reform: France and Belgium, 1885-1898*. New Haven: Yale University Press, 1961.
- Homer, William. *Seurat and the Science of Painting*. Cambridge: Harvard University Press, 1964.
- Joll, James. *The Anarchists*. New York: Grosset & Dunlap, The Universal Library, 1966.
- Kahn, Sholom J. *Science and Aesthetic Judgment: A Study in Taine's Critical Methods*. New York: Columbia University Press, 1953.
- Kozloff, Max. "The Authoritarian Personality in Art." *Artforum*, 12 May 1974, pp. 40-47.

- Kugle, James L. *The Technique of Strangeness in Symbolist Poetry*. New Haven: Yale University Press, 1971.
- Marrey, Bernard and Paul Chernetov. *Familièrement inconnues . . . Architectures, Paris (1848-1914)*. Exhibition catalogue. Paris: n.p., pour le Secrétaire d'état à la culture, 1976.
- Merz, John Theodore. *A History of European Thought in the Nineteenth Century in Four Volumes*. 4 vols. London: William Blackwood and Sons, 1904-1912.
- Pevsner, Nicolaus. *The Sources of Modern Architecture and Design*. London: Thames and Hudson, 1968.
- Pillement, Georges. *Paris en fête*. Paris: Bernard Grasset, 1972.
- Rezler, André. *L'Esthétique anarchiste*. Collection SUP. Paris: Presses universitaires de France, 1973.
- Rheims, Maurice. *Nineteenth Century Sculpture*. Translated by Robert E. Wolf. New York: Harry N. Abrams, 1977.
- Roisecco, Giulio; Jodice Romano; and Vannelli Vater. *L'Architettura del ferro: la Francia (1715-1914)*. Series *L'Architettura del ferro*. Rome: Bulzoni, 1973.
- Rookmaaker, H. R. *Gauguin and Nineteenth Century Art Theory*. 2nd ed. Amsterdam: Swets and Zeitlinger, 1972.
- Rosenblum, Robert. *Cubism and Twentieth Century Art*. New York: Harry N. Abrams, Inc., 1959; revised ed. 1966.
- Roskill, Mark. *Van Gogh, Gauguin, and the Impressionist Circle*. Greenwich: New York Graphic Society, 1970.
- Schapiro, Meyer. "Style." *Anthropology Today*. Edited by A. L. Kroeber. Chicago: University of Chicago Press, 1958.
- Shattuck, Roger. *The Banquet Years*. Revised ed. New York: Vintage Books, Alfred Knopf and Random House, Inc., 1960.
- Sorlin, Pierre, Waldeck-Rousseau. Paris: Colin, 1966.
- Stromberg, Roland W. *Realism, Naturalism, and Symbolism: Modes of Thought and Expression in Europe, 1848-1914*. New York: Harper & Row, 1968.
- Symbolisme en Europe*. Exhibition catalogue. Edited by J. C. Ebbinge Wubben. Paris: Editions des musées nationaux, 1976.

Valmy-Baysse, Jean. Alfred-Philippe Roll, sa vie, son oeuvre.
Séries Les Peintres d'aujourd'hui. Paris: Librairie Félix
Juven, [1910].

Villoteau, Pierre. La Vie Parisienne à la Belle Epoque. Geneva:
Cercle du bibliophile, 1968.

Wattenmaker, Richard J. Puvis de Chavannes and the Modern Tradition.
Exhibition catalogue. Toronto: Art Gallery of Ontario, 1975.

VI. Periodicals

L'Art et l'industrie de tous les peuples à l'Exposition universelle de
1878.

L'Exposition de 1878, Journal hebdomadaire illustré

L'Exposition de Paris (1878)

L'Exposition universelle de 1889

Gazette des Beaux-arts

Illustration

Le Magasin pittoresque

Le Moniteur des architectes

Le Moniteur de l'Exposition de 1889

Revue bleue

Revue des arts décoratifs

Revue des deux mondes

Revue illustrée

Revue moderniste

Le Temps

Le Trocadéroscope, Revue tintamarresque de l'Exposition universelle
(1878)

Le Voltaire

VII. Dictionaries and Reference Works

- L'Année artistique, Les Beaux-arts en France et à l'étranger.
- Dictionnaire biographique du mouvement ouvrier français (1871-1939).
- Dictionnaire critique et documentaire des peintres, sculpteurs, dessinateurs et graveurs. Edited by Emmanuel Bénézit.
- Dictionnaire de la langue française. Edited by Emile Littré.
- Dictionnaire de pédagogie et d'instruction primaire. Edited by Ferdinand Buisson.
- Dictionnaire encyclopédique et biographique de l'industrie et des arts industriels. Edited by Eugène Lami.
- Dictionnaire général des artistes de l'école française depuis l'origine des arts du dessin jusqu'à nos jours. Edited by Emile Bellier de la Chavignerie and Louis Auvray.
- Dictionnaire historique des arts, métiers et professions exercés dans Paris depuis le treizième siècle. Edited by Alfred Franklin.
- Dictionnaire universel illustré, biographique et bibliographique de la France contemporaine. Edited by Jules Lermina.
- Encyclopédie des Beaux-arts: architecture, sculpture, peinture, arts décoratifs. Edited by Louis Hourticq.
- Encyclopédie raisonnée des arts et des métiers. Edited by Denis Diderot and Jean d'Alembert.
- La Grande Larousse encyclopédique du XIX^e siècle.
- Le Vocabulaire politique et social en France de 1869 à 1872. Edited by Jean Dubois.

APPENDIX A

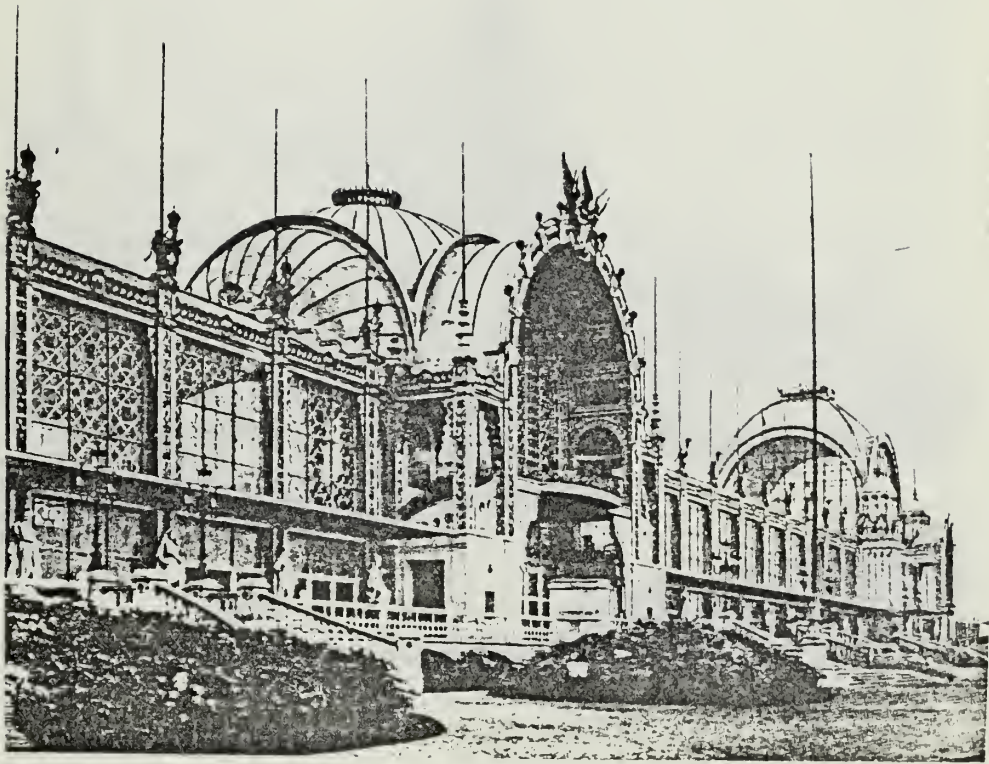


Figure 1. Palais du Champ de Mars, Universal Exposition, Paris, 1878.

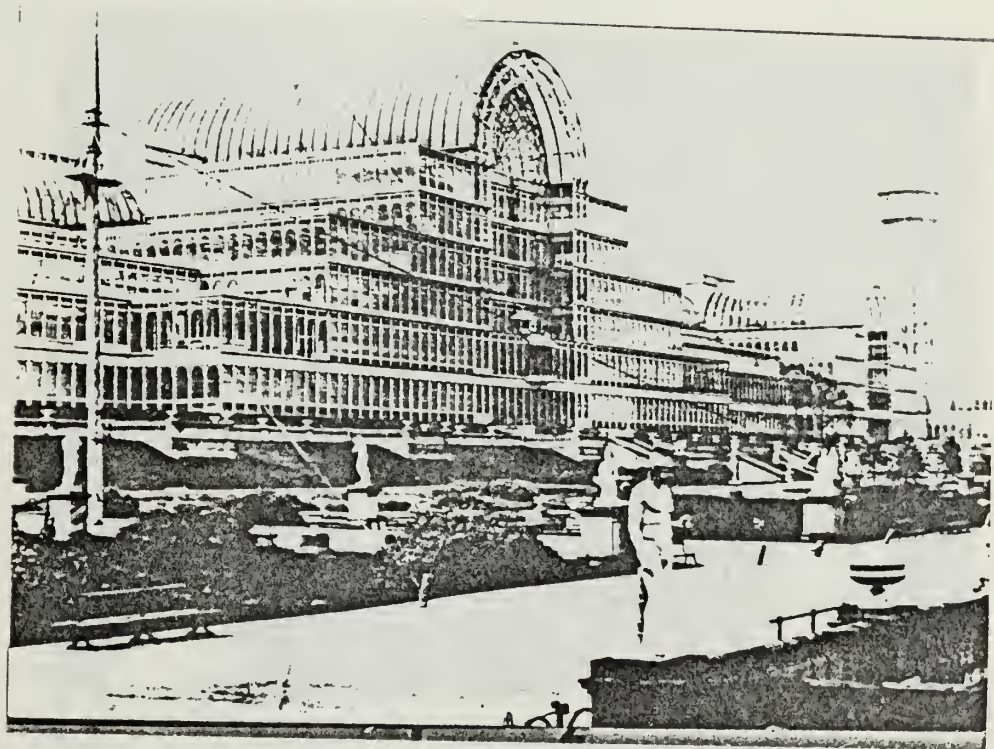


Figure 2. Sir Joseph Paxton, The Crystal Palace at Sydenham, 1850-51.

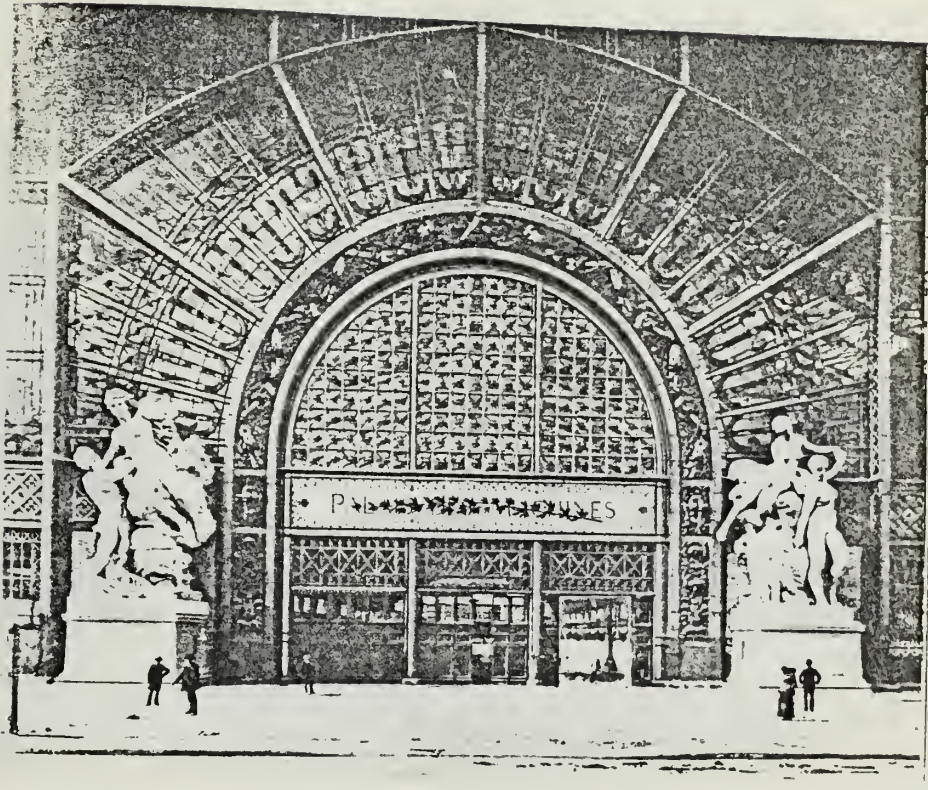


Figure 3. F. Dutert and V. Contamin, The Galerie des machines, exterior, Universal Exposition, Paris, 1889.

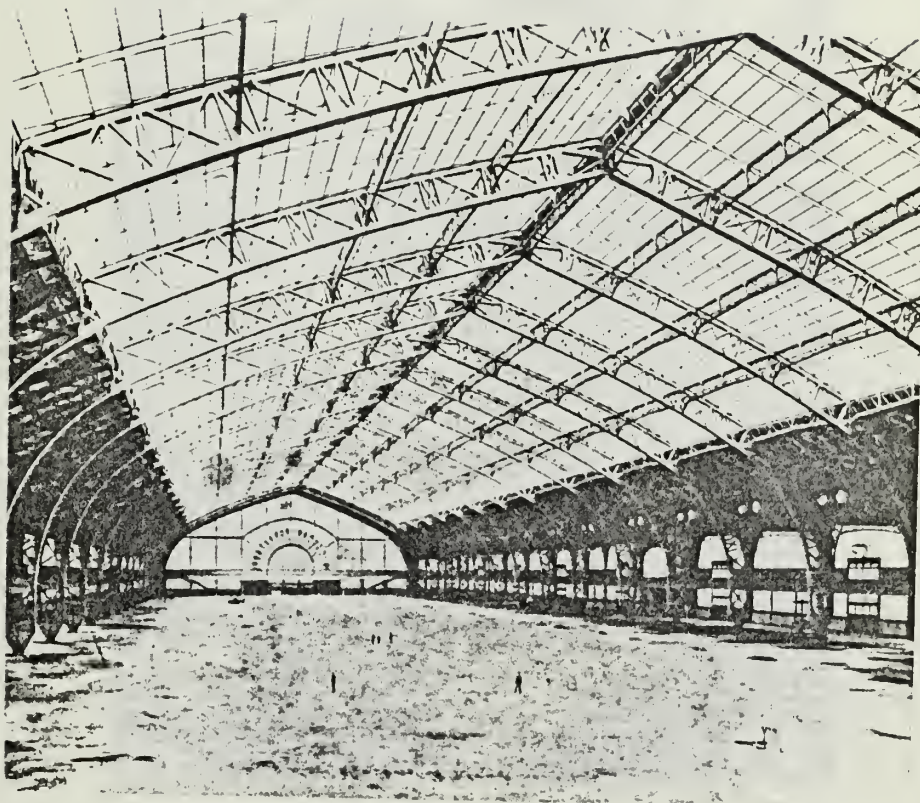


Figure 4. The Galerie des machines, interior, Universal Exposition, Paris, 1889.



Figure 5. Contemporary illustration showing temporary wooden structure commonly used for public gatherings--here a political meeting at which Gambetta is speaking.

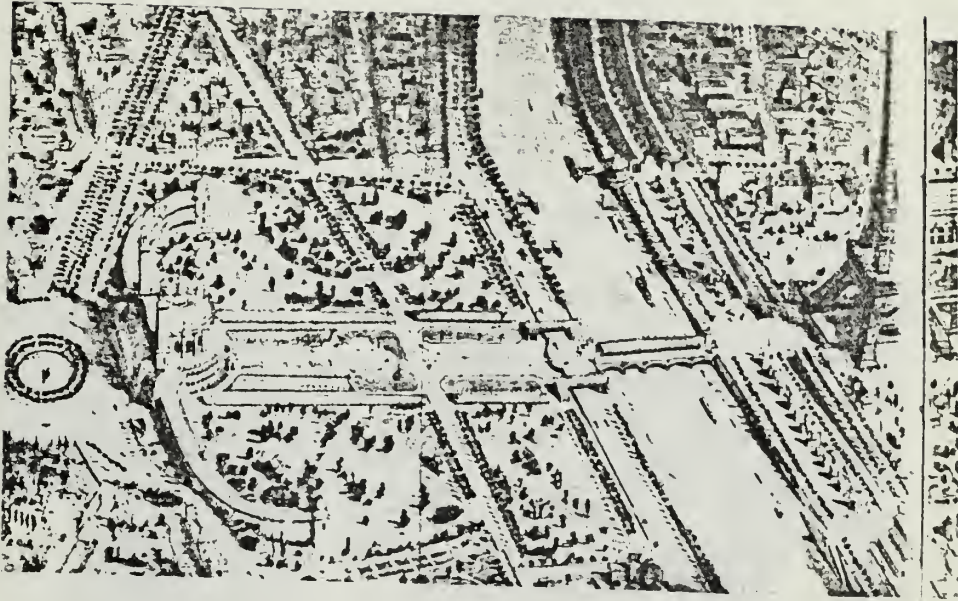


Figure 6. Gabriel Davioud, Palais du Trocadéro, Paris, 1878.
Drawing of Palais and gardens during 1889 Centennial Exposition.

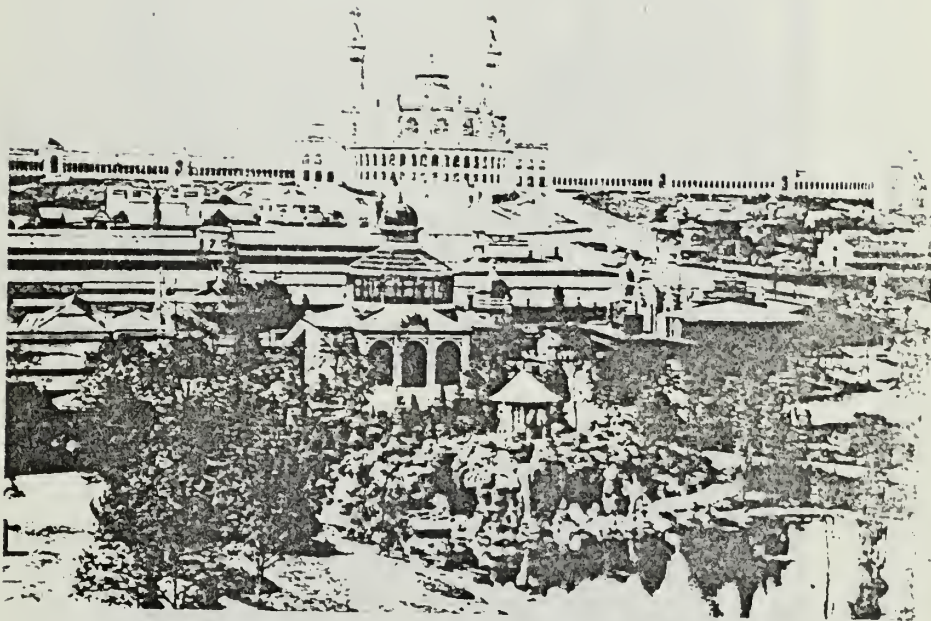


Figure 7. Palais du Trocadéro and Pavillions, contemporary photograph, Universal Exposition, Paris, 1878.

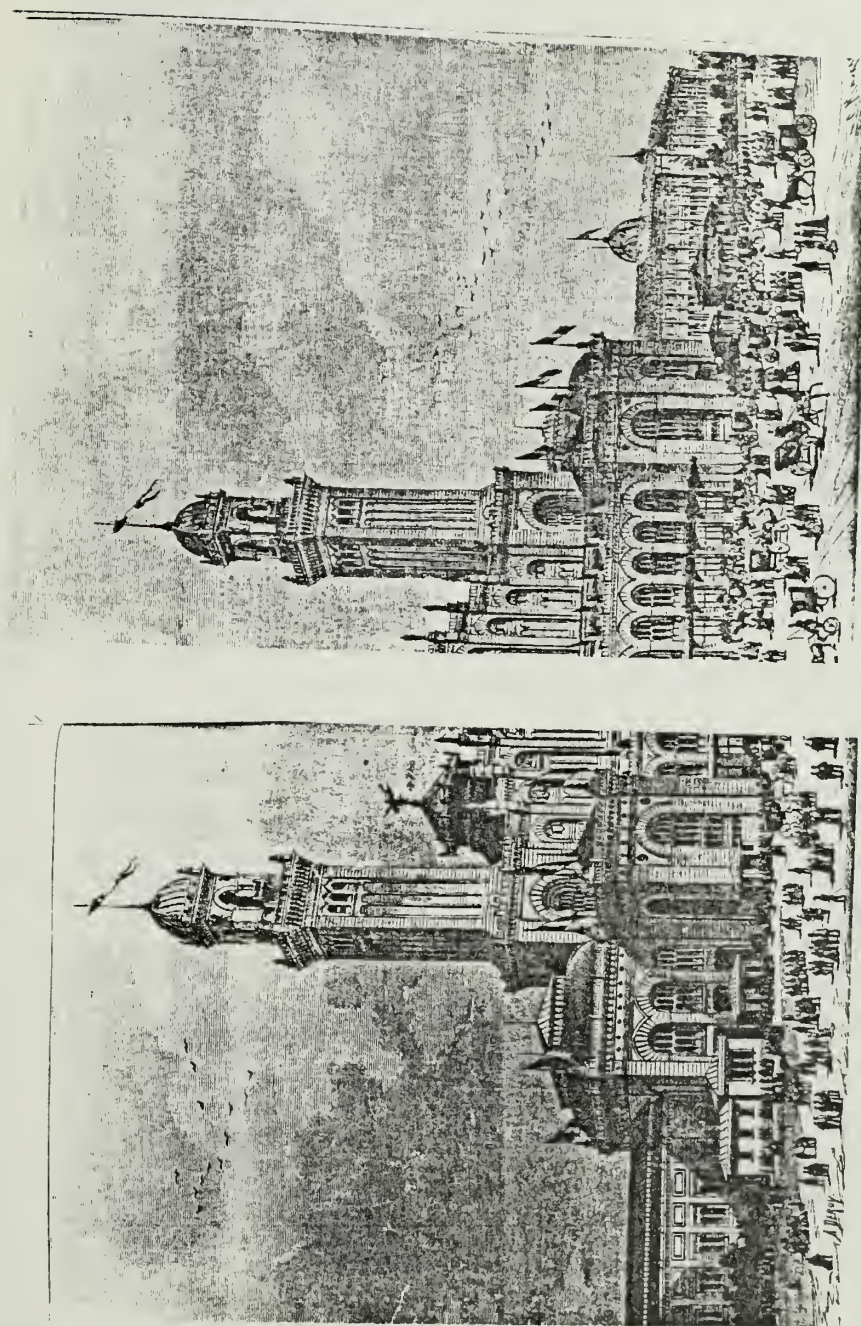
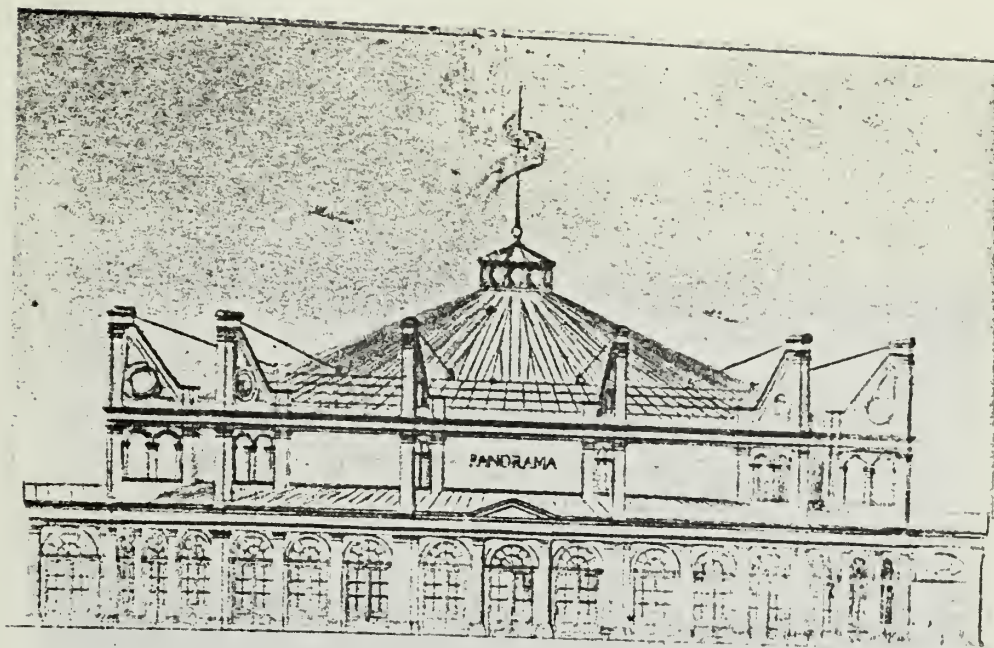
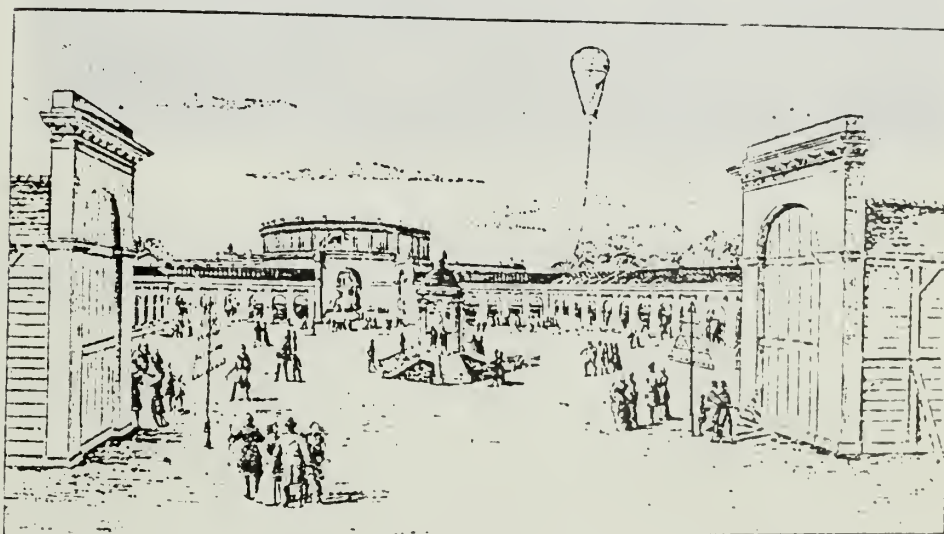


Figure 8. Palais du Trocadéro, Façade, Place du Trocadéro, contemporary illustrations, 1878.



a.



b.

Figure 9. a) Jacob Hittorf, The Rotunda of the Panorama of the Champs-Élysées, Drawing of the exterior, Paris, 1838-39. b) View of the first Industrial Exposition, Champ de Mars, Paris, May 1798, contemporary illustration.



Figure 10. Fête de la nation, The Champ de Mars, Paris, November 1798, contemporary engraving.



Figure 11. Edouard Manet, In the Conservatory, 1879, National Museum, Berlin.



Figure 12. Edouard Manet, The Railroad, National Gallery of Art, Washington, D.C.



Figure 13. Edouard Manet, The Bar at the Folies-Bergère, 1882, Courtauld Institute, London.



Figure 14. Edouard Manet, Autumn, Museum of Fine Arts, Nancy.

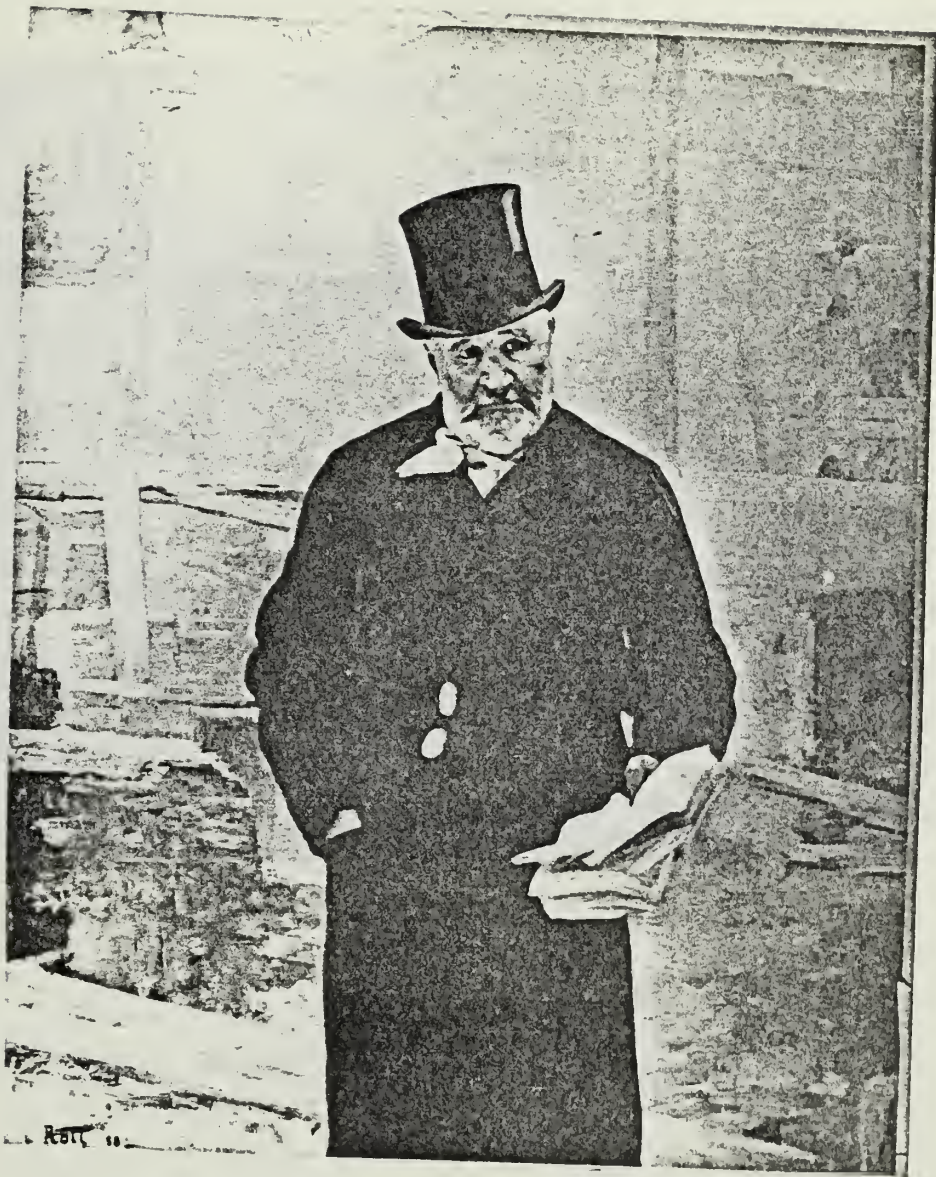


Figure 15. Alfred Roll, Portrait of M. Alphand, 1888, Petit Palais, Paris.

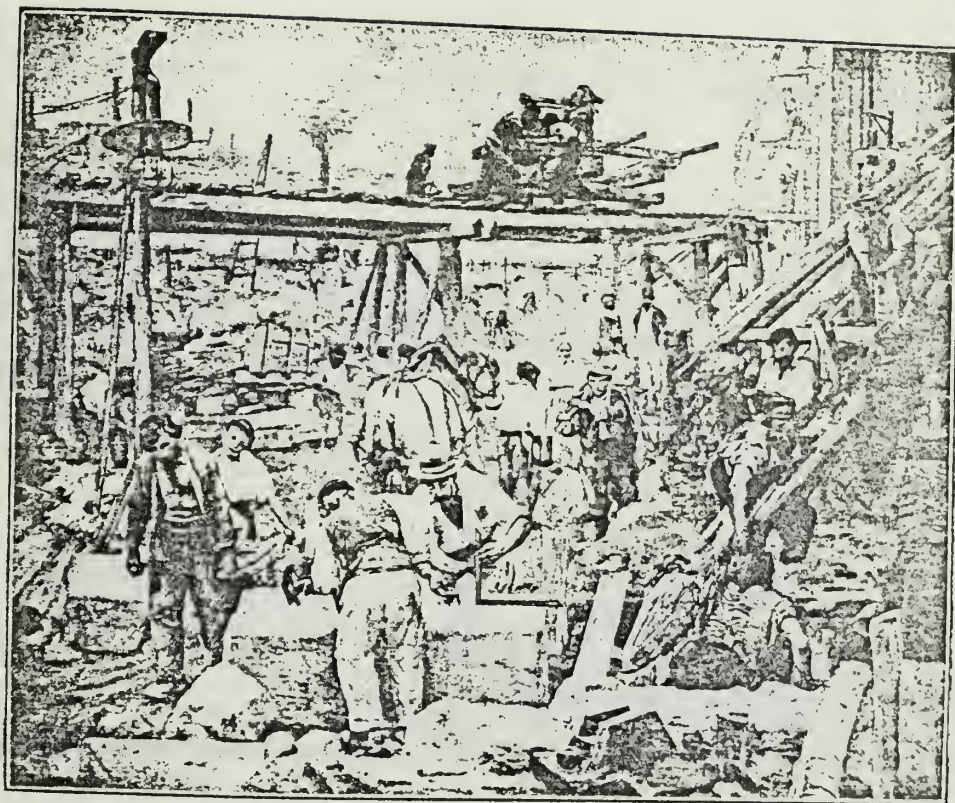


Figure 16. Alfred Roll, Le Chantier de Surènes, 1885.



Figure 17. Jean Cazin, Le Chantier, 1876, The Cleveland Museum of Art.



Figure 18. Jean Cazin, Souvenir de Fête, 1882, Galiera Museum, Paris.

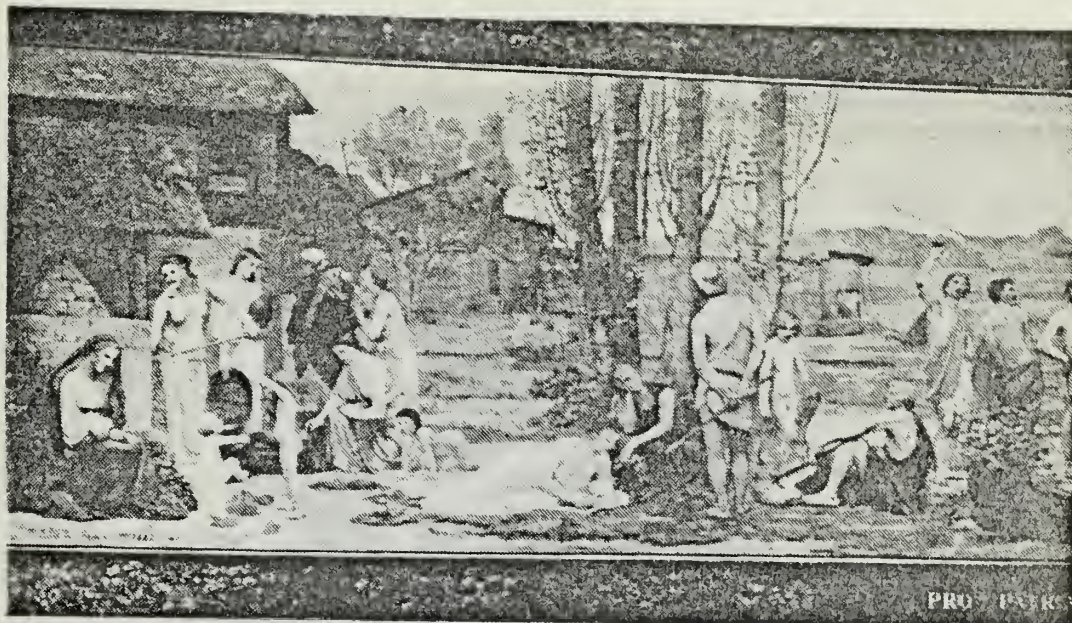


Figure 19. Pierre Puvis de Chavannes, Ludus Pro Patria, 1879-1882, Musée des Beaux-arts, Amiens.

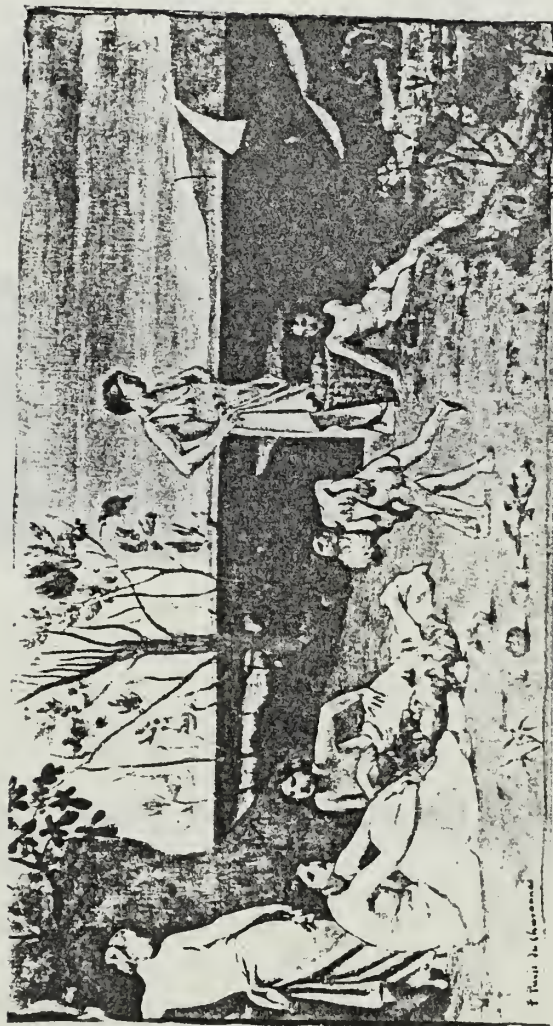


Figure 20. Pierre Puvis de Chavannes, Doux pays, c. 1882, Yale University Art Gallery, New Haven.



Figure 21. Pierre Puvis de Chavannes, Le Pauvre pêcheur, 1881
Louvre Museum, Paris.



Figure 22. Jean-Jacques Henner, Eglogue, 1879, Petit Palais, Paris.



Figure 23. Antonin Mercié, Le Souvenir, 1885, Luxembourg Museum, Paris.



Figure 24. Alfred Roll, La Fête du 14 juillet, 1880, 1882, Versailles Museum.



Figure 25. Alfred Roll, Sketch for La Fête du 14 juillet, 1880, c. 1881, Petit Palais, Paris.



Figure 26. Antonin Mercié, Quand même, Salon of 1882, Belfort.



Figure 27. Antonin Mercié, Quand même, Sketch by the artist.

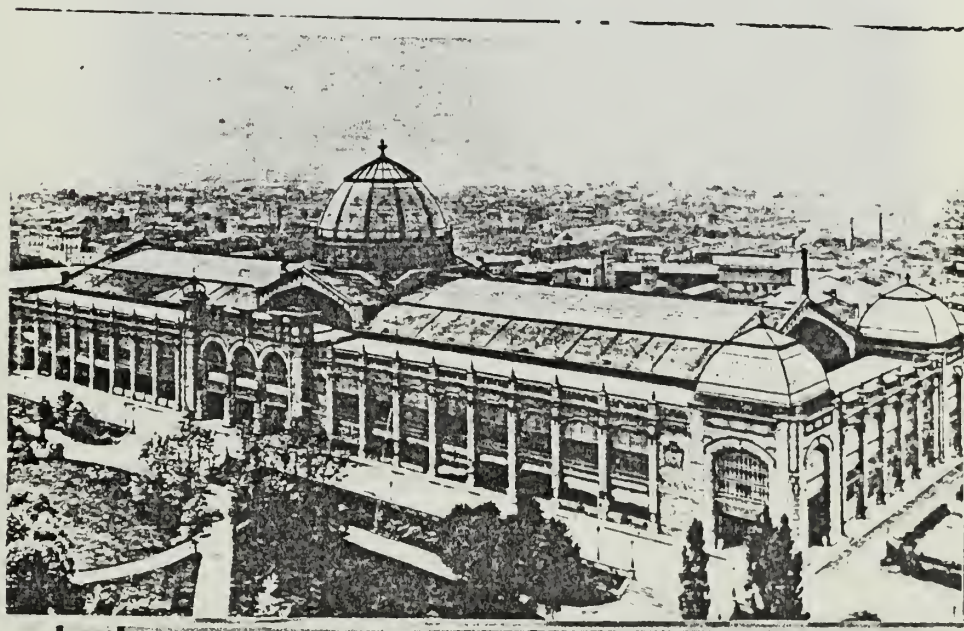


Figure 28. Jean Formigé, Palais des Beaux-arts, Universal Exposition, Paris, 1889.

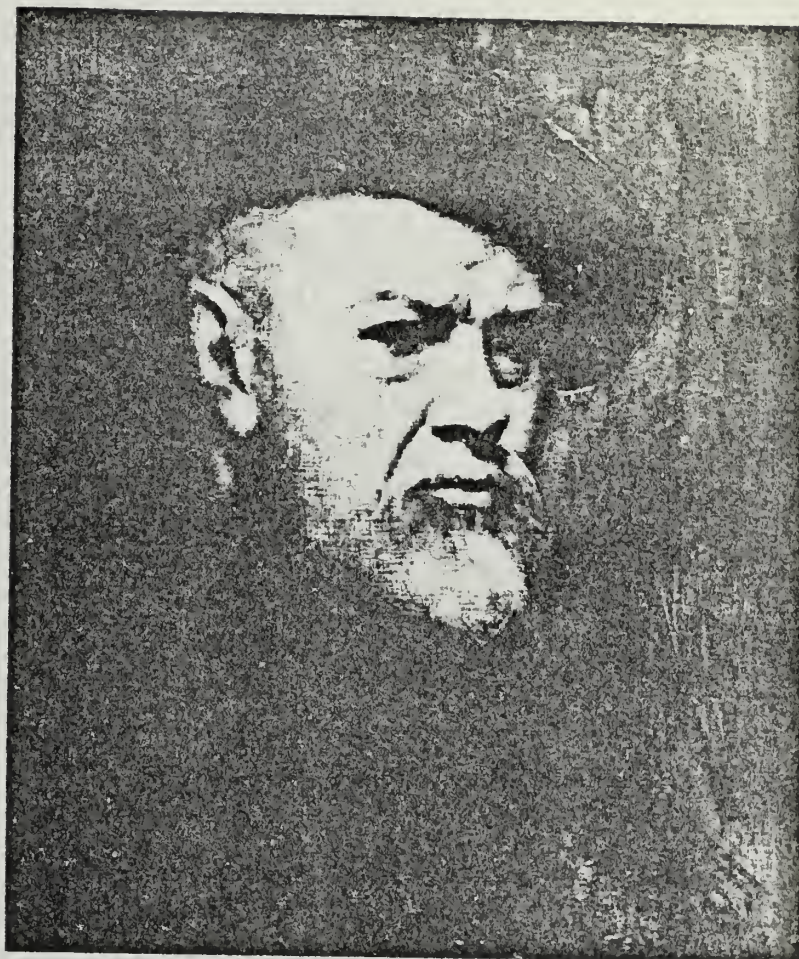


Figure 29. Jean-Jacques Henner, Self-Portrait, n.d., Petit Palais, Paris.



Figure 30. Antonin Mercié, David, 1872, Southebys, Belgravia.

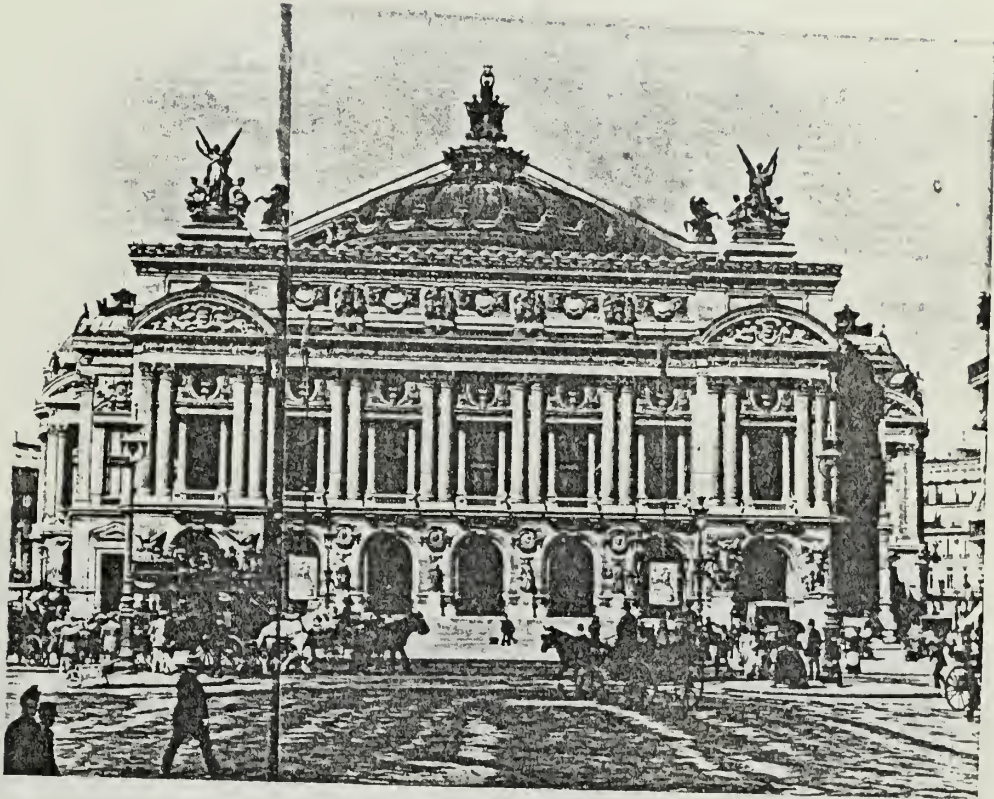
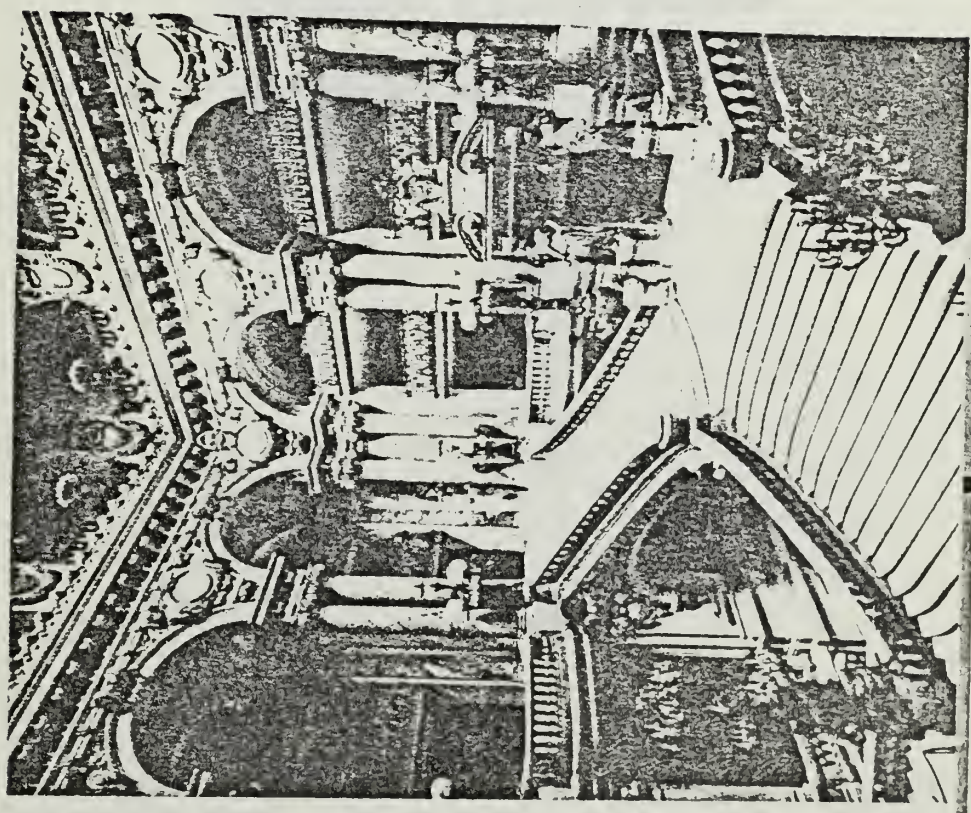
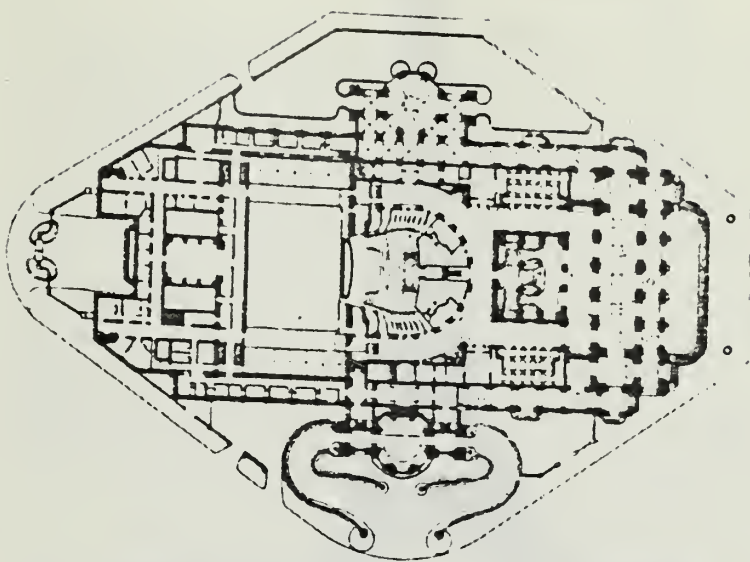


Figure 31. Charles Garnier, Opera, 1861-1875, Paris.



a. Interior, vestibule with grand staircase



b. Plan

Figure 32. Charles Garnier, Opera, 1861-1875, Paris.



Figure 33. Gustave Eiffel and L. Sauvestre, The Eiffel Tower, 1889, Paris.

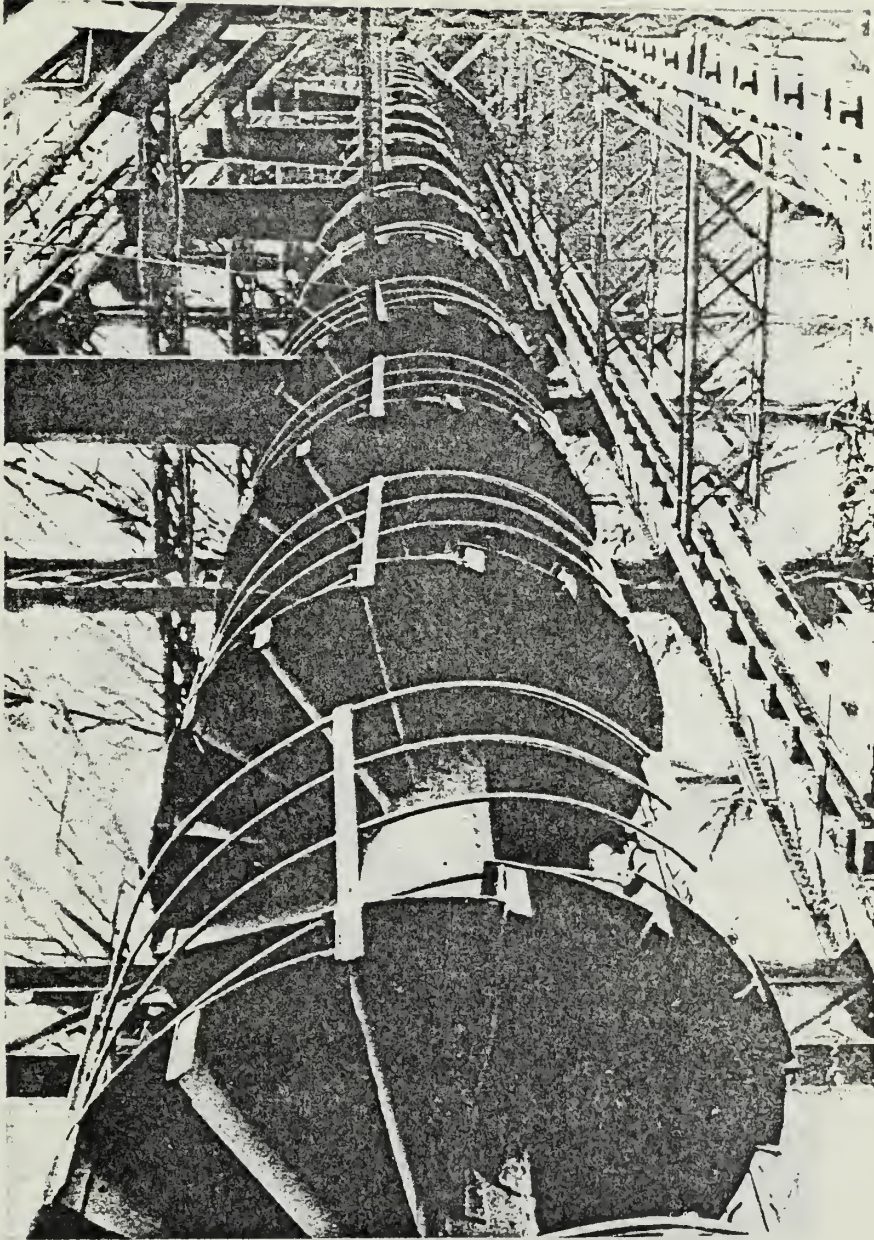


Figure 34. Gustave Eiffel and L. Sauvestre, The Eiffel Tower, 1889, View of the stairway from the second to third landings.

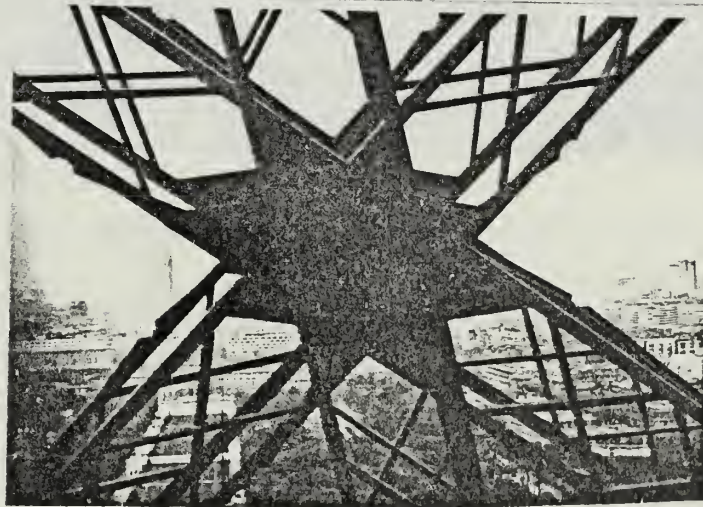
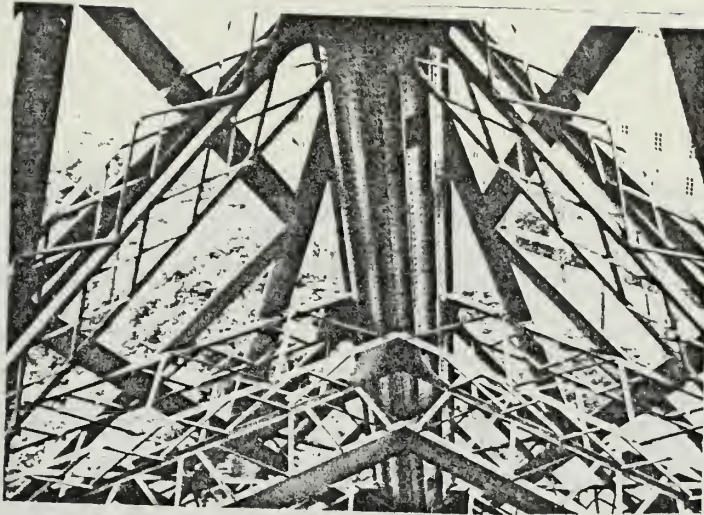


Figure 35. Gustave Eiffel and Leopold Sauvestre, The Eiffel Tower, 1889, Paris.



Figure 36. Alphonse Mucha, Printed Velvet, c. 1900, Collection Mucha, Prague.

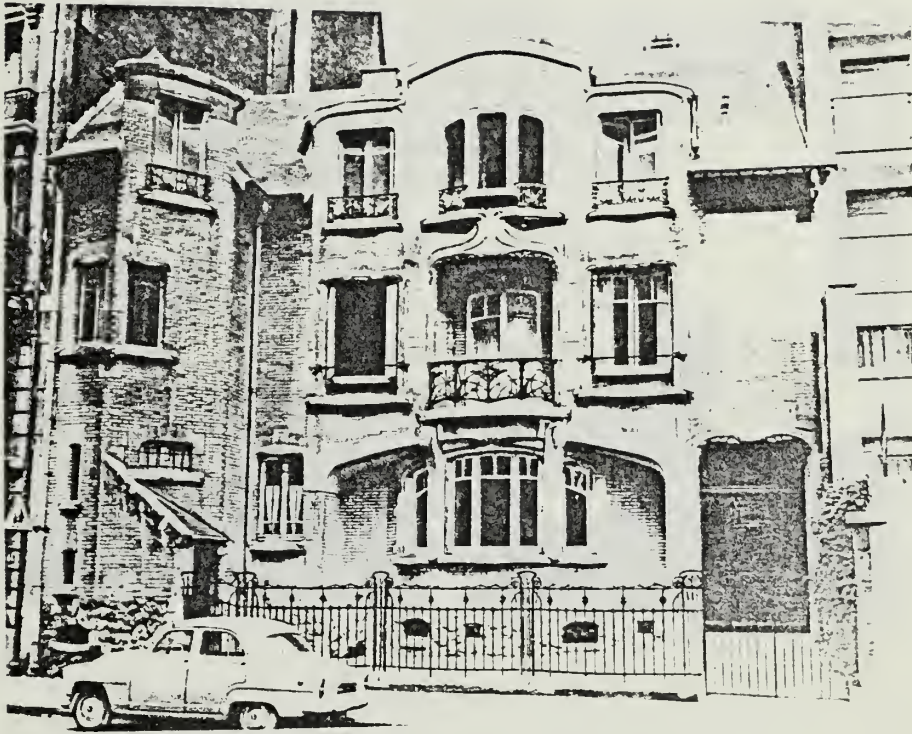


Figure 37. Hector Guimard, Private House, 1908, 60 rue de la Fontaine, Paris.

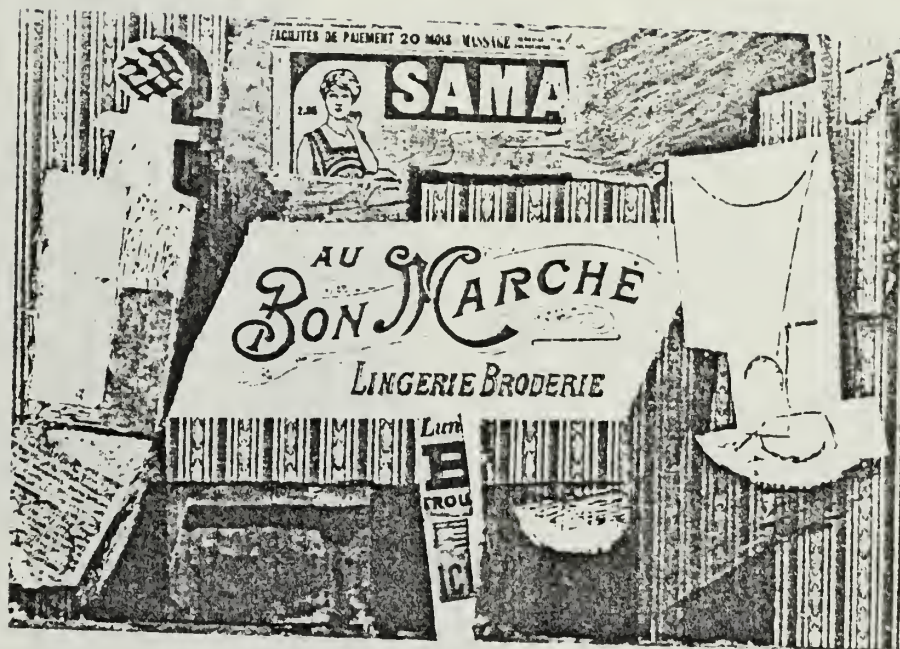


Figure 38. Pablo Picasso, Au Bon Marché, Collection of Mr. and Mrs. Michael Newbury, Chicago.

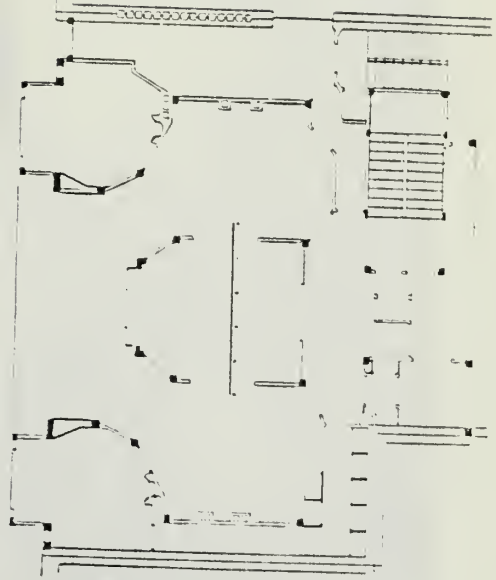
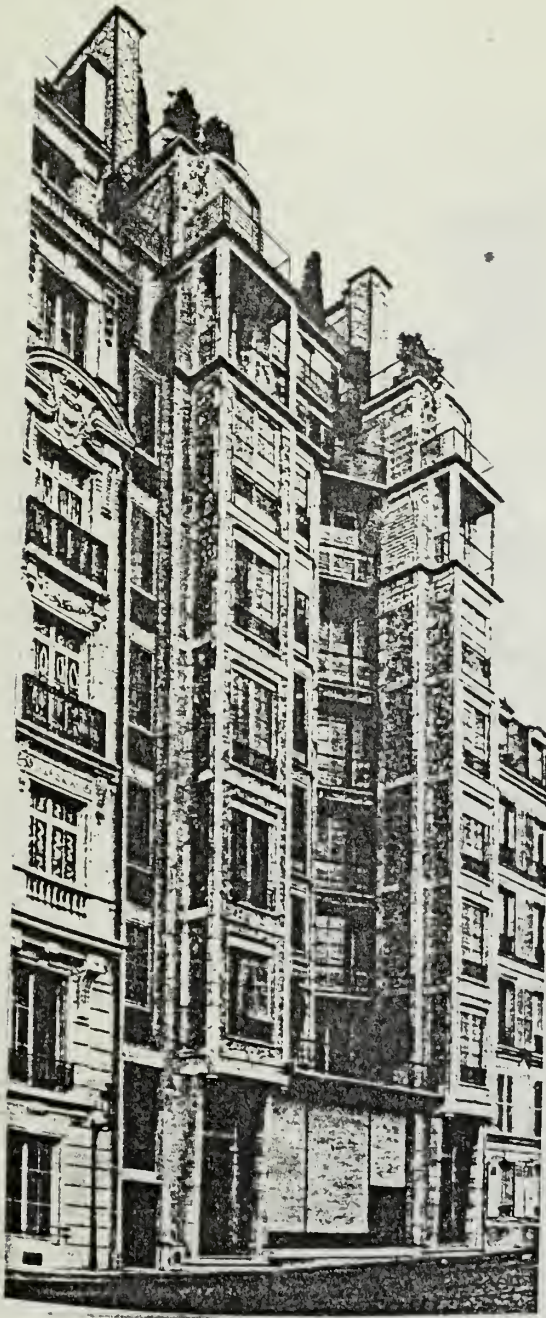


Figure 39. Auguste Perret, Apartment Building, 25 bis rue Franklin, 1903-04, Paris.



Figure 40. Edouard Manet, Portrait of Anonin Proust, 1880.

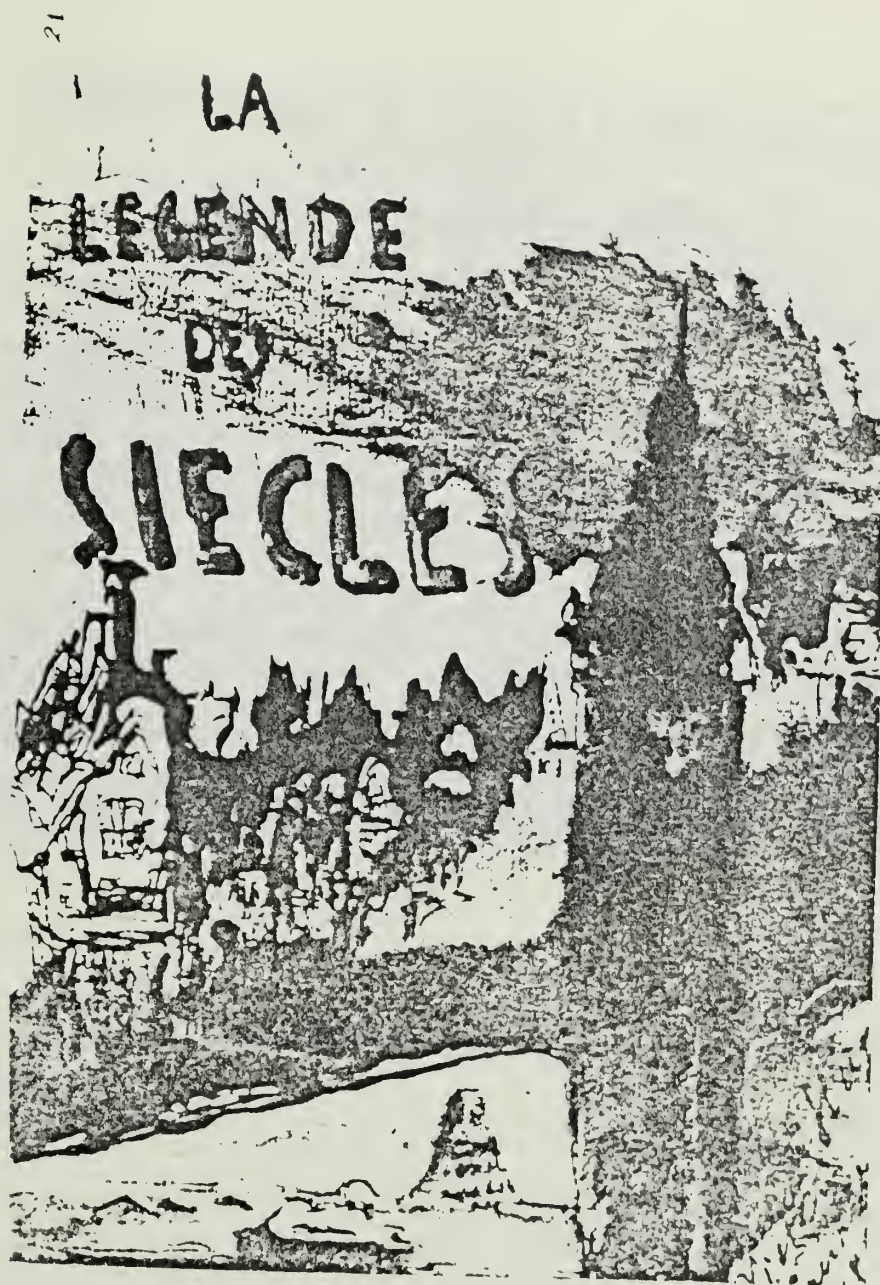


Figure 41. Victor Hugo, Frontispiece, *La Légende des Siècles*, ink drawing, c. 1859, Victor Hugo Museum, Paris.

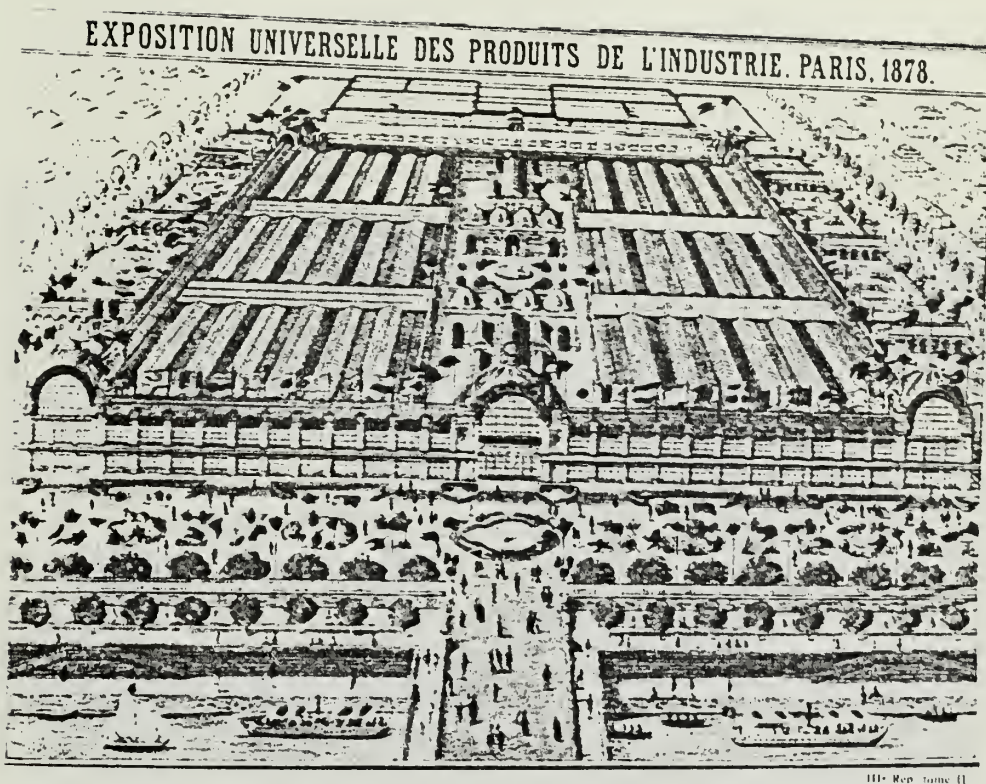


Figure 42. Plan of 1878 Paris Exposition from a contemporary journal.

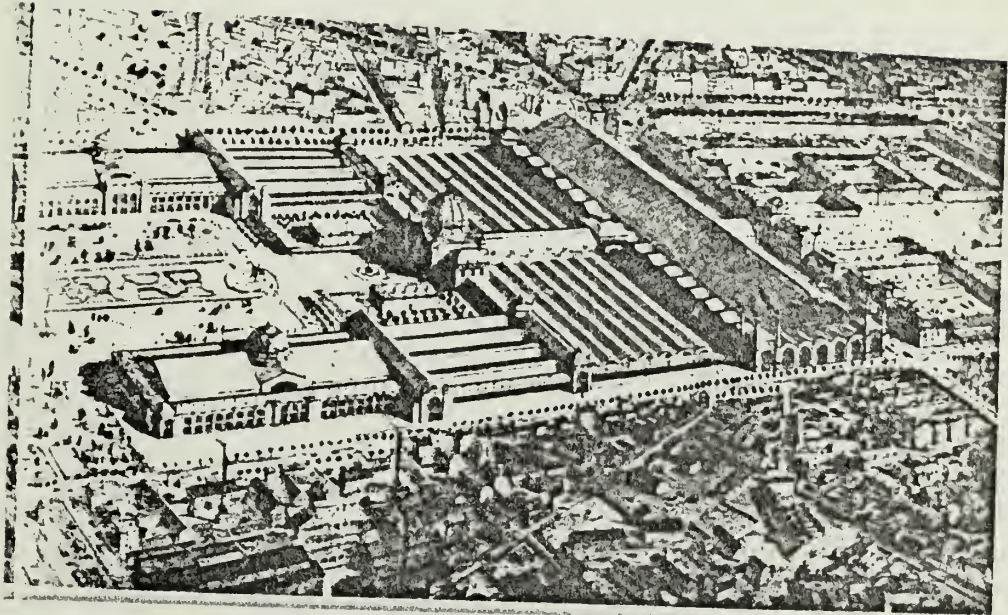


Figure 43. Plan of 1889 Paris Exposition.



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