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BUILDING THE FINANCIAL FAÇADE: JACQUES-DENIS ANTOINE'S HÔTEL DE LA MONNAIE, THE PARISIAN MINT, 1765-1775

by

AMANDA CATHERINE ROTH CLARK

A THESIS

Presented to the Department of Art History and the Graduate School of the University of Oregon in partial fulfillment of the requirements for the degree of Master of Arts

August 2005

"Building the Financial Façade: Jacques-Denis Antoine's Hôtel de la Monnaie, The Parisian Mint, 1765-1775," a thesis prepared by Amanda Catherine Roth Clark in partial fulfillment of the requirements for the Master of Arts degree in the Department of Art History. This thesis has been approved and accepted by:

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Amanda Catherine Roth Clark for the degree of Master of Arts in the Department of Art History to be taken August 2005

Title: BUILDING THE FINANCIAL FAÇADE: JACQUES-DENIS ANTOINE'S HÔTEL DE LA MONNAIE, THE PARISIAN MINT, 1765-1775

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In the 1760s, near the end of the life of Louis XV and the French monarchy, Jacques-Denis Antoine was commissioned to build the Hôtel de la Monnaie, a new national Mint for the production of French coins. Antoine's adept handling of the site demonstrates a late eighteenth-century approach based upon hierarchy and the rationally organized plan. The two distinctive rusticated façades express interior functions in a display of French caractère. Located prominently on the Seine, Antoine's Parisian Mint can be considered an archetype of pre-Revolution French Neoclassicism. It may be perceived both as a public and a national building, ancien régime in conception, yet architecturally innovative and forward-looking. At once enigmatic and innovative, the Monnaie has received far less scholarly attention than it deserves. The present study strives to introduce this significant edifice to the English reader, examining its commission, its design, and its architect.

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CHAPTER I

INTRODUCTION

Victory to him who holds the last coin.

Popular eighteenth-century French idiom

In the year 1774, Louis XV died and twenty-year-old Louis XVI was crowned King of France. By the end of the year the French parliament had been dissolved by order of the king in an attempt to solidify his authority, while the exorbitant cost of wheat incited the so-called "flour war" in the following year. France already had seen a century of petty and expensive wars. Louis XIV's court had been tightly run, but was costly nonetheless, and under his grandson Louis XV the court had hemorrhaged money. Needless to say, the kingdom was nearly bankrupt. In 1775, the Hôtel de la Monnaie, the new Parisian Mint, a monument to the glory of France, its monarchy, and its treasury was completed, if not without some irony given the actual state of finance.

The Hôtel de la Monnaie was realized in an interim period between the reign of two kings, between the height of the *ancien régime* and the ensuing Revolution. It is a paradox, difficult to define conceptually and place stylistically. Since the Middle Ages,

¹ Jean-Charles Volkmann, A Chronological Look at the History of France, translated by Angela Moyon (Paris: Jean-Paul Gisserot, 2001), 65.

mint facilities had been housed within the royal compound, and thus Paris had a long history of associating the Mint with the king. Essentially a monument to the achievements of monarchy, the mint manufactured the most functional everyday object of the common people: coinage. Though the new Mint symbolized financial stability, the looming economic crisis in France indicates that the building was in effect a façade, both literally and figuratively. Moreover, the economic crisis would enflame the nation and fuel the Revolution of 1789 in just over a decade. Nevertheless, the Monnaie was stylistically forward-looking, arguably Neoclassical, with an austerity staunch enough to rival that of architects termed "revolutionary." Yet it also housed aristocratic functions, which included a grand salm and imperial stair. A Janus-like edifice, the Monnaie simultaneously looked both to the past and to the future; it pivoted stylistically and socially at a time of change.

The Mint was the first major monument finished under the short reign of Louis XVI. Jacques-Denis Antoine (1733-1801), master architect of the Hôtel de la Monnaie, was the son of a joiner. An autodidact, his rearing lacked the benefits of an expensive education. He learned the trade of mason and contractor, moving up into the realm of architect only by his own perseverance.³ Mild-mannered, his friends credit him with having emulated the ancients; he is known to have read widely and collected engravings, a surrogate for formal education. Antoine was a seemingly unusual selection for a

² Further discussion will be given in later chapters to Revolutionary architects such as Boullée and Ledoux and their relationships with Antoine.

³ Rand Carter: "Antoine, Jacques-Denis," *The Grove Dictionary of Art Online* (Oxford University Press, Accessed 11 October 2004), http://www.groveart.com>.

commission of this magnitude, winning the project against competition entries by noteworthy architects such as Etienne-Louis Boullée (1728-1799), whose teaching position Antoine later assumed. Furthermore, the Monnaie is the building for which Antoine is chiefly remembered, and though he was a significant figure in his era, history has largely forgotten him. Antoine left no descriptions of his design process for the Mint, only his drawings, now housed at the Bibliotèque nationale in Paris.

The Hôtel de la Monnaie survived the Revolution relatively unscathed, standing today as a monument to the great achievements of architecture during the French Enlightenment, even if its stylistic definition remains somewhat amorphous. Although the Monnaie has been hailed by some modern historians as an archetype of the Neoclassical style and a canonical work of French design,⁴ the building has remained little explored by American and French scholars. In its own era, however, the Mint was praised by Antoine's stylistic successor, architect J.-N.-L. Durand, and in the nineteenth-century by J. Gaudet in his Ecole des Beaux-Arts lectures.

Has this oversight of the Monnaie occurred because it lacks the elegance of its neighbor, the Institut de France, as Patrice Cahart suggests? Can it be seen as somehow indecisive or unresolved in style? This striking and bold edifice at such a prominent position off the end of the Île de la Cité certainly begs consideration. Cahart considers it

⁴ Wend von Kalnein called the Monnaie "one of the major public buildings of Louis XV's reign." Wend von Kalnein, *Architecture in France in the Eighteenth Century* (New Haven: Yale University Press, 1995), 161.

⁵ Patrice Cahart, Introduction to G. Gille et M. Berry, L'Institut de France et la Monnaie de Paris (Paris: Délégation à l'Action Artistique de la Ville de Paris, 1990), 159.

an excellent representation of the height of French Enlightenment architecture and labels it one the first buildings designed for an industrial purpose.⁶

Much about the Monnaie remains to be considered. The Hôtel de la Monnaie has been discussed, at varying depth, in many recent publications surveying this period of French architecture. Such works include Allan Braham, The Architecture of the French Enlightenment, Louis Hautecoeur, Histoire de l'architecture classique en France; Wend von Kalnein, Architecture in France in the Eighteenth Century, and Jean-Marie Pérouse de Montclos, Histoire de l'architecture française: de la Renaissance à la Révolution (and other titles), to name a few of the better-known surveys.

There are several indispensable contemporary French sources on the Monnaie that serve as starting points for any study on the building, and served likewise as the foundation for this research. Such works include Jean-Marie Darnis, La Monnaie de Paris: sa création et son histoire du Consulat et de l'Empire à la Restauration (1795-1826); Fernand Mazerolles, L'Hôtel des Monnaies: les Bâtiments, le Musée, les Ateliers; and, G. Gille et M. Berry, L'Institut de France et la Monnaie de Paris, which is a collection of essays, including Monique Mosser, "Jacques-Denis Antoine, Architecte Créateur."

Additionally, publications concurrent with or near in date to the construction of the Monnaie, guide-books and other texts offer glimpses of the Mint. A few of the many sources include: J.-F. Blondel, *Cours d'architecture*, 1771; J.-B.-P. Le Brun, *Almanach*

⁶ Ibid.

⁷ For a full citation of the following entries, please refer to the bibliography.

⁸ Monique Mosser, "Jacques-Denis Antoine, Architecte créateur," in L'Institut de France et la Monnaie de Paris, by G. Gille et M. Berry (Paris: Délégation à l'Action Artistique de la Ville de Paris, 1990), 161-175.

historique et raisonné des architectes, peintres, sculpteurs, 1776; J.-G. Legrand and C.-P. Landon,
Description de Paris et de ses edifices, 1806; C. Lussault, Notice historique sur défunt Jacques-Denis
Antoine, 1801; Pierre Patte, Mémoires sur les objets les plus importans de l'architecture, 1769; and
Luc-Vincent Thiéry, Guide des amateurs et des étrangers voyageurs a Paris, ou, Description raisonnée
de cette ville, de sa banlieue, & de tout ce qu'elles contiennent de remarquable, 1781.9 Unfortunately,
Lussault's works, among others, were unavailable to me because of their rarity. One of
the values of Monique Mosser's essay for this thesis is that she accessed these texts and
includes discussions of them in her writing.

Mosser established an excellent starting point for this thesis. She places the Mint both physically and socially in the context of Antoine's architectural peers. She likewise discusses the excellent reception the Mint received from Parisians and contemporary guidebooks alike, being praised especially for the ingenuity and the "pure engineering" of its grand staircase. Mosser laments the scant, or missing documentation on the design ideals that drove Antoine. Here too I found a further avenue to explore – Mosser quotes Antoine's contemporary Lussault, who stated that the building was marked by a particular preeminence related to *caractère*; an aesthetic response to its duty as a symbol of

⁹ I have had recourse to Thiéry only in so much as the few pages I was able to secure through Inter Library Loan; thus I am indebted to the writings of those scholars who have been able to consult this work first-hand.

¹⁰ Mosser, "Architecte créateur," 163.

national opulence.¹¹ The concept of French *caractère*, also a fruitful area for new research, has long been of interest to me, and I will argue that the Mint serves as an excellent example of this notion.

Lussault's observation can be further pursued to reveal design intentions relating to the planning of the interior, observations relevant to the existence and use of the unusual staircase and grand salon of the premier étage. Where I differ slightly with Lussault's discussion, however, is that he found the Monnaie less concerned with caractère than with suitability or utility, convenance. This discrepancy between symbolic impression and practical design must be well understood in placing the Mint among its peers, and will be discussed later in this thesis. Was Antoine's Monnaie an achievement in the pure "mechanics of art," an architectural simplicity serving only its function? Or was the Monnaie perhaps something more?

The Monnaie is an exceptional example of the rationally organized plan of the eighteenth century. As we shall see, Antoine organized the program into one cohesive treatment that included three major functions: residence, workshops, and administrative facilities. Each of these programmatic elements was connected through a network of axes and through the overall composition of the structure as it revolves around a central courtyard. The two primary façades of the building also helped express these interior

¹¹ Ibid. Although Mosser does not includes footnotes, one might assume from her general bibliography that she refers to C. Lussault, *Notice historique sur défunt Jacques-Denis Antoine* (Paris, 1801). Two extant volumes of this text are held in the Bibliothèque d'art et d'archéologie in Paris.

¹² Ibid.

¹³ Mosser, "Architecte créateur," 164.

functions through an exceptional use of rustication. Antoine's excellent organization clarifies what could have become a tangled plan; furthermore his use of rustication expresses the building's *caractère*, or the representation of its function.

It is not that mints were an entirely new building-type. While there were predecessors in France since the Middle Ages, covered in this thesis in the Appendix, it was in the late eighteenth century that industrial buildings became of great typological interest. As John Summerson notes, the architecture of the Enlightenment was a response to the growth of certain philosophical ideas, particularly an interest in industry and science.14 Numismatics was of course industrial and technological in nature and Antoine incorporated innovations congruent with the era to meet those needs. He crafted his spaces to fit contemporary minting machinery, such as the screw-press, and he is reported to have designed skylights for the foundry rooms to afford light to the workers - features also treated later in this thesis. Antoine likewise embraced the building's industrial nature by adopting a more austere building aesthetic. Subsequently this structure, as a significant financial edifice in a central capital of Western Europe, became a stylistic innovator and trendsetter, influencing many successive architects both in Paris and abroad, such as Revolutionary architect Durand and English architect William Chambers, as will be further discussed.

What I have attempted in this expository work is to bring a building that was little studied, though highly praised, to the English reader in a manner fuller than previously

¹⁴ John Summerson, The Architecture of the Eighteenth Century, World Art Series (London: Thames & Hudson, 1986), 105.

attempted. It is my hope that future scholars will be able to use this work as a reference point, expanding on those questions that I have posed, and correcting those errors that I have undoubtedly made. The chapters to come shall progress in the following order.

Chapter II overviews J.-D. Antoine, his oeuvre, and his pivotal place within the context of Neoclassicism and the age of the Enlightenment, touching briefly on his use of French caractère.

Chapter III is a formal description of the building and its spaces. Chapter IV considers more carefully the commission and construction of the edifice, ending with a collection of critical assessments of the structure. Chapter V provides a conclusion, followed by an Appendix, which traces the history of the Parisian Mint and French numismatic history up until the construction of the eighteenth-century Mint.

CHAPTER II

ANTOINE AND THE ARCHITECTURE OF THE FRENCH ENLIGHTENMENT

Jacques-Denis Antoine and His Contemporaries

The premier building in the architectural career of Jacques-Denis Antoine (Illustration 1), was the Hôtel des Monnaies or Hôtel de la Monnaie (1765-1775) (Illustration 2). Born August 6, 1733, Antoine studied the trades of builder, mason, and contractor. Whether his father simply did not have the means to offer Antoine a formal education, or Antoine apprenticed under someone of note, his training appears to have been minimal and he was an autodidact of the most extraordinary kind. Of the seven siblings, Antoine had one brother who was an architect and another a sculptor, both of whom Antoine employed on the Mint project and elsewhere during his career. In the early 1760s Antoine was contracting by trade and had worked on several small architectural projects, including work on the church façade of St. Nicolas-du-Chardonnet, completed in 1765.

¹⁵ Michel Gallet, Les architectes parisiens du XVIIIe siècle: dictionnaire biographique et critique (Paris: Mengès, 1995), 24.

¹⁶ It appears that Antoine did employ some nepotism in his construction hiring, as his own brother served as a sculptor for the Mint (a relatively unknown figure compared with Pigalle and Mouchy). Ibid. Worthy of note also, Antoine assended the ranks of his trade quickly; by age twenty Antoine was an "official contractor" and soon thereafter an "expert contractor." Mosser, "Architecte créateur," 164.

¹⁷ In some translations this project is referred to as the gate of Saint-Nicolas-du-Chardonnet, but the word *portail* is best rendered façade. Charles Halley rebuilt the new façade for this church in 1934 in a

Antoine submitted a design entry for the 1760 Comédie-française project, which was later built in the Odéon district by Marie-Joseph Peyre (1730-1785) and Charles de Wailly (1730-1798). Although he did not win the competition, Antoine was undoubtedly attentive both to the building process and design, which is severe and planar as can be seen in Illustration 3. The Comédie-française was proposed originally to sit on the Hôtel de Conti site (Illustration 4), the future location of the Monnaie, suggesting that Antoine had already begun to consider the challenges of this site. As demonstrated in Illustration 5, he likewise began to contemplate a curved façade, according to this surviving competition drawing. These drawings were at one time attributed to Jacques-Germain Soufflot (1713-1780) because of their excellence.¹⁸

One might associate certain elements of the Monnaie with the works of previous masters, thus conceptualizing Antoine's stylistic lineage: Solomon de Brosse (c.1571-1626) for the interest in and treatment of columns, shown in Illustration 6; Claude Perrault (1613-1688) for his regularized east façade of the Louvre, seen in Illustration 7; and for the design theories of François Blondel (1628-1686) regarding hierarchy. Later, a portrait of François Mansart (c.1598-1666) hung in Antoine's office within the Mint, suggesting that Mansart may have been a great source of inspiration for him. 19 Despite his lack of formal education Antoine appears to have been steeped in the traditions of

seventeenth-century style. Jean-Marie Pérouse de Montclos, Le Guide du Patrimoine: Paris (Paris: Hachette, 1994), 473.

¹⁸ Mosser, "Architecte créateur," 164. This elevation drawing, interestingly, seems to be in a Baroque style, reminiscent of Bernini's attempts with the east façade of the Louvre; this style is dramatically removed that of the final façade of the Monnaie, built just a few years later.

¹⁹ Gallet, Les architectes parisiens, 24.

the greatest architectural fathers of France. Perhaps this partially explains his architectural daring and innovation since certain better-known architects such as Soufflot and Gabriel were more closely regulated by their patrons and their positions. Conversely, Antoine had no *Prix de Rome* prize to ensure and drive his career; like his education, his success appears self-made.²⁰

Antoine lost the competition for the Paris Halle au Blé, or corn exchange (1763-69), to architect and critic Nicolas Le Camus de Mézières (1721-1793), who would later appraise Antoine's Mint in his theoretical treatise.²¹ In 1766, while involved to some degree with the project of the *place Louis XV*, Antoine worked on a series of *immeubles* on the rue Saint-Honoré, which hardly offered the pomp and display of the theater or Halle au Blé projects.²² In their letters of this period, Antoine's friends described him in terms of old Roman virtue and likened him to the Neoclassical painters of the era. In contributing to the Neoclassical architectural movement in France, Antoine was promoting an architecture which sought to embody the pure mechanics of art, "la partie purement mécanique de l'Art." He was commended for an enlightened understanding of materials, for generating works of power and simplicity, full of energy, character, and

²⁰ Mosser, "Architecte créateur," 164.

²¹ Carter, n.p.

²² Norval White, *The Guide to the Architecture of Paris* (New York: Charles Scribner's Sons, 1991), 7. One of these buildings, as I have seen, is still extant but has been greatly altered in more recent years.

²³ "The merely technical side of the art." Mosser, "Architecte créateur," 164. This phrase might be interpreted as art in its entirely functional state, and thus successful, and to some, most beautiful. It also may be seen as *architecture parlante*, or speaking architecture, coined in the nineteenth century – an architecture which clearly reveals its purpose.

severity.²⁴ An admirer of Vitruvian ideals, Antoine also collected engravings and read extensively; and though unable to travel to Italy until after the Mint project, Antoine sought always to educate himself.²⁵

The new Mint was conceived concurrently with plans for the *place Lonis XV* (present-day Place de la Concorde), which was being overseen by Ange-Jacques Gabriel (1698-1782) (Illustrations 8, 9, and 10). Working alongside Gabriel, Antoine began designing a Mint structure to be located behind the Hôtel de Coislin (Hôtel de Crillon), a scheme that envisioned the Mint building surrounding two courtyards. By 1767 the location of the Mint was reconsidered and positioned more strategically for use, across the Seine from the Louvre and adjacent to Louis Le Vau's Collège des Quatre Nations (Institut de France) (Illustration 11).²⁶ It was also in 1767 that Antoine committed himself with vigor to the Mint project, as his biographer Joachim Le Breton states, "Antoine parut tout armé, comme la Minerve qui sert d'emblème aux Beaux-Arts." The foundations and basement level of the Mint were completed by April 1771, the façade in

²⁴ Mosser, "Architecte créateur," 164.

²⁵ Ibid.

²⁶ Contractors Letellier, Armand, Lefèvre, and Caqué, oversaw its progress. Carter, n.p.

²⁷ "Antoine appeared armed like Minerva, the emblem of the Beaux-Arts schools," Mosser, "Architecte créateur," 164. Le Breton's quote may have possibly come from the text Rapport fait au nom de la section des finances sur le projet de loi relatif aux monnaies (Paris: l'Imprimerie Nationale, 1803), which I have been unable to consult, but is discussed by Mosser.

1773, and the details and decorations in 1775.²⁸ The building received unanimous praise; in the following year, 1776, Antoine was granted a second-class honorarium at the Académie Royale d'Architecture.²⁹

Along with his work on the Mint, Antoine continued to accept commissions for other buildings. From 1770 to 1772 he worked on several country houses, including the Château de Herces in Berchères-sur-Vesgres. In 1773, he worked on some of his many hôtels, including the Hôtel Brochet de Saint-Prest,³⁰ and aided in the reconstruction of the fire-damaged Palais de Justice by designing a new stair, writing hall, and record office.³¹ Also in 1776 he was appointed as the Contrôleur des Hôtels des Monnaies du Royaume, and placed in charge, in part, of the very facility he had built.³² From 1777 to 1778 he had the opportunity to visit the great monuments of Italy, an expected trip in the education of any significant French architect.

The Monnaie had established for Antoine a reputation of capability and he would live in the wake of this influential design for his remaining years. In 1778, for the Duke of Alba, José Alvárez de Toledo y Gonzaga, Antoine designed the staircase, interiors,

²⁸ An anecdotal story tells of the delivery of faulty stone that was pushed on Antoine with a consolatory copy of the recent *Encyclopédie* – Antoine, it is said, refused both, such was his attention to perfection and detail. Gallet, *Les architectes parisiens*, 24.

²⁹ Gallet, Les architectes parisiens, 25.

³⁰ This is now part of the Ecoles des Ponts et Chaussées on the rue des Saints-Pères. Carter, n.p.

³¹ Carter, n.p. Most of the Palais de Justice was renovated or rebuilt by Louis Lenormand, circa 1874 under Haussmann's grand scheme; I am unsure whether the elements designed by Antoine are extant, but Kalnein implies that they are. White, 21; Kalnein, 163.

³² Gallet, Les architectes parisiens, 25; Carter, n.p.

and gardens of the Palacio Alba y Berwick in Madrid.³³ In 1780, Antoine introduced to Paris the first archeological use of the Greek Doric order in his design of the temple-front portico for the courtyard chapel of the monastery of Révérends Pères de la Charité (rue des Saints-Pères).³⁴

In 1801, he built the Hospice de La Rochefoucauld as a private hospital for destitute clergy, magistrates, and military officers (Illustration 12).³⁵ Also in the 1780s, with Nicolas-Henri Jardin (1720-1799), Antoine designed the façade for the Hôtel de Ville in Cambrai; for Friedrich Salm-Kyrsburg he devised a house and garden for the Schloss Kirn-Kyrsburg in the Palatinate region.³⁶ Antoine was also commissioned to assist in the redevelopment of the Île de la Cité and the *place Louis XVI* in Paris, though this project was never realized.³⁷

Another of Antoine's country home designs, which included a garden design, was the Château du Buisson-du-Mai at Saint-Aquilin-de-Pacy, built in 1782.³⁸ Antoine built the Hôtel de Maillebois in 1783 and the Hôtel de Narbonne-Sérant in 1785 (Illustration 13).³⁹ In 1787, Antoine, a skilled financier, as proven with his work at the Monnaie,

³³ Carter, n.p.

³⁴ Ibid.

³⁵ This hospital was expanded in 1802 by Nicolas-Marie Clavereau and funded largely by the duchesse de La Rochefoucauld-Doudeauville. White, 250.

³⁶ It is worth noting that this is the same patron of Pierre Rousseau's 1782-1787 construction, the Hôtel de Salm in Paris. Pérouse de Montclos, *Guide du Patrimoine*, 275. The prince's satisfaction with Antoine's work, and likewise, Rousseau's consideration of Antoine's work, remain open for further study.

³⁷ Carter, n.p.

³⁸ Ibid.

³⁹ White, 107 and 109.

assumed supervision of the Paris tax walls, or *barrières* for the *Fermiers généraux*, from architect Claude-Nicholas Ledoux, who was reportedly overspending and was therefore removed from the project (Illustration 14).⁴⁰ From 1790 to 1792, a good time perhaps to have removed oneself from France, Antoine worked on constructing a mint building in Berne, Switzerland (Illustration 15).⁴¹ The above achievements help illustrate three noteworthy points about the person of Antoine: that after the commencement of the Paris Mint, he received several important commissions, as well as foreign recognition; that he was stylistically innovative (as we shall see with the Mint), yet archeologically sound (the temple-front monastery); and, furthermore, that he was an adept administrator, frugal with funds. Such perceptions permit a better understanding of this enigmatic figure.

The Revolution had erupted in 1789 and three years after, in 1792, Antoine was imprisoned, charged with having designed a secret tunnel beneath the Paris Mint that would allow the English to steal gold and escape via the Seine. This unlikely story being appealed, Antoine was released and returned to continue his much needed work on the barrières project.⁴² It was this need for his skills that most likely saved his head, and

⁴⁰ See Michel Gallet, *Claude-Nicolas Ledoux: 1736-1806* (Paris: Picard, 1980), for more information on Antoine's involvement in the tax-wall project.

⁴¹ Carter, n.p.

⁴² This is curious also because the tax walls became a focal point for public aggression against the ancien régime, and nearly all were torn down. Allan Braham, The Architecture of the French Enlightenment (Berkeley: University of California Press, 1980), 194.

perhaps his buildings as well. After 9 Thermidor (27 July 1794) Antoine retreated to his house in Touraine, in the Loire valley, where he spent a great deal of time.⁴³

In 1799, Antoine was made a member of the Institut de France, filling the position vacant after Boullée's death. At this time, Antoine and his wife lived in the apartment at the corner of rue Guénégaud and the Quay, on the *premier étage* of the Mint, a lodging that had been previously allotted to him under the *ancien régime*. His last few years were spent in the comfort of social recognition. At the time of his death in 1801, Antoine's oeuvre was extensive, though little of his work remains intact today. Although he may not now be considered one the great masters of the eighteenth century, his Parisian Mint influenced many leading architects, both contemporary and those to come. Antoine's niece married François Soufflot le Romain; his notable nephews include architects Louis-François Dubois and Jean-Jacques Huvé (1742-1808), who had assisted with the Mint, and, Antoine's biographer, Claude Thomas de Lussault.

Neoclassicism and the Enlightenment

The era and style in which Antoine designed is of critical consideration in understanding the Mint. The Monnaie might be categorized as, first, a mint-building in building type; second, Enlightenment in time-period; and, third, Neoclassical in building

⁴³ Gallet, Les architectes parisiens, 29.

⁴⁴ Ibid.

⁴⁵ Gallet, Les architectes parisiens, 29 and 358. I have also found Lussault's name spelled Lussaut.

style. These latter two categorizations, however, are less self-evident than the first and warrant further reflection. Let us consider the era of this building, the Enlightenment, before turning to Neoclassicism.

The Enlightenment was a philosophical era that penetrated the minds, arts, and politics of eighteenth-century France. It espoused a love of technological invention, empirical knowledge, science, and education, driven in France largely by the *philosophes*. The *philosophes* saw art as a potential tool for society's betterment; a didactic means to an end. Ouring the second half of the eighteenth century architecture as a conscious social process underwent dramatic changes toward more philanthropic-oriented results. It was not simply a formal development from a Rococo to Neoclassical style, but a more philosophical change that was both rapid and ubiquitous. Helen Rosenau argues that to understand design one must first look to the corresponding thought of the period, and only then to the architecture. During Antoine's time, architectural cues where taken from the *philosophes* and their *Encyclopédie*. Two ways this was translated into architecture was through *utilité*, which Antoine employed through the clarity of the organized plan, and through overt spoken purpose, or *caractère*, which will be discussed shortly.

Within this era of Enlightenment what was the style of the Mint? Many categorize it as Neoclassical, but what are the traits of this style? Enlightenment values, heavily influenced by recent archeological finds in Pompeii and elsewhere helped produce the

⁴⁶ Helen Rosenau, Social Purpose in Architecture: Paris and London Compared, 1760-1800 (London: Studio Vista, 1970), 10.

⁴⁷ Ibid.

style now called Neoclassicism.⁴⁸ A style that "aimed at recapturing the sober magnificence of the antique world and producing an architecture embodying the 'noble simplicity and tranquil greatness' which Winkelmann regarded as the outstanding qualities of antique art."⁴⁹ Its formal qualities have been described as, "solid, linear, and generally rather severe;"⁵⁰ in a word, it was a style as bold as the era under which it developed.

Rather than emerging explicitly from the trends of the Renaissance period or Palladian tradition, the Neoclassical edifice exhibits an overt interest in the architecture of antiquity. Unlike the Renaissance antique revival, however, the revival of the eighteenth century had a particular interest in archeological correctness, though in practice this varied widely. Neoclassicism incorporated the growing understanding of antiquity with a developing scientific approach. Publications of varying exactitude, recording first-hand marvels of ancient architectural sites, flooded the book market during the 1750s and 1760s.⁵¹

Peyre and de Wailly's Théâtre de l'Odéon is one building frequently considered Neoclassical (Illustration 3). It is sober in its execution: the rustication is indeed linear and severe, but it is proportional, not over-scaled; it exudes a calm in keeping with the

⁴⁸ Braham, 16.

⁴⁹ John Fleming, Hugh Honour, and Nikolaus Pevsner, "Neo-classicism," *The Penguin Dictionary of Architecture* (Baltimore: Penguin Books, 1966, 1967), 154.

⁵⁰ Ibid.

⁵¹ Berry Bergdoll, European Architecture 1750-1890, Oxford History of Art (Oxford: Oxford University Press, 2000), 15-18.

movement, and does not experiment with foreign ornament apart from that drawn from antiquity. Its façade is such that the viewer takes in the whole, not its parts – the effect is both noble and simple, as Winkelmann defined. Through overall monumental scale and the classical architectural reference of the portico, this theater prevails in "calm simplicity and noble grandeur."⁵²

In turning to the Mint we see a less stylistically pure example, a mixture of past and future. Certainly the Mint appears noble and simple in form, sober and magnificent, while drawing on antiquity for inspiration. But compared with the Théâtre de l'Odéon the Mint is in some instances somewhat more daring and at others less so. The rustication, as found on the side façade, seems at times over-scaled, and stretches the entire height of the façade. The Mint, moreover, does not exude calm as much as it speaks its purpose; the Seine face is grand and regal like that of a palace façade. Furthermore, Antoine drew not only on the ancients for his inspiration, but on his French forefathers as well, employing the traditional pavilion ends on the side façade; and, even more outside of strict Neoclassicism, the Mint references more recent Italian examples, with sky-silhouetted statuary atop the attic block of the Seine façade, the repeating aedicule, and in its organization referencing Italian palazzo design. What this demonstrates is not a failing on the part of Antoine – far from it – but illustrates the complexity of this structure, both formally and stylistically.

⁵² Marc Jordan: "Neoclassicism," The Grove Dictionary of Art Online, (Oxford University Press, Accessed 24 April 2005), http://www.groveart.com.

Because of its time-period most likely, some later scholars have considered this building an example of French Neoclassicism. And indeed, it does share some of these attributes; the Seine façade consists of an austere repetition of shallow relief, rendering it chastely ornamental. Yet Antoine was not trying to collapse social classes, as some of his contemporaries sought to do through architecture, but, rather, to symbolize class strategizing, with the king, perhaps, as grand accountant and head.⁵³

Thus the building is somewhat of a paradox, displaying a synthesis of elements, representing both the traditions of France and showcasing the Enlightenment fervor for advancement and science. The Mint was in ways stylistically and structurally innovative and deployed the interest in building expression of purpose, or *caractère*. The building references the past, formally complementing the east façade of the Louvre, while establishing innovative foundations for the future. Features such as the novel fire-resistant hollow tile vaulting system and skylights demonstrate Antoine's serious architectural response to the function of the building exemplifying the late eighteenth-century interest in building-purpose, character, and technology.⁵⁴ Although well-proportioned and cubic, Antoine's work still draws upon the seventeenth-century

⁵³ Rosenau, Social Purposes, 11.

⁵⁴ Gallet, Les architectes parisiens, 29.

tradition of French Academic Classicism,⁵⁵ as seen also in the public works of Gabriel, which incorporate classical elements as decorative ornament, not those believed to be literally inspired by the antique.⁵⁶

Even more challenging than determining the building's style is assessing its role: it is simultaneously a public monument in the sense that it produced the national coinage, and it is a royal monument in both its symbolic decoration and its psychological association with the crown and the royal treasury. While Enlightenment in its public role it retains elements of the *ancien régime*. It succeeds both in representing the crown well, in addition to serving the people functionally. The construction of a mint, therefore, in keeping with the ideals of the Enlightenment serves society as a visual means to a financial, or perceived financial, end.

Caractère: Building a Financial Façade

One component of architectural design during the Enlightenment, and one often seen in Neoclassical works, was the concern for expressed function or *caractère*, which sought to "express the ideas of both unification and differentiation distinctly, but

⁵⁵ Having never had a proper Baroque era of building, France built instead in what has been called the style of French Academic Classicism, which utilized amateur archeological inspirations within a framework of design standards and principles taught first under the apprenticeship system and later in the Académie Royale d'Architecture. The Academy was founded in 1671, after the east façade of the Louvre fiasco involving Gianlorenzo Bernini, to provide France with architects capable of overseeing the increasingly frequent large royal commissions. Joseph Rykwert, The First Moderns: The Architects of the Eighteenth Century (Cambridge: Mass: MIT, 1980), 13-15.

⁵⁶ Wend von Kalnein, Architecture in France in the Eighteenth Century (New Haven: Yale University Press, 1995), 162-163.

without exaggeration."⁵⁷ The Palais du Luxembourg of the seventeenth century with its flamboyant rusticated columns (see Illustration 6) might be critiqued for such exaggeration, whereas a Neoclassical edifice, seeking honesty in design, would shun rustication beyond its use for functional clarity. This truthfulness is demonstrated in the Monnaie, where Antoine employed rustication to enhance the sense of the building's solidity, to communicate its purpose, so requisite for a financial and industrial building.

The golden Dome des Invalides, in the critique of Abbé Marc-Antoine Laugier (1713-1769), lacked all sense of Enlightenment functionality, its "utter uselessness" never ceasing to shock him.⁵⁸ What Laugier and others sought from Enlightenment architects was a theory of building that responded to a social or utilitarian need and was expressed through a vocabulary of order and hierarchy – achievements often reached through the use of the Neoclassical style. The Monnaie, with its stark, geometric façade and bold columnar treatment, expresses this hierarchy both within its own features and within the greater urban architectural surround.

In considering the Monnaie, the concept of *caractère* is of particular interest. This building has an immediately identifiable presence; with its massive stones and heavy rustication, it is imposing and muscular. Its powerful façades are the visual embodiment of a secure building, so apropos to a mint. Theories involving the concept of character were born out of an interpretation of Aristotelian philosophy in which the external body

⁵⁷ Emil Kaufmann, Architecture in the Age of Reason: Baroque and Post-Baroque in England, Italy, and France (New York: Dover, 1955, reprinted 1968), 121-122.

⁵⁸ Marc-Antoine Laugier, An Essay on Architecture (1753), translated by Wolfgang and Anni Herrmann (Los Angeles: Hennessey & Ingalls, 1977), 91.

expresses the inner state of the soul, i.e., that the exterior of a building portrays its interior reality.⁵⁹ Boullée and others considered the use of *caractère* as a direct expression of function.⁶⁰ John Summerson described this era of architecture as based on the idea of *bienfaisance*, "meaning quite simply the desire to render society more reasonable and more humane," a kind of architectural benevolence.⁶¹ But bound with the idea of *bienfaisance* was the idea of *caractère*, which sought to achieve a common social goal through unity and clarity of purpose.

In his 1745 treatise, *Livre d'architecture*, Germain Boffrand (1667-1754) does not speak of style but of character. Boffrand was a primary proponent of the use of *caractère* both to inform the viewer of the building's function and for it to make an impression upon him.⁶² He was likewise one of the first theorists to speak of a type of narrative architecture where function was clearly expressed, moving away from the idea of architecture as poetry. Boffrand, rather, saw architecture as a kind of theater, both as the stage setting for society and as itself an actor presenting its "character" to the audience of passers by. Like an actor, the building was ornamented to better express its character.

⁵⁹ The concept of caractère was discussed in the Encyclopédie by Diderot and D'Alembert, and was encouraged in the Academy. Donald Drew Egbert, The Beaux-Arts Tradition in French Architecture: Illustrated by the Grands Prix de Rome (Princeton: Princeton University Press, 1980), 121. See Egbert's chapter on character for a fuller reading of how this architectural theory evolved.

⁶⁰ In 1746 Abbé Charles Batteux wrote for a wide audience about an ordered cosmos that included art, nature, and function. Burke's philosophical writings on the sublime and the beautiful had a profound impact on French architects once translated in the late 1750s, but whether Antoine read any such influential philosophical texts is open to speculation. The Encyclopédie had an exceptionally large architectural audience and in other areas of learning Antoine was an avid self-teacher. Rosenau, Social Purpose, 13; and, Melanie Parry, ed., "Burke, Edmund," Chambers Biographical Dictionary (New York: Chambers, 1997), 300.

⁶¹ Summerson, 106.

⁶² Kaufmann, 130.

The *caractère* of the building, Boffrand believed, should represent the patron's status only in so much as it utilizes the expressive nature of the building. The building therefore should have a rhetoric or persuasive communication, not unlike human "attitude, dress and gesture." For the Mint, this character was one of security.

For Jacques-François Blondel (1705-1774), caractère went beyond visual beauty, though he remained torn between a supremacy of aesthetics versus functionality. Blondel embraced Boffrand's ideas of character but added to them a Vitruvian philosophy of "practicality, solidity, and adornment," advocating exterior formality and interior practicality. In his 1753 Essai Laugier further advocated minimizing the concern for visual beauty with a concern for expressiveness and character. Nicolas Le Camus de Mézières wrote in his treatise of 1780, that "the style and tone must be relative to the character of the whole," both inside and out. For him caractère was supported by notions of harmony and proportion, and was contingent upon building type. These related theories, so prevalent at the time of Antoine's Mint construction, may well have influenced the ideology of the building.

⁶³ Caroline van Eck, ed., Introduciton, Germain Boffrand, Book of Architecture: Containing the General Principles of the Art and the Plans, Elevations and Sections of Some of the Edifices Built in France and in Foreign Countries (1745), David Britt, trans. (Burlington, VT: Ashgate, 2002), xix.

⁶⁴ Kaufmann, 131-133. This latter distinction the Monnaie achieved well.

⁶⁵ Kaufmann, 134.

⁶⁶ Nicolas Le Camus de Mézières, The Genius of Architecture; or, the Analogy of That Art with Our Sensations, introduction by Robin Middleton, translation by David Britt (Santa Monica: Getty Center for the History of Art and the Humanities, 1992), 93.

⁶⁷ Le Camus de Mézières, 72.

By means of its function as the producer of French national coinage, the *caractère* of the Mint expressed its public nature and a character of monarchical fiscal power. On the whole, the eighteenth century saw a shift of emphasis from private buildings to those of a public and secular realm.⁶⁸ The Mint can be considered both a public edifice in the way it marked the face of the city and a royal edifice in its perceived affiliation with the treasury. It was both the producer of coins to be carried by all and the destination of funds, the origin of a prevalent imperial iconography.⁶⁹ The building was both a start and finish for the idea and reality of French coinage, the place where it was distributed, returned, and saved. In this sense above all, it was a powerful and symbolic public, civic, and governmental edifice. In didactic fashion, these messages were related to the populace by means of a particular architectural character achieved through the visual nature of the façade.

Paris was also, as it had been for centuries, a significant trendsetter in Western Europe. 70 Antoine's Mint, therefore, was an aesthetic statement about the appearance of finance, financial institutions and government as a whole, and was successful enough that he was later commissioned to build another mint in Berne. 71 In a true representation of its *caractère*, the Monnaie shaped both the character of the city and that of the architect.

⁶⁸ Rosenau, Social Purpose, 26.

 $^{^{69}}$ As is common social tradition, French coins frequently bore an image of the king, a reminder of the great benefactor from which the currency emanated.

⁷⁰ Rosenau, Social Purpose, 27.

⁷¹ Minting facilities in Berne were moved to a new building in the early twentieth century, as Antoine's building was found inadequate in size. "Construction du bâtiment actuel de la Monnaie fédérale," Swiss Mint website (Accessed 29 April 2005) http://www.swissmint.ch/f/numismatique/150_ans.shtml>.

CHAPTER III

BUILDING DESCRIPTION

The Designing of a Mint

The plan of the Monnaie is trapezoidal with an acutely angled diagonal rear wall (see Illustrations 16, 17, and 18). The building was thus built to fit the unusual shape of its site, a constriction that figured largely in its design. The Mint consists of two primary exterior façades and three functionally different internal areas. Unique to the design of this Mint is its tripartite program of (1) semi-public administrative spaces, (2) industrial production facilities, and (3) private residential quarters (see Illustration 18). The rustication of corresponding façades serves to characterize the functions taking place within. The stately Seine façade represents the administrative functions of the building, the rue Guénégaud side façade corresponds to the minting ateliers and service entrance, and the interior court indicates the aristocratic hôtel. To

⁷² Francis Ambrière, Les Guides Bleus: Paris et sa proche banlieue (Paris: Librairie Hachette, 1963), 314.

⁷³ For a better understanding of minting, see Thomas J. Sargent and François R. Velde, *The Big Problem of Small Change* (Princeton: Princeton University Press, 2002), especially the section, "Supply side: the mint." They write, "The mint stands ready to convert gold or silver into specified coins at fixed prices" (Sargent and Velde, 8), but as we shall explore here, there is much symbolic meaning in the structure of a mint; ideologically, it is so much more than a simple factory.

The design as a whole seems reminiscent of the French hôtel, or palatial townhouse tradition, a common example of which is shown in Illustration 19. Adhering to the French hôtel type would offer visual references to the prestige of the already established seventeenth- and eighteenth-century hôtel tradition, while suggesting an innovative precedent for the character of this building. Hitherto, France lacked a specific mint-building architectural tradition; the style was not yet defined, and in this sense, malleable. The Conti site, once the location of a residential hôtel, was already predisposed to accommodate this type of hôtel-derived structure.

Prior to Antoine's Monnaie, Parisian mints had been built slowly in piecemeal constructions, as needed. During the Middle Ages, French minting facilities lacked a rigid architectural canon or typology. At times, these utilitarian operations were housed in part of the Louvre or other palace structures, and they followed the court as its location changed. These earlier palace-bound and purely utilitarian structures were unconcerned with producing a characteristic architectural image, as Antoine's Mint was clearly intended to do. It also was in the medieval period that the right bank began to flourish as the commercial center of Paris. In time, this economic heart of the city, containing the markets and natural trading port, became the home of the late medieval Mint, where it

⁷⁴ For further reading, see N. J. Mayhew and Peter Spufford, eds., Later Medieval Mints: Organization, Administration, and Techniques, The Eighth Oxford Symposium on Coinage and Monetary History (Oxford: B.A.R., 1988). See also the Appendix.

⁷⁵ David Nicholas, The Growth of the Medieval City: From Late Antiquity to the Early Fourteenth Century (New York: Longman, 1997), 94-95.

remained until the eighteenth century. Based on available evidence, it seems that early mint workshops were not yet designed specifically for minting nor were they designed with a particular aesthetic character in mind.

In the latter part of the fourteenth century, a purpose-built mint, or *Monnaie*,⁷⁶ devoted solely to the purpose of minting stood on the rue de la Monnaie of the right bank, perpendicular to the Seine and near where the Pont-Neuf is today. This Mint, which no longer survives, remained at this location for nearly four centuries.⁷⁷ This 1396 Mint, recorded as one of the grandest in Western Europe, is mentioned as containing a communal kitchen and garden, a chapel and cloister, as well as housing for the mint staff. Although information is scant, it appears there was an open passage or alley that ran through the center of the Mint (a seeming security issue), as seen in Illustration 20. Documents further record that there were shops rented along the streets surrounding and running through the Mint.⁷⁸

This 1396 Mint had been deemed inefficient and decrepit for centuries when plans for a new Mint began to be drafted in the eighteenth century. The new Mint project was opened up as a competition in 1767, allowing architectural competitors the chance to define a mint-building tradition specific for France.⁷⁹ This new building, as we

⁷⁶ Monnaie, the title of both money and the French Mint, has its origins in the Roman word for money, Juno's supposed surname, *moneta*. It was in Juno's temple, likewise, that Roman coins were minted. Denis R. Cooper, *Coins and Minting* (Aylesbury, UK: Shire Publications, 1983), 3.

⁷⁷ Fernand Mazerolles, L'Hôtel des Monnaies: les Batiments, le Musée, les Ateliers (Paris, H. Laurens, 1907), 3-4.

⁷⁸ Peter Spufford, "Mint Organization in Late Medieval Europe," in Mayhew and Spufford, 9.

⁷⁹ This might be compared to the east façade of the Louvre competition and how it served to boost a national style a century earlier.

have seen, was originally to be located within Gabriel's place Louis XV schema. This location would have inevitably tempered the appearance of the Mint requiring it to be complementary to Gabriel's noble façades (see Illustration 10).

Boullée's entry exemplified the hôtel design tradition with the *cour d'honneur* near the front of the plan, shielded and separated from the street by the customary stone screen, as seen in his entry drawing, Illustration 21. Antoine inverted this; the main court was placed toward the center of the plan behind a dense entry passage, or vestibule, which houses the landing for the grand stairs. Antoine's plan, with the main stair near the front of the building and within a large entry vestibule, more closely resembles the design of an Italian palazzo, its stylistic ancestor, than that of a French hôtel. This similarity can be seen in comparing Illustrations 22 and 23.

In Italian palazzi of the seventeenth century, the façade of the main body of the building was flush with the street, without the need for a screen as found in the French hôtel. In a few cases the entry vestibule led to a stair, which in turn led to the *sala* above at the *piano nobile* level (see Illustration 23).⁸⁰ Below this *sala*, at the building's front, the vestibule would lead inward to the inner court. In the typical French hôtel, however, the court and street are adjacent, frequently divided only by a shallow stone screen, just thick enough to separate the interior life from the public realm (see Illustration 22). In the

⁸⁰ Although Illustration 23 is a sixteenth-century example of a palazzo, I think it makes clear the similarity. For an excellent study on Italian palazzi, see Patricia Waddy, Seventeenth-Century Roman Palaces: Use and the Art of the Plan (Cambridge, Mass.: MIT Press, 1990). Stairs in Italian palazzi can be found acsending from the vestibule or the courtyard areas. For our purposes of comparison here, vestibule-staircase examples, such as found at the Palazzo di Spagna by Borromini and Palazzo Farnese, among others, demonstrate this style of Italian palatial townhouse. It must be noted, however, that in most cases stairs are found leading from the courtyard rather than the vesitbule.

French example, the stair is intimately connected to the *salon*, the focal point of the building, located near the rear and often opening to a rear garden (see Illustration 19).

Unlike the French building shielded from the street by a screen, the Italian palazzo greets the street frontally. Thus the Italian courtyard is not a space between the screen and main building, it is a hollow center in the mass of the building itself. In this aspect of the Mint design, Antoine appears to parallel the Italian example, though it should be noted that he had not yet traveled to Italy to see such works directly.

Overlooking the Seine Antoine's salon is located at the front of the building, as commonly placed in a palazzo. The salon placement designates this more formal face toward the city, while it situates the mechanics of the building to the rear.

Rather than being considered purely an *hôtel particulier*, Antoine's building-design perhaps strove to incorporate various programmatic elements of the hôtel tradition, yet did not attempt to duplicate the townhouse type in its entirety. The Mint is thus not simply of an hôtel or palazzo style, it is an innovative mix of traditions couched in a functionally practical plan. Although the possibility of Italian influence remains uncertain, the comparison is a valuable exercise when considering the Mint in terms of the organization of space.

A Listing of Parts

Concerning the main elements of the building, the Seine façade corresponded to the administration block, including the hôtel proper, whereas the chief side façade on the rue Guénégaud denotes the mint workshops and foundry area which lay behind it.

Requisite to the residential function, stables are located next to the eastern side façade and service entrance. A short façade, on the *impasse de Conti* to the west, has some elements that appear over-scaled when compared to those of the rue Guénégaud façade (Illustration 24). Legrand astutely notes that Antoine left pageantry to the quay-side façade, while the prosaic treatment of the rue Guénégaud façade served the workshops.⁸¹ The exterior of the Hôtel de la Monnaie remains cohesive despite its varying parts, each distinct from the next. The result of generating a different stylistic character for the two main façades and their separate functions is that the edifice appears larger and more grandiose than it may actually be.

Beyond the southwest wall of Antoine's Mint was the Hôtel L'Averdy, or Palais

Conti, the smaller of the two original hôtels. It was built by a young Jules Hardouin
Mansart (1646-1708) for Henri Guénégaud who, at the time of its 1669 commission, also

owned the larger hôtel. The young architect was noted as being inspired by the larger

⁸¹ J.-G. Legrand and C.-P. Landon, Description de Paris et de ses édifices (Paris, 1806), 82.

hôtel, built by his great uncle, an old François Mansart, circa 1659 (Illustration 25).82 The Hôtel L'Averdy became the residence of François de L'Averdy, Inspector General of Finance, Louis XV's senior finance minister, who lived here until the Revolution.83 Although a small hôtel, this building comprised a considerable part of the Mint's site; in 1795 it was incorporated into the greater minting workshop area to house the Master Engraver's and gold refining workshops, abandoning, at least in part, its former residential function (see Illustrations 16 and 17).84 At the time he designed the Mint, Antoine is noted to have thoroughly examined the Hôtel L'Averdy, its style making a significant impression upon the somewhat novice architect.85

Arrangement of the Seine Façade

The Seine façade, the primary façade of the building, is in length roughly 390 feet (117 meters) (Illustration 26). It is grand and imposing, explicitly setting portraying the

⁸² Bertrand Jestaz, "La première oeuvre connue de Jules Hardouin-Mansart: Le Petit Hôtel de Guénégaud, dit de Conti," *Bulletin Monumental* 158, no. 3 (2000): 217-237.

⁸³ Indeed it seems quite fitting for a finance minister to live next to the national Mint. "Palais Conti – Hotel de Laverdy," *Monnaie de Paris* website (Accessed 26 March 2005),

http://www.monnaiedeparis.com/fonds_doc/plaverdy.htm. There is some conflicting evidence concerning this small hôtel and who lived there. Considered by some the residence of the Mintmaster at one time, the hôtel may also have been inhabited by Permon at the turn of the nineteenth century (parents of Abrantès, later associated with Bonaparte), and by the surgeon Larrey, who lived there from 1805-1832. Ambrière, 316.

⁸⁴ See Illustration 16. "Palais Conti - Hotel de Laverdy," n.p.

⁸⁵ A lineage seems to emerge: F. Mansart inspires the work of J. H.-Mansart, who in turn inspires that of Antoine. It is worth further consideration to what affect the exterior appearance of this structure had upon Antoine's design of the connecting Mint structure. Braham, 120. N.B., some confusion continues to reign in scholarship as to which Mansart built the Hôtel L'Averdy.

prestigious and symbolic function of the building over the industrial function of its interior. The Ionic order is restricted to the central block, seen in Illustration 27, following the tradition established by Jules Hardouin-Mansart. 86 The projecting avant-corps of this façade consists of five central bays, with arcades below and Ionic columns above, capped with a somewhat unprecedented French use of a rectangular attic block surmounted by six allegorical statues: Prudence by Jean-Baptiste Pigalle (1714-1785), and Law, Force, Trade, Abundance, and Peace by Louis-Philippe Mouchy (1734-1801) and Félix Lecomte (1737-1817) – all of which can be related to finance in some way (Illustration 28).87

With its formal and stately composition, this façade has as its focus something similar to an Ionic portico sans pediment. The "missing" pediment actually appears on the reverse of this façade, on the north-side elevation of the principal court shown in Illustration 29. This instance in the construction of the Mint raises questions as to Antoine's approach to design; in many cases he experimented with architectural convention, by displacing, for example, the traditional pediment in this instance and exaggerating rustication in another. An additional deviation from tradition was the main façade's absence of terminal pavilions, which usually capped the ends of a long façade, as seen in the east façade of the Louvre. The Mint is distinctive in terms of hierarchy,

⁸⁶ Robert Neuman, Robert de Cotte and the Perfection of Architecture in Eighteenth-Century France (Chicago: University of Chicago Press, 1994), 125.

⁸⁷ Ambrière, 314; Legrand and Landon, 85. The use of an attic topped with silhouetted statues is more reminiscent of Italian tradition than French.

concerning both the local built environment and greater urban planning.⁸⁸ The Seine façade, the primary focus of the building, was given the most dignified and impressive treatment – an effect accomplished by the visual density of the *avant-corps* contrasted against the long repetition of the flanking elevations; the whole, resting on a heavily rusticated base, was united.

Antoine planned a heavily rusticated basement level that not only would have allowed access to and from the water in a pragmatic sense, but would have visually grounded the building as well. From extant drawings of the time, such as Sir William Chambers's rendering seen in Illustration 30, among others, including a drawing by Hubert Robert, it appears this basement façade was indeed built, though it has not survived to the present day.⁸⁹ Without this feature the front elevation lacks the intended grounding feature, perhaps warranting potential criticism for the building.

The Side Façade

The side façade located on the rue Guénégaud forms an acute angle with the Seine façade at its northeast corner. It is low and dense, hugging the street with bold horizontal massing and deeply grooved rustication shown in varying degrees in

⁸⁸ Eighteenth-century building philosophies of order and symmetry would guide the founding principles of the Ecole des Beaux-Arts in the following century.

⁸⁹ Since the time of Antoine's construction the banks of the Seine have rebuilt, and this perhaps may have played a role in the demolition of the basement level.

Illustrations 31 and 32.90 Here, the effect is less palatial and more industrial – a particularly eighteenth-century aesthetic – visually communicating the workshop function beyond this wall. Stylistically, it seems to share more in common with emerging revolutionary works, such as Ledoux's. Like the Seine façade the rue Guénégaud façade consists of a horizontal mass punctuated by a central bay, which is similarly graced by allegorical statuary, the Four Elements by Duprez and Jean-Jacques Caffieri (1725-1792) (Illustration 33).91

In keeping with Antoine's rearrangement of architectural elements, it is this façade, not the Seine façade, that employs traditional French pavilions projecting at both ends (compare Illustrations 34 and 30). 92 For each of the building's façades the depth of rustication appears directly correlated to the function represented in that wing of the building: the Seine façade is most commanding, followed by the side façade with its intimidating heavy massing, and, lastly, the more intimate interior court, whose rusticated joints have half the depth as those stones on the Seine façade.

⁹⁰ This façade appears darker than the Seine façade, perhaps due in part to the lower light level from the close-knit street quarters, and perhaps because of more infrequent cleanings than the main façade resulting in a somewhat bolder appearance (compare Illustrations 31 and 34).

⁹¹ Ambrière, 314.

⁹² Legrand and Landon, 85.

Vestibule

The Seine façade's formal entry from the quai de Conti leads directly into the entry vestibule (Illustration 35). Here, in a tunnel-vaulted passage, stands Antoine's unheralded forest of columns beneath rosette-studded coffering, displayed in Illustrations 36 to 38. Dark and barrel-vaulted, the vestibule houses twenty-four partially fluted Doric columns. The entry allows passage to the grand stair at the west and on the main axis to the principal court with workshops beyond to the south. Entered from the vestibule, the uniquely grand imperial staircase contains sixteen Ionic columns and leads to the grand salon of the premier étage (Illustrations 39 and 40). As will be discussed later, this stair was a significant achievement in its own right, and may have influenced Ledoux's Châtaeau de Bénouville stair (Illustration 41). Antoine's was certainly one of the grander staircases outside of the court.⁹³

The salon is a double height room with twenty magnificent Corinthian columns supporting an octagonal gallery that encircles the space (Illustration 42).⁹⁴ The lavishly gilded salon, one of the parts of the building finished later, was decorated in the sumptuous style of Louis XVI and can be compared to the style of Antoine's close

⁹³ Legrand and Landon, 84. Gallet notes that Antoine had built several other notable staircases suggesting that this was a feature for which he was particularly well regarded. Michel Gallet, *Stately Mansions*; Eighteenth Century Paris Architecture (New York: Praeger, 1972), 82.

⁹⁴ Thiéry casts suspicion on the date of the salon and grand stair. Luc-Vincent Thiéry, Guide des amateurs et des étrangers voyageurs a Paris, ou, Description raisonnée de cette ville, de sa banlieue, & de tout ce qu'elles contiennent de remarquable (Paris: Chez Hardouin & Gattey, 1781), 2, 473.

friend Charles de Wailly. Legrand aptly stated that this room, in all its grandeur, seemed best suited for a concert or a ball. Above each of the four doors in this hall is a medallion that bears the initials of one of the four senior officials who served in the organization of the Monnaie (and possibly in its commission): François de l'Averdy (Minister of Finance), (Marquise de) La Boulaye (Boulais) (intendant des Finances), Jean-François Joly de Fleury (administrateur general des Finances), and François d'Ormesson. To the east of the salon are various apartments and cabinets, where allegorical figures and putti are posed with cornucopias overflowing with coins. 8

The Main Axis and Ateliers

From the vestibule the primary axial path leads to the south. The principal elevation on the south side of the main court is curved, has a central pavilion, and leads to the various quarters of the minting facility. The original and primary foundry room is

⁹⁵ The Louis XVI style suggests a later completion date, which accords with evidence that the building façade was finished first and the interior not completed until 1785, after Louis XVI's reign had begun and met with shifts in stylistic trend. Braham, 120. The salon was minimally renovated to house the Monnaie museum in 1827, which involved simply adding appropriate furnishings, and it remained in that condition until the recent relocation of the museum into the old foundry quarters. The ceiling, also of a later nineteenth-century date, was painted by Jean-Joseph Weerts (1847-1927). Ambrière, 315.

⁹⁶ Legrand and Landon, 84-85. At the time Legrand was writing on the Mint, the *salon* was kept as a laboratory of mineralogy by Balthasar Sage, which included a large circular stage and was run as a small school; illustrated in Gille and Berry, 210.

⁹⁷ Ambrière, 315.

⁹⁸ From the *salon* six doors are aligned enfilade, connecting the apartments of this wing. Napoleon III took these apartments as one of this various lodgings during his reign; his insignia now marks the overdoors of these festooned interiors. I was fortunate enough to visit the stair, *salon*, and apartments to the east of the *salon*, by private tour, upon my visit to the Monnaie in 2003.

on this main axis with the *cour d'honneur* and currently houses the Mint museum. This room, the *salle des balanciers*, is sixty-two feet (18.6 meters) in length and thirty-nine feet (11.7 meters) wide, with a heavily beamed ceiling supported by engaged Tuscan pilasters (Illustrations 43 and 44). Antoine's innovative skylights covered this great hall, allowing the screw-press workers below access to much needed day-lighting. Light would be a premium in such a facility and skylights would allow for it without, perhaps, creating the same security issue that peripheral windows might. Such security concerns likewise prompted Sir John Soane (1753-1837) to develop innovative sky-lighting for his Bank of England in London (1788-1833).

The foundry room terminates at the south in a sizable apse, designed to be visible from the main room (see Illustration 18, legend numbers M and N). From this apse presides the impressive statue of Fortune, by Mouchy, a focal piece and concluding point for the main axis (Illustrations 45 and 46).⁹⁹ The manufacture of coins was distributed between three main workshops and their various rooms: the *ateliers des Espèces*, multiple rooms of various names where the molten metal was cast, rolled, and cut into workable

⁹⁹ Legrand and Landon, 84-85. Whereas in the Renaissance, Fortune may have implied a certain aspect of changeability or worldly fickleness, here, Fortune may represent fortune in the sense of wealth. The word fortune has a double meaning in both English and French: *fortune*, destiny, and *fortuné*, wealthy. She may symbolically imply a perception of the treasury's achieved stability, or positive fortune. A more cynical reading might be that Fortune, in her finicky role, presided over the workers to abash indolence.

blanks, or discs prepared for striking; the *atelier du monnayage*, a vast room in which coins were struck (discussed above as the *salle des balanciers*); and the *atelier des médailles*, where medals were produced.¹⁰⁰

The Cour d'honneur

Antoine united this building of many parts and many faces at its central point, the principal courtyard, or *cour d'honneur*. The primary court is the heart and center of the Mint, measuring 110 feet by 92 feet (roughly 35 by 30 meters). The court's north elevation seems to correspond in its ornamental treatment to the *salon* within, employing the degree of architectural detailing one would expect in a residence, such as aedicule surrounds lacking in other parts of the building (Illustrations 47, 48 and 49). Peculiar here is the pediment above, which, one might think, should be on the exterior front of the building in place of the attic.¹⁰¹

This main court leads to two smaller service or side courts on the cross-axis; the surface treatment there is understated with sharp corners and pristine detailing, displaying the cool austerity of industry, demonstrated in Illustrations 50 and 51. These,

¹⁰⁰ Ambrière, 315. This last mentioned workshop made medals or commemorative medallions and was housed in the Louvre from circa 1609 to 1807, after which this specific workshop was transferred and housed in Antoine's Mint. The rooms are so many on the ground floor that they cannot all be listed here (see Illustration 18 for a legend).

Within the pediment two allegorical figures flank a clock; at the feet of the right figure are smoking caldrons, and at the feet of the left figure is a screw-press in bas-relief (see Illustration 49).

in turn, originally led to smaller interior courts, some of which also led to the street. 102

The smaller courts of the building would have allowed for exhaust from the processing of metal. It is worth noting that on considering the multiple entries to this structure and its many courts, the building, for a mint, seems relatively open and less secure in design than might be expected. In comparison with the medieval Mint, however, which had a street running through the center with shops for lease, this design would indeed appear more secure.

As mentioned, the southern elevation of the principal court curves in a prominent arc, decorated with the busts of kings Henri II, Louis XIII, Louis XIV, and Louis XV, all of who played a significant role in the history of French coinage (Illustration 52). The central pavilion of this concave façade demonstrates an interest in pure form and a love of proportion, as seen in Illustration 53. The pavilion is accentuated with four Doric columns and surmounted by the statues of Abundance and Good Faith (Illustration 54). The Trom Abundance's cornucopia issues forth a profusion of coins while Good Faith sits with her dog. The two flank a crest where three festooned fleurs-de-lis are capped by a crown, longtime symbol of the French monarch—rich symbolism regarding finance and royalty, which are closely-knit.

¹⁰² Unfortunately, due to the limited size and nature of this study, a full account of minting workshops, mineralogy, and numismatics, cannot by fully explored here.

¹⁰³ Gille and Berry, 202; Ambrière, 315.

¹⁰⁴ Legrand and Landon, 85.

¹⁰⁵ Good Faith appears to be holding a scale, but this is unclear. If so, it is interesting that the scale would be associated with Good Faith, perhaps boding well for the Mint's profit.

Extending from both sides of this bay is a covered passage that led to the various workshops and two secondary courts (Illustration 55). The principal court creates cohesion by centralizing the structure and clarifying the main axis, a variation on the theme of hôtel courts. Here the curved elevation consists of nine doors splayed across the concave façade as shown in Illustration 56. Above the four smaller doors hang original plaques with the directional inscriptions: "Bureau des monnayeurs," "Entrée du blanchiment," "Entrée des fondeurs," "Chambre de la délivrance" (des espèces frappées). With this signage Antoine has created a sense of easy passage through the building. Although the reality of navigating was nonetheless through a complex network of passages, his design gives a perception of clarity. With its center in the court, the edifice is an exercise in the clarity of the organized plan, an accomplishment indeed when considering the mêlée of different tasks taking place within the structure. 107

Foundry Apse

The middle door of the Seine façade aligns axially with the central door of the curved court façade; the axis terminates in the apse, from which Fortune presides over the main foundry (see Illustration 43). Reminiscent in placement to a statue of the Virgin in a church, inspiring the faithful to piety, here, Fortune motivates the workers to

¹⁰⁶ Gille and Berry, 202.

¹⁰⁷ Such clarity was espoused by architects of this time, such as Blondel and Laugier; here it additionally served to increase the appearance of building size.

prosperous diligence. This voluptuous statue stands as the representative symbol and taskmaster of the edifice, the fecundity of the foundry (see Illustration 45).

In this apse Antoine again employed the curving splay of doors as a guide, repeating this favored theme. This smaller arc mimics its precursor in the court, and, even more than in the courtyard, an illusion of grand building size is generated. Whereas one might expect this kind of planning device toward the front of a building, leading to lengthy passages, Antoine employed it here perhaps to create the illusion that the building extends much further beyond this wall.

Each door is labeled with a direction above it, naming the workshop area to which it leads, "Espèces," "Flaons," "Dépôt," and "Forge," thus serving both as building guide and an orienting device. This functional clarity is deceptive, since the apse is actually near the rear of the building. Due to the odd shape of the site, the westernmost doors of the apse are mere yards from the outer edges of the principal building wall, yet the apse creates an appearance of further depth and grandiosity. This is similar to the aesthetic treatment of the exterior of the building, where, for example, rustication is exaggerated to induce a more formidable appearance.

The curving stylistic feature, popular in eighteenth-century designs, was put to use masterfully by Antoine, who enhanced the appearance of size and clarity in this building. It was also a clever use of planning that helps make sense of an otherwise troublesome trapezoidal site-plan. Antoine efficiently utilized the main axis, though it

¹⁰⁸ Gille and Berry, 203.

was really quite short, to deflect movement off the main path and direct it obliquely toward the majority of rooms located off-axis (see Illustration 18).

French architectural historian Michel Jantzen discusses the significance of the court d'honneur and the central axis of the building. Just beyond the central door of the court was the principal workshop area – a position that he suggests almost sacralizes the activity of minting coins (see room N, Illustration 18). 109 This high-ceilinged hall has restrained architectural detailing and moldings. It was this hall, the salle des balanciers, that housed the technologically advanced and prized eighteenth-century German minting machine, the screw-press (Illustration 57). 110 By centralizing this room on the plan's principal axis, Antoine not only glorified the royal act of minting, but also the advanced technology at work there, as it was commensurate with an architectural Enlightenment interest in utilité.

Rustication

An unprecedented Parisian civic structure, the Mint's primary expression of function through symbolism is seen in Antoine's use of exaggerated rustication. Two intriguing aspects of Antoine's Mint design include his stripping away of long-established

Michel Jantzen, "L'Hôtel de la Monnaie," Monnaie de Paris website (Accessed 28 July 2004)
http://www.monnaiedeparis.com/fonds_doc/michel_j.htm>.

Although perfected by the Germans, the screw-press was first designed under the patronage of French king Henri II (r.1547-1559) (Sargent and Velde, 54), hence the significance of having Henri II's bust among those kings represented in the main court. For more information on the development of the screw-press, see Sargent and Velde, "The screw press."

forms and ornament, and his unique incorporation of unusual elements. On the rue Guénégaud façade, windows are cut directly into the surface of the wall without a framing aedicule or even a simple molding. The absence of transition between wall and puncture creates an almost brutal utilitarian appearance.

In contrast, the interior court has quieter rustication with aedicules that give the appearance of a traditional hôtel. Antoine provided the fenestration with bands of stone framing, thus softening the effect of the rustication on the whole of the surface and drawing attention to the *salon* windows on the *premier étage* (see Illustration 48). The Seine and side façade's *avant-corps* are both articulated with bulbous cushion rustication, the round-edged variety of smooth rustication (Illustration 58), whereas other parts of the edifice are treated with the sharp-edged variety of smooth rustication (see Illustration 53). These gradations are subtle, but the overall effects are impressive.

Rustication plays a particularly symbolic role in the case of a mint, which by its type merits a fortified appearance. Rustication became an inseparable element of eighteenth-century French civic building, seen particularly in the works of Ledoux. In Antoine's building, the characterization of each part of the Mint was achieved through

The Monnaie comes from an evolution of rustication development in Paris following influential designs such as the Théâtre l'Odéon and the Palais Luxembourg. The Mint may be thus considered a tremendous distillation of French rustication in its many types and uses so admired by the French, and as appropriate to this specific building character and function.

Although the French particularly admired the use of rustication, the technique was derived from Italian examples and early encouraged by Marie de' Medici during her reign in seventeenth-century France. Sir Anthony Blunt, *Art and Architecture in France: 1500-1700*, Pelican History of Art (New Haven: Yale University Press, 1953, revised 1999) 112.

differing degrees of rustication as he created a hierarchy of façades, responding to the psychological impression he hoped to make upon the viewer.

As touched upon earlier, the most significant façade seen from the farthest possible distance was the Seine façade, boasting the deepest rustication with the depth of the projecting blocks measuring 2 inches (5 cm); the east side façade is less deeply rusticated, measuring 1.2 inches (2.8 cm); the primary court has the most shallow rustication, measuring only 1 inch (2.5 cm) deep.¹¹³ While these may be subtle gradations, direct measurement helps dispel the impression that the rue Guénégaud façade has the deepest rustication, as it appears because of sheer massiveness accentuated through the optical illusion of foreshortening. Overall, the side façade is physically smaller than the Seine façade, but although its size is small, its scale is monumental – a combination of weighty rustication, reduced ornament, and pronounced horizontality.

The industrial side façade, with its correlation to the physical gold within, thus appears more fortified than the Seine façade, which corresponds to a more administrative function. It would be most satisfying to view this side façade from a distance, but because of the narrowness of the street – the same today as it was in the 1760s – this façade can be seen only from oblique angles; and, perhaps, this foreshortened view of it helps intensify the monumental effect (see Illustrations 31 and 32). A view of the side façade presented in Antoine's drawing, Illustration 34, is hardly the view offered in his day or ours.

¹¹³ Measurements were taken on site by the author.

The inner court, contrasted with the rustication found here, seems comparatively domestic and scaled to fit the more intimate atmosphere of the enclosed space (see Illustration 47). Extending from the main court, the two side courtyards are austere. The rustication is flattened against the wall in a planar treatment that appropriately expresses the utilitarian function of this part of the building.

CHAPTER IV

THE HÔTEL DE LA MONNAIE: COMMISSION AND CONSTRUCTION

The Financial State of Late Eighteenth-Century France

As France's economy grew, so too did her need for currency. Scottish financier

John Law was brought to Paris to introduce paper money, establishing a "General Bank"
in 1716, which in 1718 became a Royal Bank with the government as primary
shareholder. The attempt to introduce paper money to France was disastrous.

Mistrustful nobles demanded withdrawals of large sums in gold and silver rather than in
paper shares; not being able to match this rapid demand, the system crumbled, inciting
civil disorder. John Law made a hasty flight from the country and coinage again prevailed
in Paris. The Even in 1781 Louis-Sebastien Mercier wrote of the continuing complaints

¹¹⁴ A. Del Mar, Money and Civilization: or, a history of the monetary laws and systems of various states since the dark ages, and their influence upon civilization (London: George Bell and Sons, 1886), 233-235. Alistair Horne, Seven Ages of Paris (New York: Alfred A. Knopf, 2003), 146.

¹¹⁵ Del Mar, 240-241. See also Sir John Herbert McCutcheon Craig, The Mint: A History of the London Mint from A.D. 287 to 1948 (Cambridge: Cambridge University Press, 1953); and, Horne, 147.

about Law's failed system, indicating the distrust that continued toward the current economic system; it would not be until Bonaparte that another Banque of France would be established.¹¹⁶

Since paper money remained untenable, coin was required to fuel the burgeoning luxury economy, and the need to produce coinage necessitated a capable foundry.

Furthermore, a new Mint to keep up with monetary demand might also restore faith in the economy and the state. Antoine's Monnaie was a project long desired and discussed by the court, with formal planning starting in the 1740s. In 1769, just a few years into the construction of the Monnaie, Paris was embroiled in civil disputes over the price of bread. Again in 1775, riots over high prices broke out in what has popularly been called the "flour war." The high cost of living was great enough to enrage a nation. There were, nevertheless, monumental plans for the city, including a desire for a new mint; beautification projects were continuously underway.

By the time of Louis XV's death, despite many contributions to the beauty of Paris, including the Monnaie, he was chiefly remembered for extravagancies in money and incompetence in war. Louis XVI thus ascended the throne in a period of economic

¹¹⁶ Louis-Sebastien Mercier, Tableau de Paris. 1782-83 (Reprint, Genève : Slatkine Reprints, 1979), 51-52; Horne, 147.

While other eighteenth-century countries were turning to paper currency, it is important to understand why a coin foundry was still an essential building project for France in the 1760s. Alfred Cobban, A History of Modern France: Old Régime and Revolution, 1715-1799. Vol. 1 (Baltimore: Penguin Books, 1957), 22-25.

¹¹⁸ Mercier, 113.

¹¹⁹ About Paris Mercier prophesied in 1781: "I see this city flourishing, but at the expense of the nation as a whole." Mercier, 33.

disarray.¹²⁰ Regardless, the city's population swelled. A mint, however bankrupt the greater nation, represented a role of prosperity as the physical producer of public wealth, the coin. Despite reservations over royal expenditures, the Mint was inevitably to be a landmark and monument to economic glory, a symbol, even if a hollow one.

Urban Planning and the Growth of a City

From a population increase that accelerated throughout the eighteenth century, Paris was growing; city planning was continuously under discussion, and the existing city under re-organization in an attempt not to move the city's wall further out yet again (see Illustration 8). Sources cite growth from somewhere near 500,000 people to one million by the end of the eighteenth century. Faubourgs, or suburbs, were growing exponentially, and the city was expanding rapidly westward, as seen in the place Louis XV

¹²⁰ Cobban, 28, 120-123; and, George Rudé, The Crowd in History: A Study of Popular Disturbances in France and England, 1730-1848 (London: Lawrence and Wishart, 1964, 1985).

¹²¹ It was this growing population, an exceptionally large proletariat without capital, which would become such a key factor in the Revolution. Hilaire Belloc, Paris (London: Methuen, 1907), 376. Pierre Couperie, Paris Through the Ages: An Illustrated Historical Atlas of Urbanism and Architecture (New York: George Braziller, 1968), n.p. Urban schemes were pondered by Jacques-Germain Soufflot (1713-1780) and Pierre Patte (1723-1814), who considered destroying Les Halles and razing the Bastille, renovating the Île, and relocating the Hôtel-Dieu to the countryside. One of the only major urban projects both undertaken and completed in the eighteenth-century was the construction of the place Louis XV. Couperie, n.p. See also Richard Louis Cleary, The Place Royale and Urban Design in the Ancien Régime (Cambridge: Cambridge University Press, 1999).

¹²² Jean Chagniot, Nouvelle Histoire de Paris: Paris au XVIIIe siècle (Paris: Hachette, 1988), 218.

project. Some, however, might consider the roughly fifty-year period during which Louis XV reigned a considerably slackened building period when compared to that of his predecessor Louis XIV.¹²³

After Louis XIV's death in 1715, multitudes of courtiers followed the example of the Regent, the Duc d'Orleans, and returned from Versailles to Paris for a life of lavish gaiety. 124 Development of new *hôtels particuliers* overflowed into the districts of St-Honoré, Gaillon, St-Lazare, Les Porcherons, and Le Roule. After 1763, Louis XV continued to try to enhance the prestige of the city while attempting to limit its outward growth, yet the city spilled into old swamplands, filled sewers, riverbeds, and previous lumberyards.

Population rise was met with a rise in rent and rapid and hasty building construction. 125

The English traveler, the Reverend William Cole, writing of the city in 1765, echoes the King's sentiments – that Paris remained largely a dark and gloomy city, with cramped streets, and though well paved, poorly lit; it remained the vestige of a medieval city. 126 Certainly, Cole's interests were not much concerned with the art of building, aside from the expected tourist's nod to famous monuments; he laments Paris's

¹²³ Louis XVI, furthermore, ruled for such an abbreviated period that it is difficult to assess his building success, and, though construction picked up in the early nineteenth century, the Revolutionary period was likewise a stale time for construction. Horne, 151.

¹²⁴ Cobban, 20.

¹²⁵ Couperie, n.p.

¹²⁶ The Reverend William Cole, A Journal of my Journey to Paris in the Year 1765, edited by Francis Griffin Stokes (London: Constable, 1931), 46. While in Paris, Cole's residence overlooked the Collège des Quatre Nations, which he described at length. He notes also the rue Guénégaud, where he procured a coach, but says nothing of the Hôtel de Conti. Cole, 37, 290.

"contemptible" buildings of stone which "altogether have a very mean Appearance." He does note for us that, whatever its merit, the riverside quay was both broad and handsome.

Cole complains that the city's few notable buildings sat upon the banks of that "dirty nasty Ditch of a River." His opinion that the wings of the Collège projected too far into the street might shed light upon the question of the width of the quay and the distance of these building-fronts to the Seine, as it appears that the bank of the river and the road width were in some state of flux. The Seine, evidently, had not yet acquired its noble architectural definition, as Illustrations 59 and 60 portray. Bridges were still few and under construction, and the river itself was not yet architecturally contained. This helps illuminate Antoine's interest in designing for the Mint a riverfront façade below the street-level. The unfinished state of the riverbank may have encouraged Antoine's design of this level, as the connection of the Mint to the Seine became a significant aspect of the building's greater design.

¹²⁷ Cole, 45-46.

¹²⁸ Cole, 104-105.

The Commission for the Mint

The history of Antoine's Mint begins with the construction of the earliest mints of Paris. 129 As a symbolic economic edifice, the Parisian mint holds a special place in the development of its urban environment, first manifest in the Middle Ages and brought to fruition during the age of the Enlightenment. The old Mint on the rue de la Monnaie had been marked for replacement since the time of Louis XIII, but for various economic and political reasons it had remained the primary coin foundry. 130 It was not until the eighteenth century that the dilapidated medieval Mint of Paris was once again considered for a long-overdue upgrade. 131

Following the Peace of Aix-la-Chapelle, which ended the War of Austrian Succession, the Bureau de la Ville de Paris, wishing to honor the king, commissioned a statue in 1748, which subsequently required a square to be situated in. This square, the place Louis XV (1757-1772), took priority in the architectural reinvigoration of the city. The place began under the architectural direction of royal architect Ange-Jacques Gabriel

¹²⁹ Currently scant information is available to describe the bourgeoning mercantile economy of medieval and Renaissance Paris and the Parisian Mint. This information, gleaned from a variety of sources and compiled in the Appendix, includes texts on coinage, economics, and mint development, and considers the image such mints gave to the royal city. Also briefly reconstructed in the Appendix is a social history of the many mints of Paris, from their appearance in the early Middle Ages through the eighteenth century. In one of the few English-language works on mints of medieval Europe, the editors explain that despite growing interest and scholarship regarding medieval mints, very few publications have resulted. Mayhew and Spufford, Preface, 3.

¹³⁰ Gallet, Les architectes parisiens, 24.

¹³¹ Germain Brice, Description de la ville de Paris et de tout ce qu'elle contient de plus remarquable, 1752, vol. 4 (Paris: Librarie Minard, 1971), 495 (180-181, 1752 edition).

at a site west of the Tuileries which had belonged to the royal estates, a site chosen by the King.¹³² Even in the early plans, a mint building was considered part of this greater square design.

From the outset, the *place Louis XV* project was under the aegis of the crown.

The Bureau de la Ville de Paris approved the plan, along with the office of Bâtiments du Roi. At the Académie Royale d'Architecture in 1748, the project was announced as a competition, progressing later under the watchful gaze of the Marquis de Marigny,

Directeur Général des Bâtiments du Roi. 133 Gabriel was entrusted with the project and began work in 1755, with the western colonnade extending on the rue Boissy-d'Anglas. 134 Antoine, it seems, was employed under Gabriel from the outset of the *place* project, and was likewise already working on the Mint design while it was part of Gabriel's larger schema. 135 Rand Carter suggests that Antoine was influenced by Gabriel's style, seen perhaps in the elegance of the Mint's final façade design, despite the uncertainty in how closely they worked together or if Gabriel was at all a mentor to Antoine. 136

¹³² Christopher Tadgell, Ange-Jacques Gabriel (London: A. Zwemmer, 1978), 175.

¹³³ Tadgell, 175-176. In consideration of these origins I consider Marigny the primary patron of the Mint, but it is difficult to determine the ultimate genesis for the project's conception and its commissioning body. Because Marigny supervised this project in his royal post, it seems likely that he likewise played a large role in the development of the Mint; this speculation is based largely on his correspondence in which he mentions the Mint's progression. Furthermore, in considering the royal offices that oversaw and approved this project including the Mint, there seems a likely connection with royal funding as channeled through the Bâtiments du Roi bureau and Marigny.

¹³⁴ Gallet, Les architectes parisiens, 24.

¹³⁵ Ibid; and, Carter, n.p.

¹³⁶ Carter, n.p.

The *place* commenced in 1757, was inaugurated in 1763, and completed in 1772 (just prior to the completion of Antoine's Mint). The *place* became a new focus of the city; it was considered a masterly conception, a demonstration of modern and mature city planning. The *place* was a functional and conceptual crossroads; it also was an urban stage. The design of the *place* was innovative, as Gabriel had conceived the unprecedented square as a palace forecourt bordered by moats. To the north are Gabriel's hôtels, inspired by the colonnades of the Louvre and the Place Vendôme, the functions of which fluctuated, being used variously as aristocratic housing or for the storage of aristocratic furnishings. ¹³⁸

Marigny, the younger brother of Madame de Pompadour, was the patron of many structures. In 1754, with the help of his sister, Marigny had succeeded Philibert Orry in the office of Directeur Général des Bâtiments du Roi, the office through which the King's patronage for building was executed. All architects employed by the crown worked through and with this Directeur. Marigny held this most prestigious office until 1773 when it was passed to Abbé Terray. Although Terray was involved with ceremonial events at the completion of the Monnaie, it was Marigny who had been involved at its seminal stages and who had personal contacts with Antoine regarding its

¹³⁷ Couperie, n.p.

¹³⁸ Ibid.

¹³⁹ The office was then reunited, after some lapse, with the post of Contrôle Général des Finances, which added significant power to the position. Tadgell, 4.

site and design. Marigny is remembered for his love of the Greek style and for his disdain for the Rococo. While his favorite was Soufflot, he rewarded those architects, like Antoine, who favored classical severity.¹⁴⁰

The place Louis XV was one of Marigny's greatest urban successes and earned him the reputation as the finest Directeur in nearly thirty years. 141 After the Seven Years War ended in 1763, attention once more focused on the place building project. 142 The most feasible location for the new Mint was directly behind one of the wings of Gabriel's place façades, with the Ferme Générale allotted to the other side. At this time the Hôtel de Conti, eventual site of the Mint, was assigned to continue housing the Gardemeuble, or furniture warehouse; a most unsatisfactory arrangement considering the potential of this site, as it could be and would become the location of a major national monument. 143

In an undated letter composed circa 1765, Marigny writes of problems in providing a new building for the Mint, among others; this fact indicates that at this date the Mint project was already well under consideration and within his jurisdiction. The old Monnaie was to remain in production during the new construction, since the city could not function without it; presumably, then, the new Mint could not be built on the

¹⁴⁰ Braham, 45.

¹⁴¹ Braham, 46.

¹⁴² One major concern of the construction thus far was how to arrange the area behind Gabriel's monumental northern façades. Complications were certain to arise if this land were left to private development; Marigny proposed allotting the land to public buildings. Tadgell, 179.

¹⁴³ Ibid.

¹⁴⁴ Other buildings under construction included the Ferme Générale, the Ecuries de la Reine, the Gardemeuble de la Couronne, and the Ambassadeurs Extraordinaires. Tadgell, 180.

same site as the old. In another letter of 1765, Marigny considered housing the Ferme Générale in the Hôtel de Conti, with the Mint still to be built behind Gabriel's western façade, for which the land had been purchased on January 7, 1765 (see Illustration 9).

Work was begun, but the decision to build the Mint at that location was rescinded in September 1767 and the building site was moved to its present position on the left bank, at the site of the old Hôtel de Conti, closer to the old Mint building and also nearer to the business district of the right bank. Part of the impetus behind the expansion of the city westward past the Tuileries was the desire to create a Paris of broad boulevards and grand monuments, a desire unfulfilled until the following century. The new Mint, although intended as part of this westward expansion, was relocated to its present location, neighboring the Collège des Quatre Nations, where it became a more grand and independent monument than perhaps originally foreseen.

The newly designated site for the Mint was originally purchased by the city of Paris for the location of a new Hôtel de Ville, and was at that time occupied by the two seventeenth-century Conti hôtels (see Illustration 25). 148 Antoine was present for the demolition of the Hôtel de Conti, built by François Mansart, an architect he much revered, and its destruction evidently made a strong impression upon him. Shifting the

¹⁴⁵ Important businesses on the right bank included the primary city port, the corn exchange, and the markets, or Les Halles.

¹⁴⁶ Couperie, n.p.

¹⁴⁷ Eventually, the land north of the *place* was authorized by the King to be sold to private buyers. Tadgell,

¹⁴⁸ Gallet, 24.

site changed the design conception of the Mint significantly by taking a supporting building and transforming it into a signature monument. The building commission may have been opened to competition during this time, and although the details of this event remain uncertain, several rendered proposals by various architects still exist.¹⁴⁹

Projects submitted in response to the change in location considered how the Mint building should respond to this particular site. 150 Among the notable architects who submitted drawings was Etienne-Louis Boullée (see Illustration 21). Boullée's scheme was in the style of an *hôtel particulier*, with the building-mass set back from the quay. Antoine's design was a reversal of this more traditional layout, "placing the administration block along the river front and removing the high-security foundry and workshops to interior courtyards," 151 all of which fit within the old irregular site of the Hôtel de Conti buildings that had stood there.

With the change in site, one wonders if the commissioning body changed as well, and furthermore, who this body originally was. The *place*, we know, had been under the supervision of Marigny as the director of royal buildings, but beyond this, the information is unclear. As mentioned, four financiers, l'Averdy, Boulais, de Fleury, and d'Ormesson, played a role in the Mint commission and thus may have likewise served in part as its patrons, but this too remains uncertain. Documents further relate that Louis

¹⁴⁹ Kalnein, 161-162.

¹⁵⁰ Carter, Kalnein, and other sources mention this unclear competition. It is unclear whether this competition would have taken place had the site remained part of Gabriel's *place*. A building that was to have been part of a larger urban square, and originally nestled behind the Hôtel Coislin, was now to stand as a solitary major monument in the heart of the city.

¹⁵¹ Carter, n.p.

XV himself entrusted the Mint building to Antoine from 1771 to 1775; this, nevertheless, does not disclose who the funding body was.¹⁵² The question of patronage must be left for further study.

In Antoine's innovative design, the court is used almost as a hemicycle, leading to the foundry and workshop areas, creating order out of an asymmetrical site-plan while establishing an illusion of depth where it was lacking. 153 When the site for the new Paris Mint was changed to that of the old Hôtel de Conti, this now-independent building was no longer merely part of a larger grouping, but an urban focus on a prominent quay.

Comments and Critiques

Although many of Antoine's contemporaries praised the building, some observers were unsatisfied with the depth of rustication on the Seine façade. Le Camus de Mézières, for example, complained that there was an unbecoming lack of shadow on this face, perhaps due to overly shallow rustication, ill-suited for a building of such import. He wrote in his *Genius of Architecture*:

Although finely conceived, well composed, and harmonious to a degree, this work seems monotonous: the result fails to answer our expectation. Take due note of the cause: it lies solely in the Northerly exposure of the building. There is no variety in the shadows of the projecting portions; the same tone prevails throughout. 154

¹⁵² Monnaie de Paris website (Accessed 2 May 2005), http://www.monnaiedeparis.com/fonds_doc/.

¹⁵³ Carter, n.p.

¹⁵⁴ Le Camus de Mézières, 174.

Le Camus de Mézières concedes, however, that this failing may have been partially due to the site's placement, over which Antoine had no control. 155

Legrand, on the other hand, notes the building's complexity, saying that although the Mint was characterized by its external magnificence in accord with its importance as a national monument, it was not pompous but rather simple in its public utility as a workshop. 156 Nevertheless, one might argue that Antoine's design was indeed extravagant, employing only the best stone, building on an extraordinarily large scale, and employing innovative building techniques. Regardless, the decoration and design of the structure were not decisions easily arrived at; they demanded the architect's careful consideration to achieve a balance of function, utility, and prestige. The result was a feat in urban design that satisfied both interior function and exterior clarity.

French historians consider the Monnaie an early example of industrial architecture and an excellent French example of Enlightenment Neoclassicism. 157

Although a mint, it compares in grandeur with the monumental façades of such works as the French-designed palaces in St. Petersburg. 158 In an attempt to place Antoine's mint within a greater category of mint buildings, some scholars have been tempted to compare

¹⁵⁵ Nonetheless, Antoine's lack of anticipation in the need for deeper shadow alludes, perhaps, to his overall lack of architectural experience in building at such a grand scale.

¹⁵⁶ Legrand and Landon, 81.

¹⁵⁷ Cahart, Introduction, in Gille and Berry, 159-160.

¹⁵⁸ Ibid. The Monnaie, however, does not display the same joy of color. Like the buildings that surround it, the Monnaie was built in the ubiquitous palette of creamy limestone quarried from beneath the streets of Paris.

it to the mint in Venice, which shares similar formal attributes (Illustration 61).

Nevertheless, there appears to be no evidence of a connection between the two buildings.¹⁵⁹

Although the architectural influences upon Antoine's Mint are now vague, the impression it made on other architects is known to be extensive. To record the many examples of the Mint's influence on subsequent architecture would take an additional thesis; such was the impression of Antoine's building. Chamber's Somerset house indeed rates as one of the most poignant appropriations of Antoine's style, shown in the façade of Illustration 62. Chambers was greatly influenced by the Monnaie, which he saw near its completion, making a detailed drawing of it (see Illustration 30). Impressed particularly by the Mint's formal aesthetic, Chambers incorporated many of its elements into his design for Somerset House. 160 Ledoux was another architect perhaps inspired by the Mint; his Château de Bénouville (Calvados) completed in 1777, suggests possible inspiration. The stair especially bears a striking resemblance to Antoine's imperial stair, as

¹⁵⁹ It is doubtful that Antoine was familiar with the Zecca apart from limited literary descriptions alone. Rand Carter also mentions here, and furthers a view found in several sources, that this use of rustication and other features was drawn from the Zecca Mint in Venice of the sixteenth century. Carter, n.p. Though both face the water and convey similar visual messages, these characteristics might be expected in any design of a mint regardless of direct influence. Furthermore, Antoine had not yet traveled to Italy, nor would images of the Venetian mint have been likely available to him. Until evidence of some conviction to the contrary surfaces, it is necessary to assume that the design of the Parisian Mint did not draw upon the Venetian Mint for inspiration.

Unfortunately the length of this thesis prohibits an in depth analysis of the influence that the French Mint had upon Chambers and others. Worth further study and consideration, however, is the role of the Monnaie on Chamber's Somerset house as its primary influence. John Harris and Michael Snowdin, Sir William Chambers: Architect to George III (New Haven: Yale, 1996), 28-29.

can be compared in Illustrations 40 and 41.161 Prominent Revolutionary architect and educator J.-N.-L. Durand (1760-1834), exemplar of austere design and catalyst for nineteenth-century French design theory, thought highly of the Mint, even including its image on the frontispiece of his Recueil et Parallèle des edifices de tout genre published in 1800 (Illustration 63).162

New civic buildings of the eighteenth century sought to establish an architectural code that would visually speak its function using the older architectural language with an application of a new grammar. The Mint of the Enlightenment era moved away from its medieval ecclesiastical heritage; Antoine sought to draw on broad architectural predecessors, including seventeenth-century classicism and palace design styles.

Architects designing for other new building-types were, like Antoine, consecrating a building typology, as seen at the Ecole de Chirurgie by Jacques Gondoin (1769-1774), with its unprecedented columnar screen and hemicycle interior.

Unlike the mints of old, Antoine's modern mint housed machinery that required a great deal of space and design consideration. And with an elegance suitable to the crown, Antoine created an expansive structure worthy of both its practical function and its national signification. He built a façade that was both pragmatic and symbolic.

Antoine could hardly have understood that he was building during a convulsive cusp of

¹⁶¹ Robin Middleton and D. Watkin, Neoclassical and 19th Century Architecture (New York, 1979), 142.

¹⁶² Sergio Villari, J.N.L. Durand (1760-1834): Art and Science of Architecture, Eli Gottlieb, translator (New York: Rizzoli, 1990), illustration 82.

time. To later observers, his Mint was stylistically neither a decisive rejection of the past, nor a clear harbinger of things to come. Accordingly, it has been overshadowed by the extravagant niceties of the ancien régime that came before, and by the cool austerity of emerging Greco-Roman Neoclassicism that would follow.

CHAPTER V

CONCLUSION

A Précis of Antoine's Mint

Antoine's Mint is multivalent. It is neither easily classifiable nor readily accessible visually. Perhaps because of this, many scholars merely provide cursory discussion of the Mint in their texts, and fail to deal with it in depth. While the building is representative of the Enlightenment, the architect's greater oeuvre is not consistently Neoclassical. The Mint may be considered Neoclassical, but only in part; it could be perceived as royal, but it is also public. The building then is as complex as it is flirtatious – always present, but not always within reach.

A consideration of the Mint among those buildings patronized by Marigny and through the King's architectural offices helps illustrate the special place the Monnaie held regarding use and aesthetic character. As a mint represents the financial stability of the state, it also must iconographically represent the wellbeing of the national treasury, and display the protection of the wealth housed within. This stability materialized, in part

through the use of rustication, which gave a fortified appearance to the building and visually stabilized the perceived character of government, the ultimate controller of funds.¹⁶³

The solidity of the building, both materially and conceptually, would perhaps also be equated with the financial stability of the state, which was, ironically, in precipitous decline. For the nearly bankrupt French government under Louis XV, such a statement, however empty, certainly would have been desirable. By the nature of its function, the Mint necessitated a monumental presentation. This building was built to serve as an emblem of its host city, a visual pronouncement to the foreigner. And, furthermore, it was a memory in stone of an era of luxury, a physical reminder of financial power written in architectural grammar.

This large royal monument has a cohesive exterior treatment, encasing the fragmented assembly of workshops, furnaces, presses, noises, odors, and the labyrinth of machines in a foundry. 164 Behind the veneer of a prestigious palatial design lay a utilitarian interior network of workshops, which produced the literal and conceptual wealth of France. The workers of France's vast fields labored to produce her wealth, the result of which was minted into coins and distributed back into the hands of those very people. In this sense the Mint was a measure of the nation's financial success, and simultaneously, however accurate, it generated a physical image of that success. As Legrand wrote, "a Mint

¹⁶³ Writers such as Boullée, Laugier, and later Durand, insisted upon this kind of clearly expressed character, in what would later be termed *architecture parlante*.

¹⁶⁴ Jantzen, n.p.

located in the capital of the richest and most powerful empire, must likewise hold the first rank among public monuments."¹⁶⁵ This, the majority of the Monnaie's critics declared, the Mint did most successfully.

The building was novel in many ways. On the exceptionally long Seine façade of twenty-seven bays, the only expressly vertical elements are the freestanding Ionic columns. 166 The overall effect emphasizes the appearance of impenetrability and the solidarity of the structure. Without the traditional pavilions on the ends of the main façade, Antoine's design is unique in its extraordinary and unbroken length. Antoine deemphasized the Mansard roof and he capped the temple-front bay with an attic and statues with almost Italian effect. The pediment, found in the main courtyard, seems a literal inversion of tradition.

In creating a building of immense scale, Antoine likewise created a monumental image of financial stability. In the example of the *wur d'honneur* we have seen Antoine's illusionary creation of building size. In the court he succeeded in two ways: first, his overall building plan was carefully organized through axes creating a perception of clarity, however difficult it may actually have been to navigate the building; and second, he made the building appear far larger than it actually was. The signage both in the court in the following apse helped establish a concept of depth, equal or greater to the distance

¹⁶⁵ Legrand and Landon, 81. "Un Hôtel des Monnaies, dans la capitale du plus riche et du plus puissant empire, doit tenir le premier rang parmi les monuments publics." Author's translation.

¹⁶⁶ Carter, n.p.

already traversed. It seems as if each element of the building was designed to enhance the visual scale of the structure, whether through layout and planning internally, or by rustication externally.

Falling between two eras in France's history the building resists fitting easily into any one stylistic category. Although displaying austere exterior rustication and columnar treatment, it has also an enchantingly Louis XVI-style grand salon. An architectural symbiosis, a fusion of ideals and spaces was realized here, combining old and new, administrative, residential, and factory, all within one structure. Drawing on tradition in an innovative way, the building exterior is a visual combination of French classicism and the "character of the Roman Renaissance palazzo." ¹⁶⁷

The Mint, it would seem, is a building full questions built in an unresolved time, in an interim period between great events. The Monnaie drew upon the classical language of architecture and employed it in an austerely modern manner. It could also be described as monarchist in affiliation, since it was not built under the new ideals of revolution. The building offered a positive message — one might say a propagandistic one — to its urban environment. Just as the coins minted there sent a message to the user, so too did the Mint building; staring at a coin, the viewer beholds the bust of the king, the ultimate dispenser of their money, the Mint likewise shared this role and this glory.

¹⁶⁷ Carter, n.p.

¹⁶⁸ It is also worth noting that although the minting of coins is certainly not an activity regulated only to monarchy, this building was not simply functional at the production level, but was also built with the purpose of creating a social symbol of the treasury's stature, and consequently the holder of the key to this treasury, the king. Just as nearly every coin had emblazoned upon it symbols of government, the Mint edifice was propaganda on an even grander scale.

In the Monnaie's pivotal position it stands between two great eras, after those years in the sun under Louis XIV and before the devastating age of Revolution. The building is a synthesis of parts – administrative, residential, and industrial – organized through an ordered and axial plan. A study in *caractère*, the external appearance of the building, laden with heavy rustication, offers an understanding of the internal function. This edifice was built at a time when new civic and industrial building-types were being embraced, and Antoine's was the first Mint in France that appears to have sought to establish a genre, a Mint-building typology. The Hôtel de la Monnaie was a symbol of national abundance and wealth. Each part of this structure breathed meaning, the rustication represented fortified security, the allegorical statues, good fortune.

Nevertheless, despite Antoine's careful craftsmanship, it was a testament to financial stability that did not exist; that which the building embodied was indeed a financial façade.



Illustration 1. Portrait of J.-D. Antoine, engraving, by Louis-Simon Lempereur (1728-1807) after Louis-Rolland Trinquesse (1745-1800). From Braham, 118.

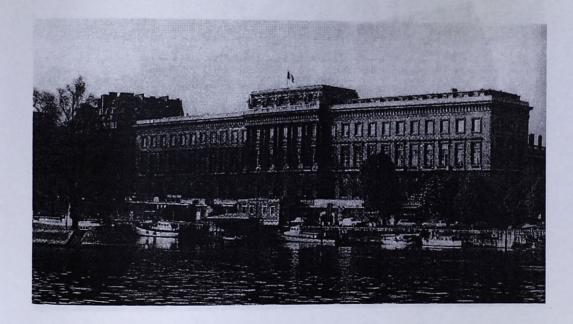


Illustration 2. J.-D. Antoine, main façade, Hôtel de la Monnaie, Paris, 1765-1775. From Braham, 118.



Illustration 3. Marie-Joseph Peyre and Charles de Wailly, main façade, Comédie-Française (Théâtre de l'Odéon), Paris, 1767-1782. From Braham, 102.

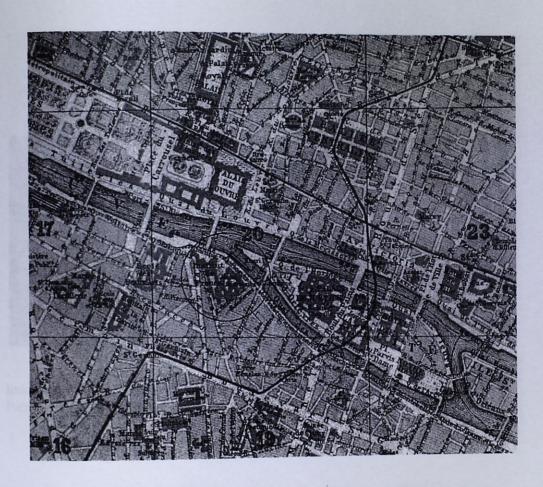


Illustration 4. Map of Paris, detail, circle added to locate Monnaie. From K. Baedeker, Baedeker's Paris and its Environs (Leipsic: Karl Baedeker Publisher, 1891), n.p.

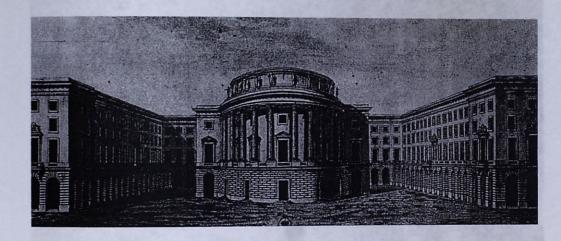


Illustration 5. J.-D. Antoine, Comédie-Française, project entry for the Conti site, 1763. From Gille and Berry, 166.

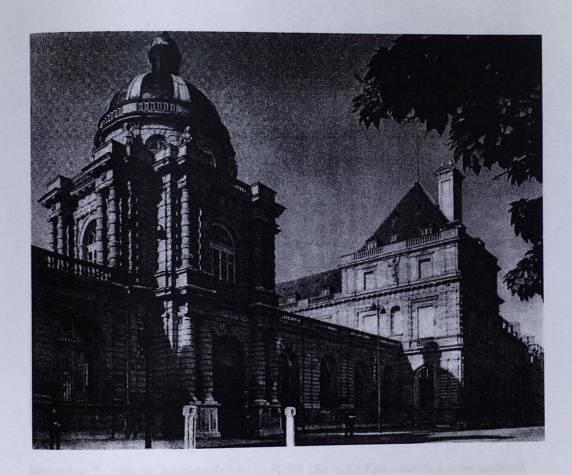


Illustration 6. Salomon de Brosse, Palais du Luxembourg, Paris, begun 1615. From Blunt, 111.

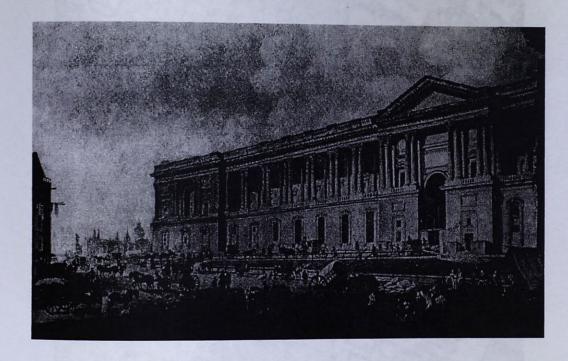


Illustration 7. Pierre-Antoine de Machy (1723-1807), La Colonnade du Louvre, undated. From Lavedan, 223. The Institut de France can be seen at the left end of the east façade of the Louvre, and then, just to the left of this is a faint shadow of the Monnaie.

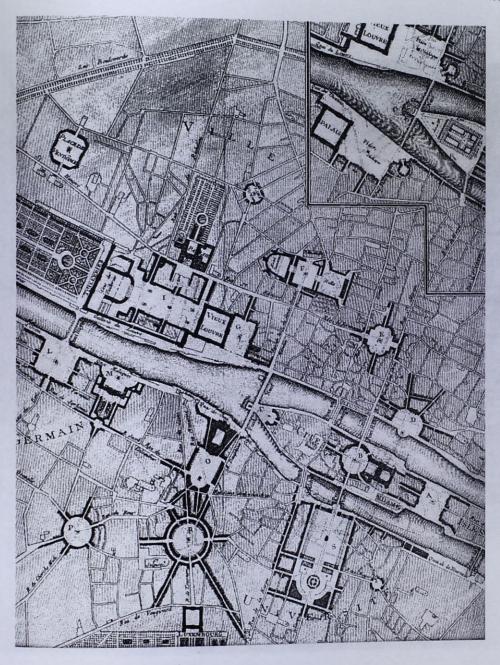


Illustration 8. Principaux projets proposes pour la place Louis XV (circa 1750s), after Pierre Patte. Detail of image from Lavedan, 261. This drawing and the detail in the upper right-hand corner show two uses for the Hôtel de Conti site, neither of which include a mint building. (Alphabetical letters refer to a legend recording the architects who proposed each design).

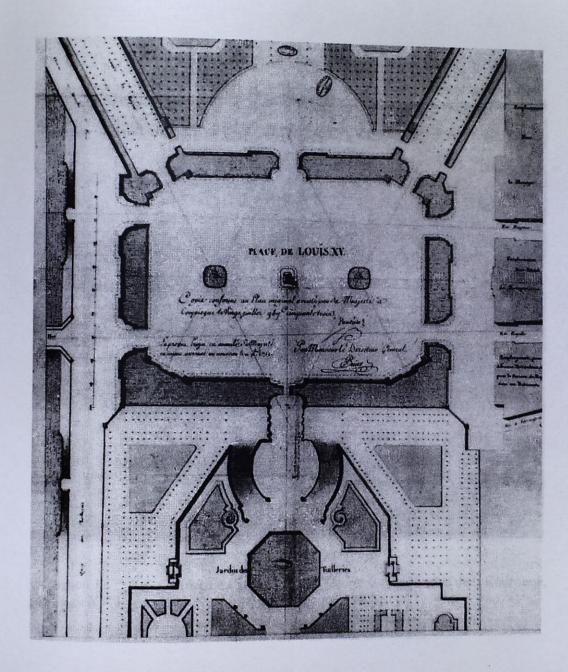


Illustration 9. A.-J. Gabriel, *place Louis XV*, detail of preliminary project, dated July 1753. From Tadgell, illustration 151. The building in the upper right-hand corner is labeled "Emplacement pour la Monoye."

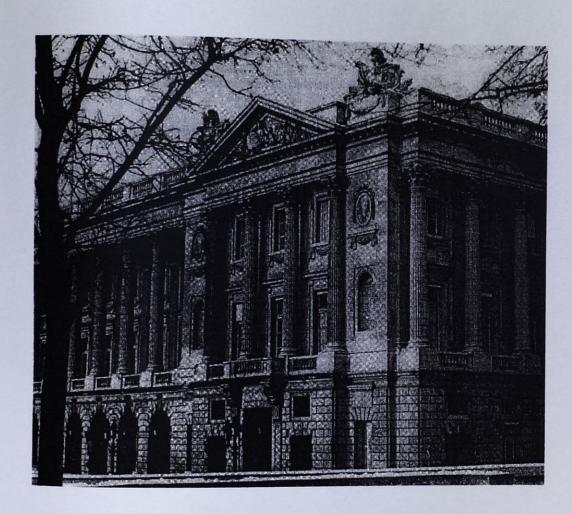


Illustration 10. A.-J. Gabriel, detail, façade of the former Garde Meuble de la Couronne, place Louis XV, begun 1748. From Tadgell, illustration 154.



Illustration 11. Louis Le Vau, Collège des Quatre Nations (Institut de France), Paris, begun 1662. Engraving by Adam Pérelle (1640-1695), undated. From Blunt, 218.



Illustration 12. J.-D. Antoine, Hospice de la Rochefoucauld, Paris, begun 1801. Author photo.

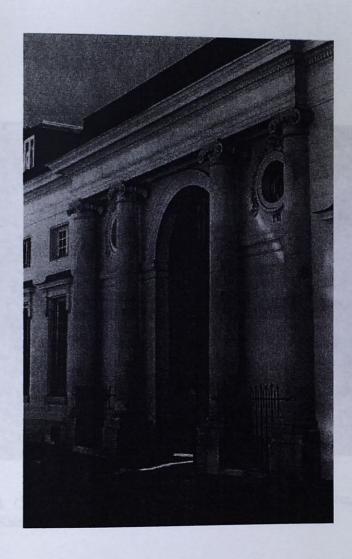


Illustration 13. J.-D. Antoine, detail of screen, Hôtel de Narbonne-Sérant, Paris, begun 1785. Author's photograph.

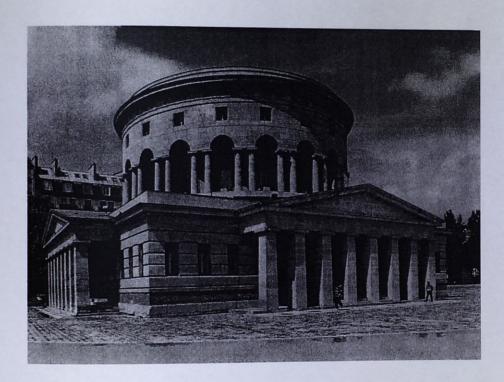


Illustration 14. C.-N. Ledoux, Barrière de la Villette, Paris tax wall project, Paris, 1785-1789. From Kalnein, 239.

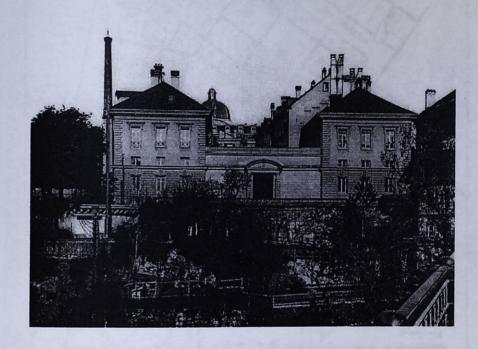


Illustration 15. J.-D. Antoine, Federal Mint, Berne, Switzerland, 1790-1792. Photo courtesy of Hanspeter Koch, Swiss Mint, 2005. Seen behind Antoine's Mint is the dome of the house of parliament.

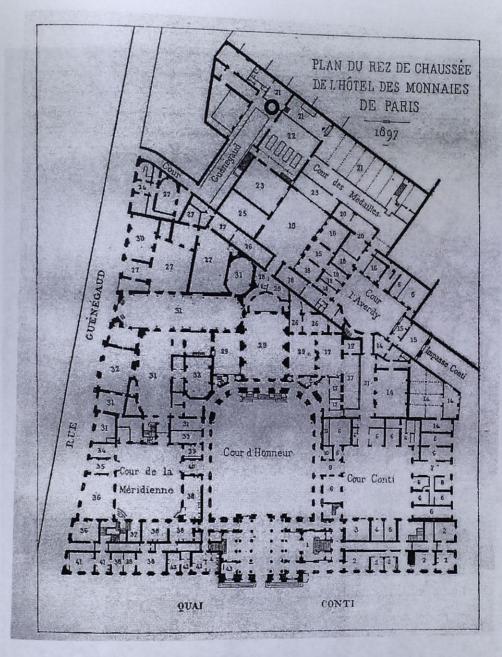


Illustration 16. Hôtel de la Monnaie, plan of 1897. Provided courtesy of the Hôtel de la Monnaie, Paris, France. Unfortunately at the time of this rendering, several reconstructions of the building had taken place, thus, all definitive interpretations of the plan should be considered according to the original. This plan has been included primarily because it is easier to discern than the older drawing.

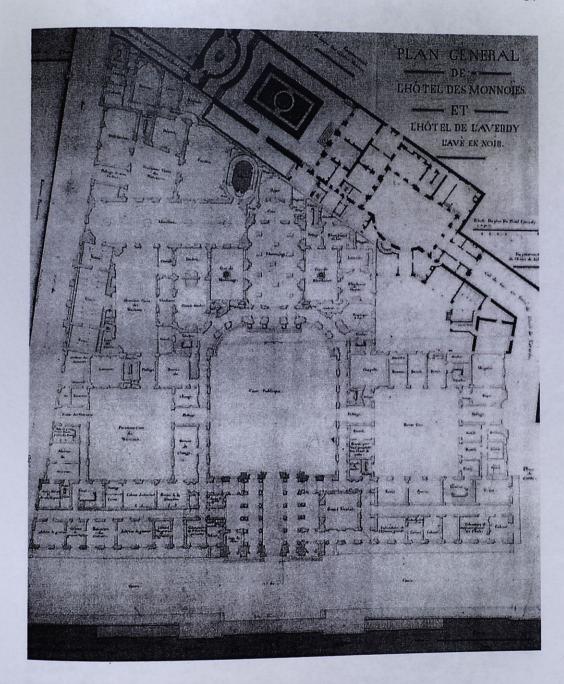


Illustration 17. J.-D. Antoine, ground-level plan, Hôtel de la Monnaie, dated 1777. From Gille and Berry, 187.

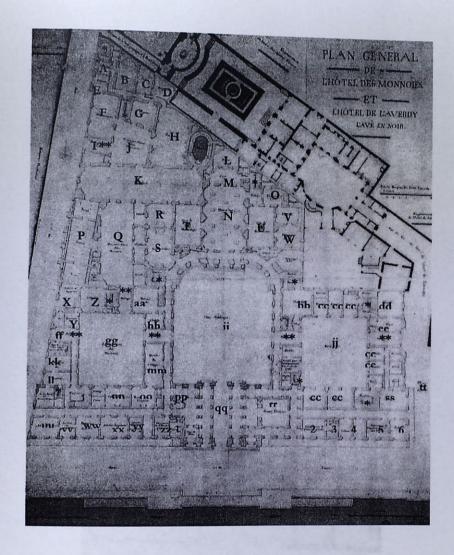


Illustration 18. A translation and legend imposed on the original plan. (*) stairs, (**) passage, (A) vestibule, (B) office, (C) court, (D) baquet, tub?, (E) cabinet, (F) distillery, (G) départ?, (H) fondrie, smelting room, (I) Passage de porte cochère, carriage entrance, (J) Troisieme Cour des Travaux, Third working court, (K) Moulins, mill?, (L) Dépot, store-room, (M) Apse, (N) Monnoiage, (O) blanchiment de l'or, gold washing/bleaching room, (P) stables, (Q) Deuxieme Cour des Travaux, Second working court, (R) Fondre, (S) Grande fondre, (T) Coer de Monnoiage, (U) Cour de Blanchiment, (V) Laverie, washroom, (W) Blanchiment de l'argent, silverworks, (X) Ateliers des ???, (Y) Directeur, (Z) ???, (aa) Bureau, office, (bb) Chapelle, chapel, (cc) Remise, store-room?, (dd) Magasin, warehouse/shop, (ee) Dépot, store-room, (ff) Entrée des Traveaux, working entrance, (gg) Premierre Cour des Travaux, First working court, (hh) Change, (ii) Cour Publique, (jj) Basse Cour, (kk) Ateliers du Servrier, (Il) Ateliers du Servrier, (mm) Bureau de change, Foreign exchange office, (nn) Cabinet du directeur, (oo) Bureau de la directeur, (pp) Corps de garde, guardhouse, (qq) vestibule, (rr) Grand Escalier, (ss) Dépot, (tt) Place de Conti, (uu) Ateliers de graveur, (vv) Cabinet des graveur?, (ww) Balanciers des ???, (xx) Ateliers de graveur, (yy) Cabinet de graveur, (zz), (1) Laberatoire de ???, (2) Laberatoire général, (3) Cabinet, (4) Cabinet, (5) L'inspecteur general des Essais?, General inspector of testing?, (6) Cabinet.

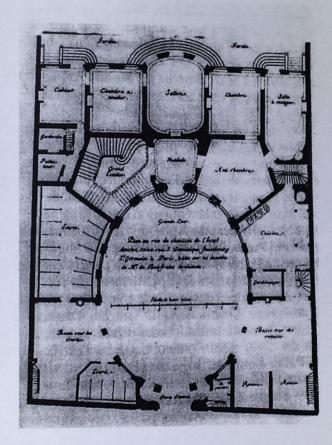


Illustration 19. Germain Boffrand, Hôtel Amelot de Gournay, Paris, 1710-1712. From Häbrele, figure 31.

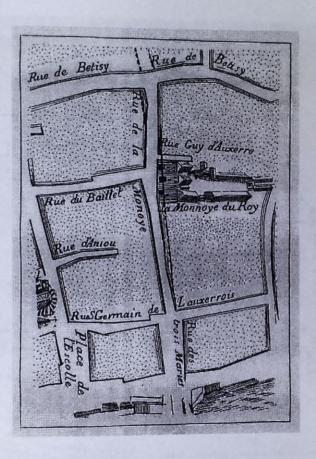


Illustration 20. The old Hôtel de la Monnaie on the rue de la Monnaie, after the plan of Pierre Bullet and François Blondel, 1676. From Mazerolle, 4.

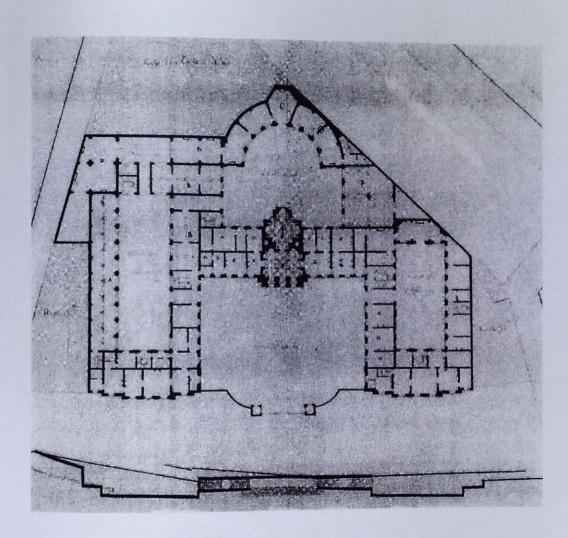


Illustration 21. Etienne-Louis Boullée, project design for the Hôtel de la Monnaie competition, c. 1767, Quai de Conti site. From Pérouse de Montclos, *Boullée*, illustration 6.

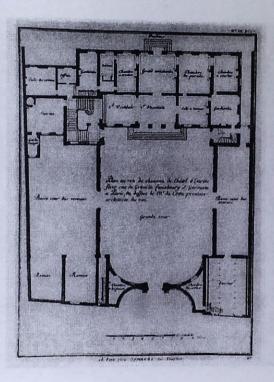


Illustration 22. Robert de Cotte, ground-floor plan, Hôtel d'Estrées, Paris, c. 1711-1713. Engraving in Jacques-François Blondel, *Architecture Française*, I (Paris: 1752). From Ziskin, 19.

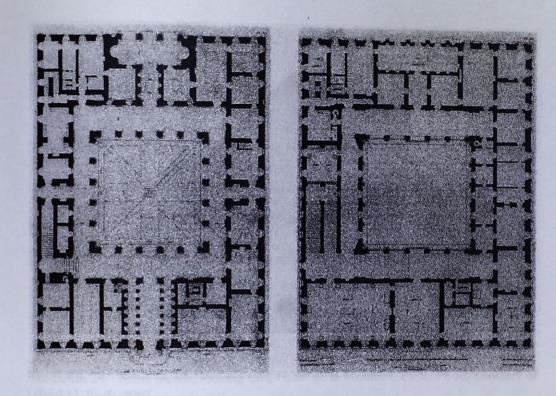


Illustration 23. Antonio da Sangallo the Younger, (left) ground floor and (right) piano nobile, Palazzo Farnese, Rome, begun 1514. From Waddy, 11.



Illustration 24. Seine façade, looking east, Hôtel de la Monnaie, Paris. Photo courtesy of Leland M. Roth, 2003.

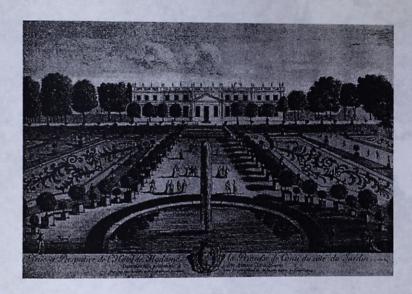


Illustration 25. François Mansart, Hôtel de Conti and garden, Paris, c. 1659. Engraved by Louis Silvestre (1675-1760), c. 1704. From Mazerolle, 51.



Illustration26. Seine façade, looking west. Photo courtesy of Leland M. Roth, 2003.

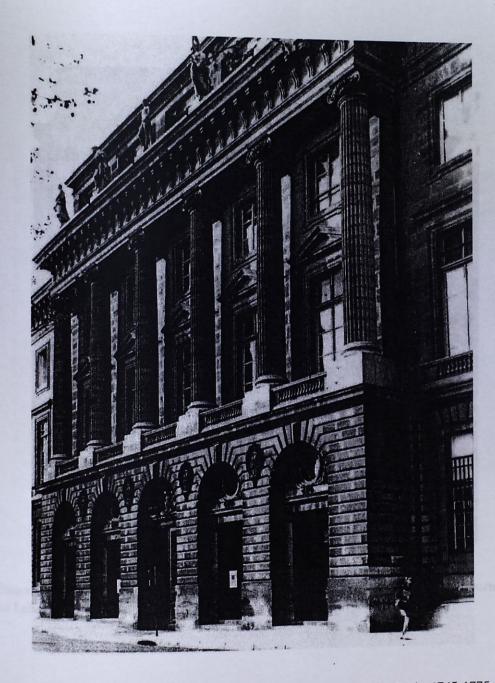


Illustration 27. J.-D. Antoine, *avant-corps* of the Hôtel de la Monnaie, Paris, 1765-1775. From Gille and Berry, 191.



Illustration 28. Avant-corps, Seine façade, looking south on the main axis. Photo courtesy of Leland M. Roth, 2003.

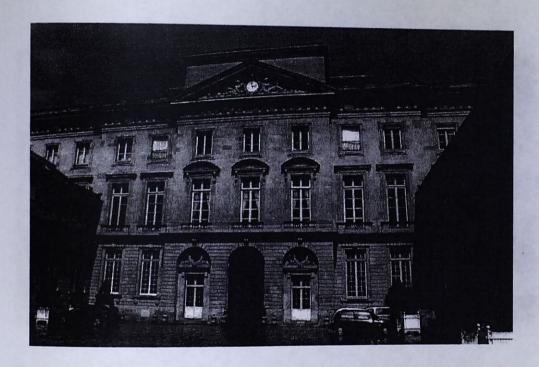


Illustration 29. J.-D. Antoine, north elevation of the main court, Hôtel de la Monnaie, Paris, 1765-1775. Author's photograph.

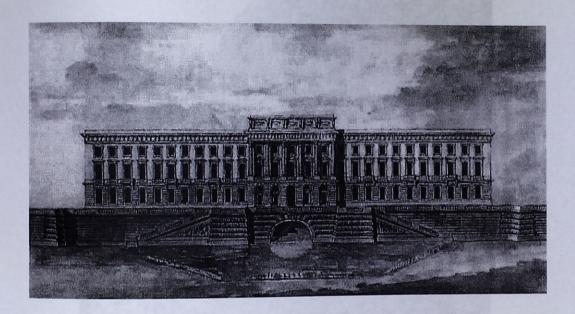


Illustration 30. Sir William Chambers, ink and wash drawing, c. 1773, Hôtel de la Monnaie, Paris, 1765-1775. From Harris and Snowdin, 29.



Illustration 31. Central bay, side façade, looking south. Photo courtesy of Leland M. Roth, 2003.



Illustration 32. J.-D. Antoine, side façade (rue Guénégaud), Hôtel de la Monnaie, Paris, 1765-1775. From Braham, 119.

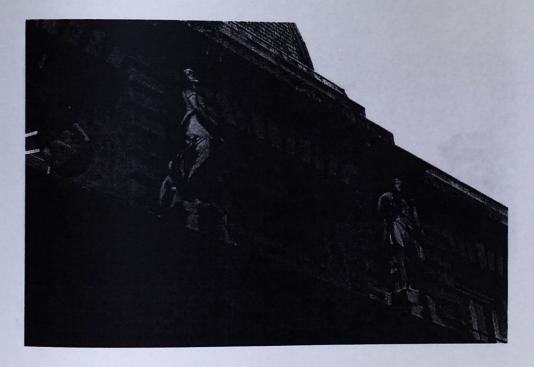


Illustration 33. Detail of the side façade, allegorical of the four elements by Duprez and Caffieri. Author's photograph.

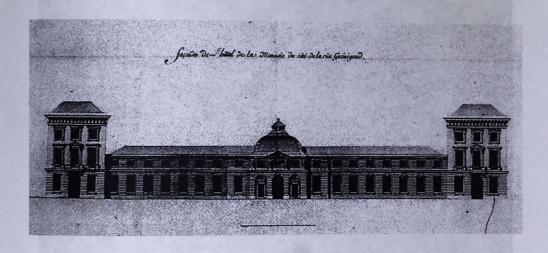


Illustration 34. J.-D. Antoine, side façade, preliminary elevation drawings, Hôtel de la Monnaie, Paris. From Gille and Berry, 188.

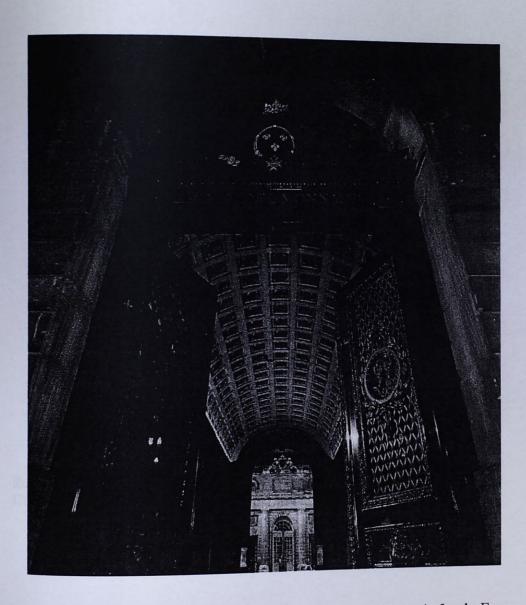


Illustration 35. Night view of the *porche d'entrée*, or vestibule, off the main façade. From Rachline, 75.



Illustration 36. J.-D. Antoine, vestibule looking south, Hôtel de la Monnaie, Paris, 1765-1775. From Mazerolle, 90.



Illustration 37. Vestibule, looking northwest. Photo courtesy of Leland M. Roth, 2003.

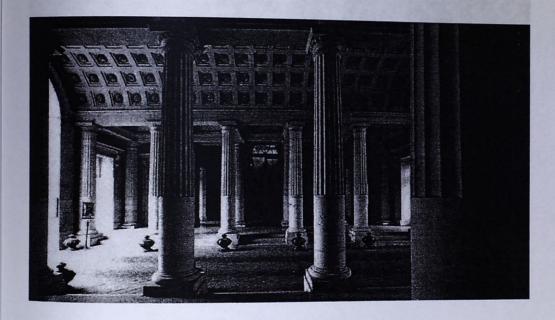


Illustration 38. J.-D. Antoine, vestibule, as viewed from the base of the stairs, Hôtel de la Monnaie, Paris, 1765-1775. From Gille and Berry, 196.



Illustration 39. J.-D. Antoine, imperial staircase, Hôtel de la Monnaie, Paris, 1765-1775. From Gille and Berry, 197.

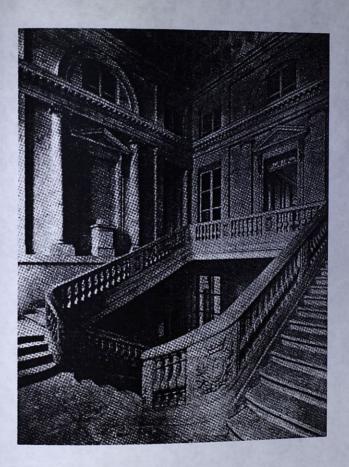


Illustration 41. C.-N. Ledoux, grand stair, Château de Bénouville, Normandy, 1770-1777. From Middleton and Watkin, 150. The authors compare this stair to Antoine's, page 142.



Illustration 42. J.-D. Antoine, grand salon, Hôtel de la Monnaie, Paris, 1765-1775. From Braham, 121.

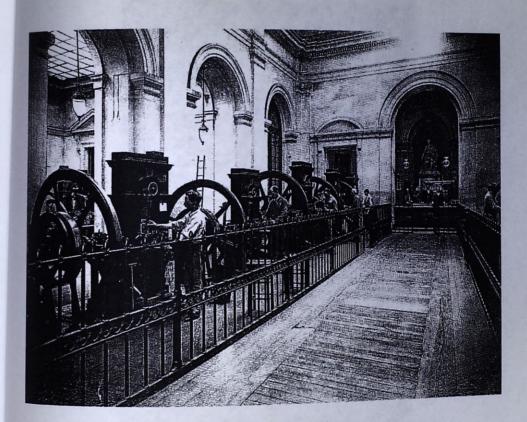


Illustration 43. J.-D. Antoine, Hall de Frappe, looking south toward the apse.

Nineteenth-century photograph. Nineteenth-century Thonnelier press in foreground.

From postcard, Archives et bibliothèque de la Monnaie de Paris.



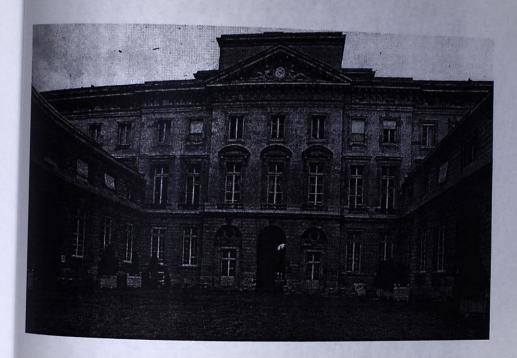
Mustration 44. Contemporary interior view of the Musée de la Monnaie, housed the former foundry. From Rachline, 29.



Mustration 45. Louis-Philippe Mouchy, statue of Fortune, apse at the southern most end of the main foundry, Hôtel de la Monnaie, Paris, 1765-1775. From Gille and Berry, 201.



Mustration 46. Apse of the main foundry room, containing the statue of Fortune, in the foreground the screw press of Louis XIV, dating to 1699. From Rachline, 30.



llustration 47. Main court, looking north, Hôtel de la Monnaie, Paris. Passages to the side courts can be seen near the edges. Photo courtesy of Leland M. Roth, 2003.



Illustration 48. J.-D. Antoine, detail of north wall of main court, Hôtel de la Monnaie, Paris, 1765-1775. Author's photograph.

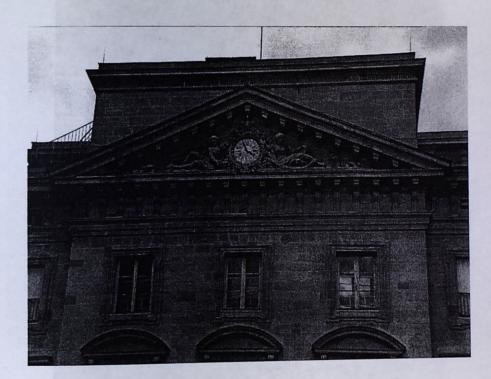


Illustration 49. Detail, pediment of the north elevation of the main court. Photo courtesy of Leland M. Roth, 2003.

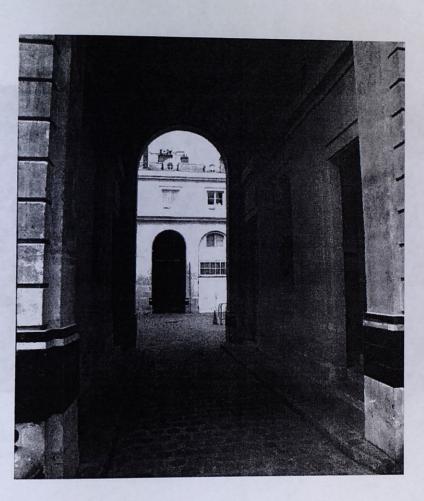


Illustration 50. Passage, looking into a side court. Photo courtesy of Leland M. Roth, 2003.



Illustration 51. Western side court, looking southwest. Modifications have been made to some of the entry doors. Photo courtesy of Leland M. Roth, 2003.

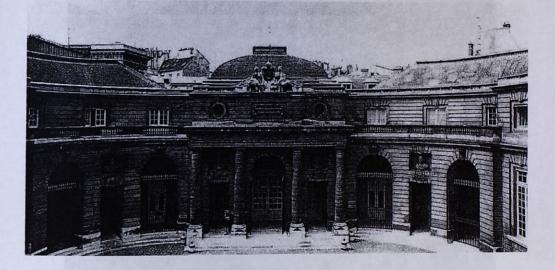


Illustration 52. J.-D. Antoine, primary courtyard, looking south, Hôtel de la Monnaie, Paris, 1765-1775. From Gille and Berry, 195.

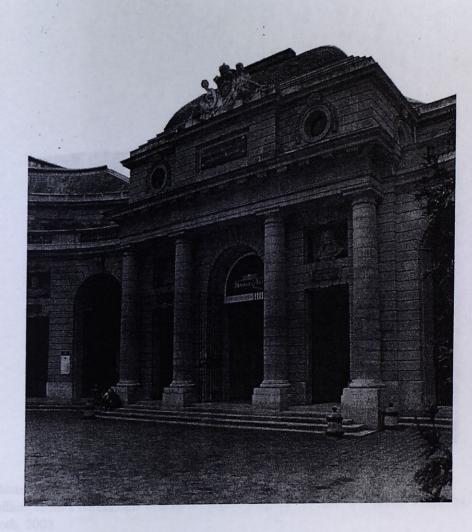


Illustration 53. Central bay, main court south façade. Note overdoor busts. Photo courtesy of Leland M. Roth, 2003.

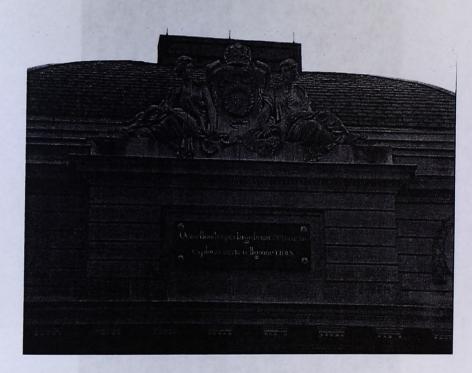


Illustration 54. Detail, central pavilion of the main court south façade. Note coins spilling from a cornucopia held by the figure at the right. Photo courtesy of Leland M. Roth, 2003.



Illustration 55. Main court curved passage, looking south. Photo courtesy of Leland M. Roth, 2003.

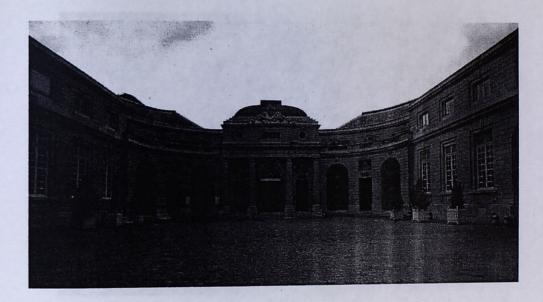


Illustration 56. Main court, looking south. Photo courtesy of Leland M. Roth, 2003.

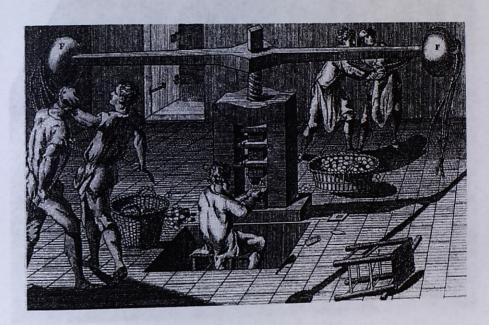


Illustration 57. Engraving, plate XV from Diderot's and d'Alembert's Encyclopédie, depicting an eighteenth-century screw press. From Cohen, 30.



Illustration 58. J.-D. Antoine, window-bracket detail, main façade, Hôtel de la Monnaie, Paris, 1765-1775. Author's photograph.



Illustration 59. P.-A. de Machy, *Monnaie de Paris vue du Pont-Neuf*, 1783. From Gille and Berry, 135.



Illustration 60. Jean-Noël d'Alexandre, Le port Saint-Nicolas et la Cité, c. 1780. From Lavedan, 205. Note the Monnaie at an oblique angle in the far right of the scene. This image gives a good sense of the command that the Mint would have posed on the river at that time.



Illustration 61. Jacopo Sansovino, Zecca, Mint, Venice, begun 1536. From Wolfgang Lotz, *Architecture in Italy: 1500-1600*, Pelican History of Art (New Haven: Yale University Press, 1995), 86.



Illustration 62. Sir William Chambers, Somerset House, London, 1776-1780. From Jones, 42.

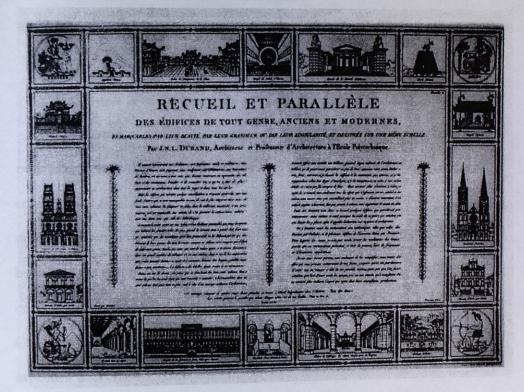


Illustration 63. Frontispiece from J.-N.-L. Durand, Recueil et Parallèle des edifices du tout genre (1800). From Villari, illustration 82. Note Monnaie at bottom left.

APPENDIX

A SELECT HISTORY OF NUMISMATICS IN FRANCE AND THE MINTS PRIOR TO ANTOINE

The monetary and economic status of the eighteenth-century Parisian Mint evolved over centuries of French national numismatic development. The history of coinage dates far earlier than a history of formalized mint buildings. Greek coins were making their way into the area of modern France as early as the fourth century B.C. and by the second century B.C. the ancient French of Celtic Gaul were fashioning their own coins. Great advances in numismatics were made up and through the rule of Charlemagne, but it was not until the medieval period that city life and general prosperity expanded under the Capetian rule of the eleventh and twelfth centuries. Likewise this intensified monetary importance and exchange increased the need for more mint foundries to produce the bourgeoning currency. Not until Charles the Bald (r.838-877) were coins first recorded as struck in the "Palace Mint," then located within the royal palace on the Île de la Cité (where the Palais de Justice now sits). Throughout this period

¹⁶⁹ Evelyne Cohen, The Coin & Medal Museum: The History of a People, translated by Marie-Jeanne Toussaint (Paris: La Compagnie d'Hauteville, 1992), 6-8.

the palace Mint is known to have traveled with the court wherever its locale, but any greater detail as to its appearance or organization is unclear.¹⁷⁰

While the location of the Parisian Mint during the reign of Henri I (r.1031-1060) is unknown, it is likely that it continued to be located in or near court facilities. Common to all Medieval European mints was their physical and psychological placement within the urban environment. The mint functioned in response to the economy of the town which housed it, and, writes Malcolm Barber, a mint was essential to the workings of government, tangibly helping drive the economy where established.¹⁷¹ Paris, the royal city, was a logical location for such a vehicle of monetary growth; as would be expected, the mint would become a building type deeply engrained in the history of Paris.

Under Philip I (r.1060-1108), who was himself a great financier, several other mints opened in France, with the king strategically positioned as the head of this hierarchical system.¹⁷² It was not until the time of Louis VI (r.1108-1137) that the royal residence was permanently established on the Île de la Cité. Although the location and appearance of the minting facility under Louis VI is uncertain, it might be assumed that, as with other Medieval mints of this period, minting may have occurred within the auspices of the royal court or palace structure, which would place the workshops of the Mint at this time (as previously) on the Île de la Cité.

¹⁷⁰ Cohen, Preface, 16.

¹⁷¹ Malcolm Barber, The Two Cities: Medieval Europe, 1050-1320 (London: Routledge, 1992), 54.

¹⁷² Barber, 18-19. At this time as well there were numerous small mints in Paris, not simply one central mint as of yet.

Renowned Capetian King Philip Augustus (r.1180-1223) took back the territories of Western France and quadrupled the size of the kingdom. He then used currency as a tool to further solidify national unity. In 1204, he prohibited the use of old money (the denier angevin of Richard the Lion Heart) in Normandy and replaced it with a coin minted under his own crown, the denier tournois. 173 Leading an assertive monarchy, he consolidated the hierarchy of nobles in which the king alone held central authority. What had previously been a loose feudal system was now under central control; coin production and its minting facilities came to be more closely monitored by the crown. 174

Under the system of Philip Augustus, the directors of medieval French mints rose quickly in social status and had a growing disposable income. The position of mint director or master was inherited (in some cases through female descent) and the wealth generated by these individuals, in addition to their royal connections, quickly brought them into the social rank of aristocracy. Intermarrying with landed nobility was common, further solidifying their positions.¹⁷⁵

The employees of a mint were comprised as follows. The mint master was a private contractor in the employment of the king. He was bound by an annual lease which stipulated the coin quantities required. The mint master was overseen by a contregarde, or warden, who, though paid by the master, served the crown. Lower in rank was

¹⁷³ Cohen, 20-21.

¹⁷⁴ Whitney S. Stoddard, Art and Architecture in Medieval France: Medieval Architecture, Sculpture, Stained Glass, Manuscripts, and the Art of the Church Treasures (New York: Harper & Row, 1966), 168.

¹⁷⁵ Robert S. Lopez, *The Shape of Medieval Monetary History* (London: Variorum Reprints, 1986), 2-4. In thinking of the eighteenth-century Mint and its grand residential quarters, we may assume that the mint directors of Antoine's time enjoyed similar status.

the engraver of coins, a master goldsmith. Lower still were the shop-workers who cast metal, rolled ingots, and prepared blanks, and the "moneyers," as they were called, who struck the coins. These two latter employee types would form guilds, membership into which was inherited.¹⁷⁶ Unlike other medieval workshops, a mint was geared for mass production and generated a healthy revenue. In turn, these directors and their guilds invested in real estate. For example, the Parisian mint guild funded the construction of a hospital in 1219, possibly located on the current site of the United States Embassy on the right bank.177

Inflation in the economy was mirrored by literal architectural growth. 178 Ruled by Capetian kings from the eleventh to thirteenth centuries, the power and wealth of France was the greatest in Western Europe. Urban population and mercantile economy likewise grew; subsequently the need for currency increased,179 as too, did the need for proper minting facilities.¹⁸⁰ Even through the early fourteenth century nearly three hundred prelates and barons were authorized to coin money. Feudal money of this type was suppressed in the sixteenth century and the primary mint facility centralized. 181

¹⁷⁶ Cohen, 28.

¹⁷⁷ Cohen, 18, 25, 29.

¹⁷⁸ Stoddard, 167-168.

¹⁷⁹ Cohen, 20.

¹⁸⁰ At this time coins were minted at various locations and forgeries were rampant; punishment was to be boiled alive, and, supposedly, some inventories list the purchase of cauldrons for this purpose. Sargent and Velde, 65.

¹⁸¹ Del Mar, 189-191.

As none remain in Paris, it is speculative whether the Parisian mint buildings of the medieval period displayed signs of extraneous wealth, as did Cathedrals. 182 It is recorded that Louis IX, i.e. Saint Louis (1215-1270), constructed a new group of mint buildings. By 1296, under Philip IV, Philip the Fair (1285-1314), this mint was divided into two separately administered shops, one for silver and one for gold. This arrangement of two separate mints housed within a joined structure of buildings was kept until the fifteenth century when the workshops were relocated. 183 Where these mints may have stood and where they were relocated remains open to further inquiry.

Increasing trade necessitated a stronger form of currency to support the growing economy and urban life. With increases in foreign trade, silver and gold Florentine and Venetian coins more frequently took the place of the French deniers in the marketplace. 184 Accordingly, Saint Louis introduced new coins into the French economy, though it would not be until the reign of Philip the Fair that gold coins would circulate widely in France.¹⁸⁵ The rule of Philip the Fair was nonetheless plagued by economic crises. By 1295 (just one year before the Mint was moved), the treasury was empty. Philip instigated

¹⁸² Few medieval French mints stand today. In Figeac, in south-central France, there remains a medieval building from the early fourteenth century, referred to as the Hôtel de la Monnaie. Current scholars doubt this building ever functioned as a mint, though it may have had some association with the mint workshops; Lopez, 30-31.

¹⁸³ Spufford, "Mint Organization," 9.

¹⁸⁵ Cohen, 22-23. In the thirteenth century, the growth of the University of Paris, with its increasing number of students and masters brought with it fiscal growth; the wealth of Parisians grew tremendously. Henry Kraus, Gold was the Mortar: The Economics of Cathedral Building (London: Routledge & Kegan Paul, 1979), 27.

a broad taxation system, which enhanced the supremacy of the monarchy. 186 Upon Philip's death, it was left to his sons to restore financial order. Despite reforms, a monetary crisis continued from this time into the fifteenth century;187 France's economic structure only continued to worsen under the later reigns of Louis XIV, XV, and XVI.

Coincidentally, this period also marks the further rise of the "merchant aristocracy" class, and the rise of a money economy as it hastened to meet a demand for luxury goods; in effect, it was the birth of a capitalist system. The mint flourished and coin production increased. Gold coins of the 1360s, minted in part to bring prestige to the monarchy, depict images of Saint Michael the Archangel (i.e. France) triumphing over the dragon (i.e. England). These coins were called the franc in reference to the French king now free of the English. 188 These varying economic factors also visually coalesced in contemporary architecture, civic building projects offering a sign of "economic vitality," according to Henry Kraus. 189 This included the very edifices of finance, such as the 1396 Mint. It also should be noted that during this period, clergy and landed nobility alike strengthened their relationships with mint directors, who were both markedly rich and influential.¹⁹⁰

¹⁸⁶ Though the mint masters benefited from this taxation, they were not exempt from paying the tax.

¹⁸⁷ Cohen, 25.

¹⁸⁸ Cohen, 32-33.

¹⁸⁹ Kraus, xv. For more information on the long history of the Parisian economic interdependence between the merchants and religious, see Anne Lombard-Jourdan, Genese de la "ville." La Rive droite de la Seine des origins a 1223 (Paris: Centre national de la recherche scientifique, 1976).

¹⁹⁰ Spufford, "Mint Organization," 9; and Lopez, 2-4.

Growing civic demands during the Renaissance period fostered a need for new building types, including town halls, public halls, law courts, hospitals, as well as mints; but in the later fifteenth century, secular architecture adapted architectural design elements from the churches of the Late Gothic period. This was done, Paul Frankl argues, to infuse the secular building with "ecclesiastical spirit." 191 Perhaps secular architecture sought to symbolically place Man in the hierarchy of societal order (the Mint at the height of secular structures), paralleled by the placing of Man in the Divine order within religious architecture.

The late fifteenth century saw an advance in mint manufacturing. 192 Manually operated machines and furnaces, among others, were improved. In response, the mint structure became larger and departmentalized; essentially mint configuration took shape as is maintained in the structure today. Due in part to the labor-intensive minting process, and in order to keep up with demand, France had some twenty-four mints in 1552.193 The right to have mint started as a privilege of select cities, which they would jealously have preserved, but in a growing attempt to consolidate power, minting control gradually shifted to the capital. By the sixteenth century, the mints of Europe, including Paris, were powerful aesthetic urban presences, 194 symbolizing national wealth.

¹⁹¹ Paul Frankl, Gothic Architecture, The Pelican History of Art Series (Harmondsworth: Penguin Books, 1962), 248.

¹⁹² Cooper, 10.

¹⁹³ Sir John Herbert McCutcheon Craig, The Mint: A History of the London Mint from A.D. 287 to 1948 (Cambridge: Cambridge University Press, 1953), 116.

¹⁹⁴ Spufford, "Mint Organization," 9.

Following the end of the Gothic period, minting machinery, such as an early version of the screw-press was introduced to the coinage industry. Henri II (r.1547-1559) patronized these machines and set up additional coinage workshops on the west end of the Île de la Cité in the Maison des Étuves circa 1551. These shops were located where the water mill for gem polishing had been built in the 1530s; this mill was now used to power the Monnaie du Moulin des Étuves. Initially it produced gold coin, though later it made only memorial medallions and tokens. It was in this mill-Mint that the first screw-presses were used in Paris. 196

In 1604, the minting of coins was moved from the Île to the Palais du Louvre though it appears that the old fourteenth-century Mint was still operational.¹⁹⁷ Louis XIII (r. 1610-1643) had an exceptional interest in numismatics, which was carried into the early eighteenth century by his successor Louis XIV (1643-1715).¹⁹⁸ A more modern version of the screw-press was brought to France from Germany in 1609, and by 1645 every French mint contained a screw-press for the mechanized production of coins. Sitting below the press in a recess, the moneyer would check the quality of the struck blanks. Several men above would rotate the horizontal bar causing the vertical screw to press with great force the blank placed between the engraved dies.¹⁹⁹ The old hammer

¹⁹⁵ Cohen, 30-31.

¹⁹⁶ Cooper, 10.

¹⁹⁷ Sargent and Velde, 54-55.

¹⁹⁸ Cohen, 44-45.

¹⁹⁹ Cohen, 30.

and pile method was all but abandoned; the minting of coins was no longer an industry that could take place in the space of a few rooms, it now required expansive building facilities.²⁰⁰

Louis XIII reformed the coinage system, introducing a new gold coin, but because of financial problems in the reign of Louis XIV, the system was again adjusted. This latter reform of 1689 to 1709 consisted of re-striking older coins and issuing tariffs. Paper money was temporarily issued, with disastrous effects. When Louis XV assumed power, financial stability was reintroduced, and though the economy strained under the weight of the eighteenth-century population and seventeenth-century debts, monetary units remained moderately stable until the fall of the monarchy. In the 1760s, despite troubles with the treasury, a new mint was commissioned for the city of Paris. This new modern mint, designed by Jacques-Denis Antoine, replaced the old medieval Mint of the right bank – it became for France the symbol of national prosperity.

²⁰⁰ Sargent and Velde, 56.

²⁰¹ Cohen, 44-48.

BIBLIOGRAPHY

- Adams, Christine, Jack R. Censer, and Lisa Jane Graham, eds. Visions and Revisions of Eighteenth-Century France. University Park, Penn.: Pennsylvania State University Press, 1997.
- Ambrière, Francis. Les Guides Bleus: Paris et sa proche banlieue. Paris: Librairie Hachette, 1963.
- Antonin, Deroc. Les monnaies gauloises d'argent de la vallée du Rhône. Paris: Belles Lettres, 1983.
- Ballon, Hilary. Louis Le Vau: Mazarin's Collège, Colbert's Revenge. Princeton: Princeton University Press, 1999.
- Barber, Malcolm. The Two Cities: Medieval Europe, 1050-1320. London: Routledge, 1992.
- Belloc, Hilaire. Paris. London: Methuen, 1907.
- Bennert, Uwe. "Le Palais de la cité, Paris et le gouvernement royal à travers le Roman de Fauvel." Bulletin Monumental 157, no. 2 (1999): 220-221.
- Bergdoll, Barry. European Architecture 1750-1890. Oxford History of Art Series. Oxford: Oxford University Press, 2000.
- Bibliothèque nationale. Vrai ou faux?: copier, imiter, falsifier. Paris Bibliothèque nationale, 1991.
- Blomfield, Sir Reginald. A History of French Architecture: from the death of Mazarin till the death of Louis XV, 1661-1774. Volume II. London: G. Bell and Sons, 1921.
- Blondel, Jacques-François. *Cours d'architecture*. 1771. 6 vols. Paris: Monum, Éditions du patrimoine, 2001.
- Blunt, Anthony. Art and Architecture in France 1500-1700. Pelican History of Art Series. New Haven: Yale University Press, 1953, revised 1999.

- Boffrand, Germain (1667-1754). Book of Architecture: Containing the general principles of the art and the plans, elevations and sections of some of the edifices built in France and in foreign countries. Edited and introduction by Caroline van Eck. Translated by David Britt. Burlington, Vermont: Ashgate, 2002.
- Braham, Allan. The Architecture of the French Enlightenment. Berkeley: University of California Press, 1980.
- Brice, Germain. Description de la ville de Paris et de tout ce qu'elle contient de plus remarquable. 1752. Vol 4. Paris: Librarie Minard, 1971.
- Bryson, Norman. Word and Image: French Painting of the Ancien Régime. Cambridge, Mass.: Cambridge, 1981.
- Cahart, Patrice. Avant-Propos to La Monnaie de Paris: Sa Création et son Histoire du Consulat et de l'Empire à la Restauration (1795-1826), by Jean-Marie Darnis. Paris: Centre d'Études Napoléoniennes, 1988.
- Berry. Paris: Délégation à l'Action Artistique de la Ville de Paris. By G. Gille et M.
- Carter, Rand. "Antoine, Jacques-Denis." The Grove Dictionary of Art Online. Oxford University Press http://www.groveart.com.
- Catalogue: l'histoire de Paris depuis 2.000 ans. Exposition de numismatique et de sigillographie organisée avec le concours du Cabinet des Médailles et des Archives Nationales. Paris: Monnaie de Paris, Juin-Juillet MDCCCCL.
- Chagniot, Jean. Nouvelle Histoire de Paris: Paris au XVIIIe siècle. Paris: Hachette, 1988.
- Cleary, Richard Louis. The Place Royale and Urban Design in the Ancien Régime. Cambridge: Cambridge University Press, 1999.
- Cobban, Alfred. A History of Modern France: Old Régime and Revolution, 1715-1799. Vol. 1. Baltimore: Penguin Books, 1957.
- Cohen, Evelyne. The Coin & Medal Museum: The History of a People. Translated by Marie-Jeanne Toussaint. Paris: La Compagnie d'Hauteville, 1992.
- Cole, The Reverend William. A Journal of my Journey to Paris in the Year 1765. Edited by Francis Griffin Stokes. London: Constable, 1931.

- The Columbia Encyclopedia, Sixth Edition, 2001.
- Condorcet, Jean-Antoine-Nicholas de Caritat, marquis de (1743-1794). Mémoires et discours sur les monnaies et les finances (1790-1792). Paris: L'Harmattan, 1994.
- Cooper, Denis R. Coins and Minting. Aylesbury, UK: Shire Publications, 1983.
- Couperie, Pierre. Paris Through the Ages: An Illustrated Historical Atlas of Urbanism and Architecture. New York: George Braziller, 1968.
- Craig, John Herbert McCutcheon, Sir. The Mint: A History of the London Mint from A.D. 287 to 1948. Cambridge: Cambridge University Press, 1953.
- Darnis, Jean-Marie. "Façade et locaux de l'Hôtel des Monnaies de Paris," Le Club français de la Médaille, 1985, 1989.
- _____. La Monnaie de Paris: Sa Création et son Histoire du Consulat et de l'Empire à la Restauration (1795-1826). Paris: Centre d'Études Napoléoniennes, 1988.
- Del Mar, A. Money and Civilization: or, a history of the monetary laws and systems of various states since the dark ages, and their influence upon civilization. London: George Bell and Sons, 1886.
- Dennis, Michael. Court & Garden: From the French Hôtel to the City of Modern Architecture.
- Duplessy, Jean. "Les monnaies concurrentes de Henri VI, roi de France et d'Angleterre, et de Charles VII." In *Later Medieval Mints: Organization, Administration, and Techniques*. Edited by N. J. Mayhew and Peter Spufford. The Eighth Oxford Symposium on Coinage and Monetary History. Oxford: B.A.R., 1988.
- Durand, Jean-Nicolas-Louis (1760-1834). *Précis of the Lectures on Architecture.* Introduction by Antoine Picon. Translated by David Britt. Texts & Documents Series. Los Angeles: Getty Research Institute, 2000.
- Recueil et parallèle des édifices de tout genre, anciens et modernes, remarquables par leur beauté, par leur grandeur ou par leur singularité, et dessinés sur une même échelle. Paris: A l'École polytechnique, chez l'auteur, 1800.
- Eck, Caroline van, ed. Introduciton. Germain Boffrand, Book of Architecture: Containing the General Principles of the Art and the Plans, Elevations and Sections of Some of the Edifices Built in France and in Foreign Countries (1745). Translated by David Britt. Burlington, VT: Ashgate, 2002.

- Egbert, Donald Drew. The Beaux-Arts Tradition in French Architecture: Illustrated by the Grands Prix de Rome. Princeton: Princeton University Press, 1980.
- Farge, Arlette. Vie Fragile. Fragile Lives: Violence, Power, and Solidarity in Eighteenth-Century Paris. Translated by Carol Shelton. Cambridge: Polity Press, 1993.
- Fleming, John, Hugh Honour, and Nikolaus Pevsner. *The Penguin Dictionary of Architecture*. Baltimore: Penguin Books, 1966, 1967.
- Fontaine, Pierre-François-Léonard (1762-1853). *Journal 1799-1853*. 2 tomes. Paris: École nationale supérieure des Beaux-Arts; Institut Français d'Architecture; Société de l'Histoire de l'Art Français, 1987.
- France-Lanord, Albert, et al. Germain Boffrand 1667-1754: l'aventure d'un architecte indépendant. Paris: Herscher, 1986.
- Frankl, Paul. *Gothic Architecture*. The Pelican History of Art Series. Harmondsworth: Penguin Books, 1962.
- Frazier, Nancy. The Penguin Concise Dictionary of Art History. New York: Penguin Group, 2000.
- Gallet, Michel. Les architectes parisiens du XVIIIe siècle: dictionnaire biographique et critique. Paris: Mengès, 1995.

. Claude-Nicolas Ledoux	1736-1806.	Paris: Picard,	1980
-------------------------	------------	----------------	------

- ___. Demeures Parisiennes; l'epoque de Louis XVI. Paris: Le Temps, 1964.
- . "Jacques-Denis Antoine (1733-1801)." In Les Architectes Parisiens du XVIIIe Siècle: Dictionnaire Biographique et Critique, 24-29. Paris: Mengès, 1995.
 - Paris Domestic Architecture of the 18th Century. James C. Palmes, translator. London: Barrie & Jenkins, 1972.
- Pour une technologie des d'ébitages laminaires préhistoriques. Paris: CNRS éditions, 1998.
- . Stately Mansions; Eighteenth Century Paris Architecture. New York: Praeger, 1972.

- Gille, G., et M. Berry, L'institut de france et la Monnaie de Paris. Paris: Délégation à l'Action Artistique de la Ville de Paris, 1990.
- Gordon, Alden R. The Houses and Collections of the Marquis de Marigny. French Inventories I. Los Angeles: Getty Publications, 2003.
- Guérinet, A., ed. L'Hôtel des Monnaies à Paris: Décorations Extérieures et Intériures, Construit par Jacques-Denis Antoine. Paris: Librairie d'Architecture et d'Art Décoratif, 1910, 1919.
- Häbrele, Michael. Pariser Architektur Zwischen 1750 und 1800: Die Entstehung des Elementarismus. Berlin: Ernst Wasmuth Verlag Tübingen, 1995.
- Harris, John, and Michael Snowdin. Sir William Chambers: Architect to George III. New Haven: Yale, 1996.
- Hautecoeur, Louis. Histoire de l'architecture classique en France, vols. 3-5. Paris, 1950-53.
- Herrmann, Wolfgang. The Theory of Claude Perrault. London: A. Zwemmer, 1973.
- L'Histoire de Paris Depuis 2.000 ans; Exposition de numismatique et de sigillographie organisée avec le concours du Cabinet des Médailles et des Archives Nationales. Juin-Juillet, MDCCCL.
- Horne, Alistair. Seven Ages of Paris. New York: Alfred A. Knopf, 2003.
- Hôtel de la Monnaie website, Accessed 26 March 2005 < http://www.monnaiedeparis.com>.
- Houyez, René. Valeur des monnaies de France: 1795 à nos jours. 6th edition. Paris: Garcen, 1984.
- Huisman, Georges. Pour comprendre les monuments de Paris. Paris: Hachette, 1925.
- Jantzen, Michel. "L'Hôtel de la Monnaie." *Monnaie de Paris* website http://www.monnaiedeparis.com/fonds_doc/michel_j.htm.
- Jestaz, Bertrand. "La Première Œuvre Connue de Jules Hardouin-Mansart: Le Petit Hôtel de Guénégaud, dit de Conti." *Bulletin Monumental* 158, no. 3 (2000): 217-237.
- Jones, Colin. The Cambridge Illustrated History of France. Cambridge: Cambridge University Press, 1994, 1999.

- Jones, Stephen. The Eighteenth Century. Cambridge Introduction to the History of Art Series. Cambridge: Cambridge University Press, 1985.
- Kalnein, Wend von. Architecture in France in the Eighteenth Century. New Haven: Yale University Press, 1995.
- Kaufmann, Emil. Architecture in the Age of Reason: Baroque and Post Baroque in England, Italy, and France. Cambridge, Mass.: Harvard College; New York, Dover, 1955.
- Krafft, J., et al. Plans, coupes, elevations des plus belles maisons & des hôtels construits à Paris & dans les environs. Paris: Librairie d'Art décoratif et industriel, 1909.
- Kraus, Henry. Gold was the Mortar: The Economics of Cathedral Building. London: Routledge & Kegan Paul, 1979.
- Lafaurie, Jean. Les assignats et les papiers-monnaies émis par l'Etat au XVIIIe siècle. Paris: Léopard d'or, 1981.
- Landry, Adolphe. Essai économique sur les mutations des monnaies dans l'ancienne France de Philippe le Bel à Charles VII. Paris: H. Champion, 1910.
- Laugier, Marc-Antoine (1713-1769). An Essay on Architecture. Translated and with introduction by Wolfgang and Anni Herrmann. Los Angeles: Hennessey & Ingalls, 1977.
- Lavedan, Pierre. Nouvelle Histoire de Paris: Histoire de l'Urbanisme à Paris. Paris: Hachette, 1975.
- Lavin, Sylvia. Quatremère de Quincy and the Invention of a Modern Language of Architecture. Cambridge, Mass.: MIT Press, 1992.
- Le Breton, Joachim. Rapport fait au nom de la section des finances sur le projet de loi relatif aux monnaies. Paris : l'Imprimerie Nationale, 1803.
- Le Brun, J.-B.-P. Almanach historique et raisonné des architectes, peintres, sculpteures. 1776. Reprint, Genève, Minkoff Reprint, 1972.
- Le Camus de Mézières, Nicolas. The Genius of Architecture; or, The Analogy of That Art with Our Sensations. Translated by David Britt. Introduction by Robin Middleton. Santa Monica: Getty Center, 1992.
- Legrand, J.-G., and C.-P. Landon. Description de Paris et de ses édifices. Paris, 1806.

- Lemonnier, H., ed. Procès-verbaux de l'Académie royale d'Architecture, 1671-1793. H. Lemonnier, 1911.
- Lombard-Jourdan, Anne. Genese de la "ville." La Rive droite de la Seine des origins a 1223. Paris: Centre national de la recherche scientifique, 1976.
- Lopez, Robert S. The Shape of Medieval Monetary History. London: Valiorum Reprints, 1986.
- Lorgues, Christiane. "L'ancien Hôtel de la Monnaie de Paris et ses problèmes." Revue numismatique 6 (1968): 138-157.
- Lussault, Claude Thomas de. Notice historique sur défunt Jacques-Denis Antoine. Paris, 1801.
- Martin, Etienne. Le palais Rohan: Musée des Arts décoratifs. Strasbourg: Editions Musées de Strasbourg, 1998.
- Mayhew, N. J., and Peter Spufford, eds. Later Medieval Mints: Organization, Administration, and Techniques. The Eighth Oxford Symposium on Coinage and Monetary History. Oxford: B.A.R., 1988.
- Mazerolles, Fernand. L'Hôtel des Monnaies: les Batiments, le Musée, les Ateliers. Paris, H. Laurens, 1907.
- _____. "L'Hôtel des Monnaies de Paris." Bulletin de la Societe des Amis Monuments Parisiens 10 (1896): 79-91.
- Mercier, Louis-Sebastien. Tableau de Paris. 1781. Reprint, Genève : Slatkine Reprints, 1979.
- Middleton, Robin. The Beaux-Arts and Nineteenth-Centry French Architecture. Cambridge: MIT Press, 1982.
- _____. Introduction. In *The Genius of Architecture*; or, *The Analogy of That Art with Our Sensations*. By Nicolas Le Camus de Mézières. Translated by David Britt. Santa Monica: Getty Center, 1992.
- and D. Watkin. Neoclassical and 19th Century Architecture. New York, 1979.
- Minor, Vernon Hyde. Baroque & Rococo: Art & Culture. London: Laurence King, 1999.
- Mitford, Nancy. Madame de Pompadour. New York: E. P. Dutton, 1954, 1968.

Moffett, Marian, Michael Fazio, and Lawrence Wodehouse. Buildings Across Time: An Introduction to World Architecture. New York: McGraw Hill, 2004. Mosser, Monique. "L'Hôtel des Monnaies de Paris, Oeuvre de J.-D. Antoine," L'Information d'histoire de l'art, 1971 (2, 94-99). . "Jacques-Denis Antoine, Architecte Créateur." In L'institut de france et la Monnaie de Paris. By G. Gille et M. Berry. Paris: Délégation à l'Action Artistique de la Ville de Paris, 1990. Myers, Mary L. French Architectural and Ornament Drawings of the Eighteenth Century. New York: The Metropolitan Musuem of Art, 1991. Neuman, Robert. Robert de Cotte and the Perfection of Architecture in Eighteenth-Century France. Chicago: University of Chicago Press, 1994. Nicholas, David. The Growth of the Medieval City: From Late Antiquity to the Early Fourteenth Century. New York: Longman, 1997. Pariset, François-George, ed. "L'Architecte Barreau de Chefdeville," Bulletin de la Société de l'histoire de l'art français (1962): 77-99. Parry, Melanie, ed. Chambers Biographical Dictionary. New York: Chambers, 1997. Patte, Pierre. Mémoires sur les objets les plus importans de l'architecture. 1769. Reprint, Genève: Minkoff Reprint, 1973. Perlin, Frank. The Invisible City: Monetary, Administrative, and Popular Infrastructures in Asia and Europe, 1500-1900. Aldershot, Hampshire, Great Britain: Valiorum; Brookfield, VT: Ashgate, 1993. Pérouse de Montclos, Jean-Marie. L'architecture à la fançaise: XVIe, XVIIe, XVIIIe siècles. Paris: Picard, 1982. _. Etienne-Louis Boullée (1728-1799), de l'architecture révolutionnaire, 1969. _. Le Guide du Patrimoine: Paris. Patis: Hachette, 1994. _. Histoire de l'architecture française: de la Renaissance à la Révolution. Paris: Mengès, 1989. "Monnaies." In Le Guide du Patrimoine: Paris, 332-334. Paris: Hachette, 1994.

- Paris: City of Art. Translated by Denise E. Barstow-Girel, et al. New York: Vendome, 2000.
 - Les Prix de Rome, Paris, 1984.
- Peyre, Marie-Joseph. Oeuvres d'architecture. 1765, 1795. Reprint, Farnborough (Hants.), Gregg P., 1967.
- Picon, Antoine. French Architects and Engineers in the Age of Enlightenment. Translated by Martin Thom. Cambridge: Cambridge University, 1988.
- Plans des divers étages, . . de l'Hôtel des Monnaies, à Paris. Paris, 1826.
- Quatremère de Quincy, Antoine-Chrysostome, Histoire de la vie et des ouvrages des plus célèbres architectes, Paris, 1830.
- Rabreau, Daniel. Architectural Drawings of the Eighteenth Century. Translated by Ian Monk. Paris: Biliothèque de l'image, 2001.
- Rachline, Michel. La Monnaie de Paris. Paris: Albin Michel; Monnaie de Paris, 1992.
- Renou, Antoine. Notice des ouvrages et de la vie du C[itoy]en Antoine, Paris, n.d.
- Rosenau, Helen. Social Purpose in Architecture: Paris and London Compared, 1760-1800. London: Studio Vista, 1970.
- , ed. Treatise on Architecture; Acomplete Presentation of the Architecture, Essai sur l'art, which forms part of the Boullée papers (MS. 9153) in the Bibliothèque Nationale, Paris. Original text by Etienne Louis Boullée. London: A. Tiranti, 1953.
- Rudé, George. The Crowd in History: A Study of Popular Disturbances in France and England, 1730-1848. London: Lawrence and Wishart, 1964, 1985.
- Rykwert, Joseph. The First Moderns: The Architects of the Eighteenth Century. Cambridge, Mass.: MIT, 1980.
- Sargent, Thomas J., and François R. Velde. *The Big Problem of Small Change*. Princeton: Princeton University Press, 2002.

- Sargentson, Carolyn. Merchants and Luxury Markets: The Marchands Merciers of Eighteenth-Century Paris. London: Victoria and Albert Museum; Malibu: J. Paul Getty Museum, 1996.
- Scott, Katie. The Rococo Interior: Decoration and Social Spaces in Early Eighteenth-Century Paris. New Haven: Yale University Press, 1995.
- Smith, Edward Robinson. "The Topographic Evolution of the City of Paris." House and Garden 6.
- Spufford, Peter. "Mint Organization in Late Medieval Europe." In N. J. Mayhew and Peter Spufford. Later Medieval Mints: Organization, Administration and Techniques: The Eighth Oxford Symposium on Coinage and Monetary History, 7-29. Oxford: B.A.R., 1988.
- Stoddard, Whitney S. Art and Architecture in Medieval France: Medieval Architecture, Sculpture, Stained Glass, Manuscripts, and the Art of the Church Treasures. New York: Harper & Row, 1966.
- Summerson, John. The Architecture of the Eighteenth Century. World of Art Series. London: Thames & Hudson, 1986.
- Sutcliffe, Anthony. Paris: An Architectural History. New Haven: Yale University Press, 1993.
- Szambien, W. Symétrie, Goût, Caractère: théorie et terminologie de l'architecture a l'age classique, 1550-1800. Paris: Picard, 1986.
- Tadgell, Christopher. Ange-Jacques Gabriel. London: A. Zwemmer, 1978.
- Thiéry, Luc Vincent. Guide des amateurs et des étrangers voyageurs a Paris, ou, Description raisonnée de cette ville, de sa banlieue, & de tout ce qu'elles contiennent de remarquable. Paris: Chez Hardouin & Gattey, 1781.
- Villari, Sergio. J.N.L. Durand (1760-1834): Art and Science of Architecture. Eli Gottlieb, translator. New York: Rizzoli, 1990.
- Volkmann, Jean-Charles. A Chronological Look at the History of France. Translated by Angela Moyon. Paris: Jean-Paul Gisserot, 2001.
- Waddy, Patricia. Seventeenth-Century Roman Palaces: Use and the Art of the Plan. Cambridge, Mass.: MIT Press, 1990.

- Ward, W. H. The Architecture of the Renaissance in France: a history of the evolution of the arts of building, decoration and garden design under classical influence from 1495-1830. Volume II: The Later Renaissance (1640-1820). Second Edition. New York: Hacker Art Books, 1976, 1926.
- White, Norval. The Guide to the Architecture of Paris. New York: Charles Scribner's Sons, 1991.
- Young, Arthur. Travels in France During the Years 1787, 1788 & 1789. Reprint, Gloucester, Mass., Peter Smith, 1976.
- Ziskin, Rochelle. The Place Vendôme: Architecture and Social Modbility in Eighteenth-Century Paris. Cambridge: Cambridge University Press, 1999.