ABSTRACT

This dissertation examines relationships between poetry and scientific discourse over the period from 1866 to 1876 in France. Focusing on the importance of Parnassianism to this era, the dissertation seeks to reframe traditional narratives surrounding post-Romantic poetry and poetic modernity’s opposition to science. The first chapter presents these central axes of inquiry using the concepts of the Parnassian moment and the experimental poem, which offers a model of thinking through links between science and poetry via technology and the technical imagination. This chapter also introduces the 1874 Transit of Venus, a highly mediatized astronomical event that grounds the dissertation’s discussion of science and technology. Each of the following three chapters pairs readings from the period’s poetry with a technological instrument and scientific issue related to the 1874 Transit. Chapter two studies representations of Venus, analyzing photography and works by Sully Prudhomme, Albert Mérat, Leconte de Lisle, Louis Ménard, poets of the Parnasse contemporain, and Rimbaud. Chapter three concerns the search for a universal language, exploring the role of electric telegraphy in works by Rimbaud, Théodore de Banville, Tristan Corbière, and poets of the Cercle Zutique. Chapter four concentrates on Charles Cros, a poet and inventor who hoped to contact extraterrestrial life using heliography. This dissertation argues that Cros’s heliographic project informs and appears in poems from his 1873 collection, Le coffret de santal. The conclusion connects Cros’s contribution to the Dixains réalistes to the close of the Parnassian moment, the disappointments of the 1874 Transit of Venus, and the advent of fin-de-siècle poetics.
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ABBREVIATIONS

In the present study, I will use the following abbreviations for certain sources to which I will refer frequently. Each of these sources will first be cited once in a footnote, then in-text for all subsequent citations.

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INTRODUCTION

On the boulevard des Capucines

Friday, May 15, 1874, was the closing night of an art show held at 35, boulevard des Capucines. Mounted in rooms belonging to famous photographer Nadar, the works on display by members of the Société anonyme coopérative d’artistes peintres, sculpteurs, graveurs, etc had drawn approximately 3,500 visitors over the course of a month. In 1874, many came to gawk at these strange paintings; a reviewer in Le Charivari had derisively dubbed the show “L’Exposition impressionniste.” Today, the Impressionist Exhibition is remembered as one of the seminal moments in the history of modern art. Contributors included Cézanne, Degas, Morisot, Pissarro, and Monet; the price of admission was one franc, with an extra fifty centimes for the exhibition catalog.

On Saturday, May 16, 1874, a lecture was held at 39, boulevard des Capucines. For more than six years, the Salle des Capucines had hosted talks and performances almost daily, generally listed under the “Spectacles” rubric of the Journal des débats. The popular scientist Camille Flammarion was a fixture at the hall, speaking every other Saturday on topics in astronomy. In 1874, the Salle des Capucines and its conférences mondaines drew large crowds of relatively well-to-do Parisians, who mixed education with entertainment at these fashionable...
evenings.\textsuperscript{7} The price of same-day, general admission was 1F50.\textsuperscript{8} That Saturday, Flammarion lectured on “Le Soleil et le prochain passage de Vénus.”

The proximity and parallels between these two events are striking, and suggestive. While the Impressionist Exhibition has become part of how we understand nineteenth-century French culture, and indeed perhaps even modernity and art, Flammarion’s talk at the Salle des Capucines has faded into obscurity.\textsuperscript{9} Yet the tickets to each were a similar cost; the two took place less than 24 hours apart, and only a few dozen meters away from each other. It is the contention of this dissertation that “Le Soleil et le prochain passage de Vénus” should also be part of how we understand nineteenth-century French culture, modernity, and art. Science and culture were not separate, isolated fields, but rather integrated into the fabric of everyday life in ways that will inform my approach to questions big and small in the study that follows. I focus on poetry of the 1860s and 1870s, and its relationship to scientific culture through the lens of technology. By seeking to uncover these connections, I will seek to shed light on particular works, from Albert Mérat’s \textit{L’Idole} to Charles Cros’s \textit{Le coffret de santal}. With the space between 35 and 39, boulevard des Capucines as my starting point, I will also propose a new perspective on the place of Parnassianism and scientific poetry within the story of modernity.


\textsuperscript{9} In addition to Robert Fox, Bruno Béguet has discussed the Salle des Capucines in the context of practices and significance of scientific vulgarization in the nineteenth century; see “La science mise en scène: Les pratiques collectives de la vulgarisation au XIXe siècle,” in \textit{La Science pour tous. Sur la vulgarisation scientifique en France de 1850 à 1914}, ed. Bruno Béguet (Paris: Bibliothèque du conservatoire national des arts et métiers, 1990), 133-134.
CHAPTER ONE

The war: Poetry, science, and modernity in nineteenth-century France

In the early years of the nineteenth century, the conservative philosopher Louis de Bonald observed a growing tension between the republic of letters and the republic of sciences. “Ce sont,” he wrote, “de part et d’autre, des plaintes et récriminations. Les sciences accusent les lettres d’être jalouses de leurs progrès. Les lettres reprochent aux sciences de la hauteur et une ambition démesurée …” Titling this short essay “Sur la guerre des sciences et des lettres,” Bonald filled out his description of the coming war with an assessment of each republic’s forces. On one side, the sciences could marshal chemistry and physiology, emboldened by new gains, alongside the mechanical arts and disciplines like pédagogique, statistique, technologie, and archéologie. On the other, the republic of letters would count on “le souvenir d’une ancienne gloire”: with tragedy, comedy, epic, and history weakened, the irregulars of modern prose, feuilletons, vaudeville and melodrama would receive only tenuous backing from the beaux-arts. Opera and poetry were left to lead the fight, and Bonald concluded, “Tout annonce donc la chute prochaine de la république des lettres, et la domination universelle des sciences exactes et naturelles.”

Bonald’s essay articulated a vision of the nineteenth century as characterized by a cultural shift, in which the unified human knowledge represented by the republic of letters splintered into separate and conflicting factions. Instead of working within the republic of letters to combat ignorance, “leur ennemi commun,” the sciences declared their independence and in so

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doing declared war.\textsuperscript{11} For Bonald, a royalist and counter-revolutionary thinker, the rise of the natural sciences came out of wrongheaded Enlightenment ideas, and at the expense of moral sciences, including theology, philosophy, and politics.\textsuperscript{12} And although Louis de Bonald was not the first to diagnose such uneasy results from the progress of natural sciences,\textsuperscript{13} the metaphor of war that he used has enjoyed a remarkably long life. Indeed, the notion of a clash between science and the arts has been foundational to the understanding of modernity itself, as it emerged in nineteenth-century Western society. In the following section, I will discuss how French poetry of the 1850s, 1860s, and 1870s represents a particularly important—and particularly vexed—site for understanding the war predicted by Bonald.

A key rhetorical move that Bonald accomplishes in “Sur la guerre des sciences et des lettres” concerns the definition of the sciences. His analysis of the various disciplines’ allegiances is indissociable from his broader ideological orientation, opposed to the Revolution and its republican, secular values. “Des sciences, des lettres, et des arts,” published in May 1807 and probably written around the same time as “Sur la guerre des sciences et des lettres,” clarifies the stakes that this topic held for Bonald’s social and political thought. The longer essay discusses at length the futility of the natural sciences, their dangerous hypertrophy thanks to Enlightenment folly, and the overvaluing of mechanical arts that have led to the split with letters and the neglect of other scientiae.\textsuperscript{14} “[D]es querelles de valeurs” set the stage for early perception of conflict between science and the arts, writes Hugues Marchal in Muses et ptérodactyles: “Au

\textsuperscript{11} Bonald, “Sur la guerre,” 223.
\textsuperscript{12} For a comprehensive introduction to that contextualizes Bonald’s writing on literature within his body of work, see Gérard Gengembre, introduction to Œuvres choisies by Louis de Bonald, vol. 1, Écrits sur la littérature (Paris: Classiques Garnier, 2010), 7-62.
\textsuperscript{13} Hugues Marchal also cites Chabanon, Schiller, and Chateaubriand; see “Deux puissances ennemies,” in Muses et ptérodactyles, 214.
lieu d’évoquer l’activité de recherche, somme toute noble, on insiste sur la place dévolue aux
chiffres parce qu’ils permettent d’assimiler les savoirs positifs au commerce, ou sur les
applications techniques des sciences, ainsi réduites à une quête bourgeoise de confort matériel.”
Like many of his contemporaries who, as Marchal puts it, took aim at science in order to target
“l’athéisme, le saint-simonisme, le positivisme ou encore le capitalisme,” Bonald felt the
republic of sciences to stand for something larger: the triumph of a bourgeois society that he
reviled.

More than 150 years later, Matei Călinescu placed the opposition between scientific,
capitalist bourgeois culture and an anarchic artistic culture at the center of his influential study,
*Five Faces of Modernity*. According to Calinescu, modernity is the product of the war
anticipated by Bonald, the struggle of aesthetics against bourgeois society. But while Bonald
turned a skeptical eye on the new literary forms, like *feuilletons*, to be drafted into the republic of
letters’ army, Călinescu’s historical account describes the distinctively modern culture that came
to join battle against the bourgeois modernity of science and industry. Călinescu writes,

It is impossible to say precisely when one can begin to speak of the existence of
two distinct and bitterly conflicting modernities. What is certain is that at some
point during the first half of the nineteenth century an irreversible split occurred
between modernity as a stage in the history of Western civilization—a product of
scientific and technological progress, of the industrial revolution, of the sweeping
economic and social changes brought about by capitalism—and modernity as an
aesthetic concept. Since then, the relations between the two modernities have

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16 Bonald, *Œuvres choisies*, 248: “Il semble qu’on humanise (si l’on me permet cette expression dans ce
sens) les êtres matériels à proportion qu’on matérialise l’homme. Il n’est question que des sensations de
l’homme et de l’intelligence des animaux. Le peuple de la création conspire pour en détrôner le roi ; et à
la tête de cette faction de sujets rebelles, on compte des hommes dont l’esprit et les talents promettaient à
la cause de l’intelligence de puissants défenseurs. La conjuratio gagne ; et bientôt l’univers, sans chef, ne
sera plus qu’une vaste république fondée aussi sur la liberté des appétits et l’égalité des instincts.”
been irreducibly hostile, but not without allowing and even stimulating a variety of mutual influences in their rage for each other’s destruction.\textsuperscript{17}

The ideology of progress that shapes bourgeois modernity is, for Călinescu, at once scientific, technological, economic, and human. Culture modernity is defined by an ideology of resistance—“its outright rejection of bourgeois modernity, its consuming negative passion.” This resistance takes on different “faces,” which Călinescu tracks as modernism, the avant-garde, decadence, kitsch, postmodernism throughout the nineteenth and twentieth centuries: each aesthetic movement makes a different attack on bourgeois modernity, but the attack unites them.\textsuperscript{18}

The beginnings of culture modernity that Călinescu dates to the mid-nineteenth century are closely associated with the figure of Baudelaire. Under the aegis of modernism, Călinescu credits Baudelaire’s work with offering “a qualitative turning point in the history of modernity as an idea,” highlighting the poet’s 1863 essay “Le peintre de la vie moderne.” Baudelaire not only develops a complex argument concerning the nature of art, divided between the eternal and the transitory, in this text; he also appropriates an unfamiliar word, “la modernité,” to make his argument, and so defines it in a critical and lasting sense.\textsuperscript{19} At the most literal, lexical level, Baudelaire is at the origin of la modernité, and Baudelaire’s aesthetics, from his rhymes to his urban imagination, provided a powerful foundation for culture modernity. For Antoine Compagnon, Baudelaire incarnates the conflict of modernity, remaining deeply suspicious of his


\textsuperscript{18} Ibid., 42.

\textsuperscript{19} Ibid., 42-43.
present even as he became one of its most vital painters. Compagnon argues that Baudelaire’s modernity is also—and essentially—an anti-modernity. On the model of counter-revolutionaries like Bonald, whose rejection of revolution necessarily supposes a theory of it, Compagnon holds up an inventory of Les Antimodernes as “les penseurs du moderne, ses théoriciens.” Among anti-modernes from Chateaubriand to Barthes, Compagnon finds the “prototype” in Baudelaire, because the poet invents a modernity “inséparable de sa résistance au ‘monde moderne’”: the first poet of modernity is already at war with modernity.

Baudelaire’s status as a founder of culture modernity is echoed by the sociological analysis of Pierre Bourdieu, who has argued that the poet’s rebellion against bourgeois modernity played a crucial part in establishing art as an autonomous field. In Les règles de l’art, Bourdieu shows that a structural revolution followed the broad social shift from the traditional patronage logic of artistic production to a new, capitalist market logic in the early nineteenth century. Lead by Baudelaire and Flaubert in the 1850s, artists sought to sever art from bourgeois society entirely. Bourdieu writes:

le champ littéraire et artistique se constitue comme tel dans et par l’opposition à un monde ‘bourgeois’ qui n’avait jamais affirmé de façon aussi brutale ses valeurs et sa prétention à contrôler les instruments de légitimation, dans le domaine de l’art comme dans le domaine de la littérature, et qui, à travers la presse et ses plume, vise à imposer une définition dégradée et dégradante de la production culturelle.

In order to achieve “la rupture avec le monde ordinaire qui est inséparable de la constitution du monde de l’art comme un monde à part, un empire dans un empire,” artistic production needed to

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22 Ibid., 7-8.
defy the logic of bourgeois modernity (RA, 103). Bourdieu names Baudelaire the *nomothète*, or law-giver, of aesthetic autonomy; put on trial and found guilty for the inadmissible poetics of *Les Fleurs du Mal*, then turned down for admission to the Académie française, Baudelaire “met en question, et au défi, les structures mentales, les catégories de la perception et d’appréciation” whose conformity with dominant social structures had otherwise eluded elucidation (RA, 108-109).

Although Bourdieu ascribes Baudelaire a heroic role in founding the new field of aesthetic autonomy, he also explains how that role was made possible by the emergence of *l’art pour l’art*. In the 1820s and 1830s, prior to the “conquest of autonomy,” two poles of artistic production aimed either at reinforcing (*l’art bourgeois*) or reforming (*l’art social*) the norms of bourgeois society. Since both movements were directly correlated with those norms, Bourdieu writes that *l’art pour l’art* appeared in the 1840s and 1850s as “une position à faire, dépourvue de tout équivalent dans le champ de pouvoir, et qui pourrait ou devrait ne pas exister” (RA, 131). The artists forging *l’art pour l’art* devalued financial success and institutional legitimation, and sought instead to discover an aesthetics pure from any external considerations—art for its own sake. This position, in combination with Baudelaire’s “acte initial de fondation” (RA, 108) opened onto aesthetic production as an independent territory, a “monde économique à l’envers” governed by its own specific logic (RA, 139).

Yet despite characterizing the work of *l’art pour l’art* as an “entreprise collective,” Bourdieu insists on the distinctive, and critical, part played by Baudelaire in the foundation of aesthetic autonomy. Baudelaire, Flaubert, Banville, Huysmans, Villiers de L’Isle Adam, Barbey

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24 Critiquing Bourdieu’s approach to literature as social object, William Marx has proposed an alternative view of its autonomization: society did not abandon literature so much as society was abandoned, traumatically, by a literature conflicted over its own value. See L’adieu à la littérature. Histoire d’une dévalorisation, XVIIIe-XXe siècle (Paris: Éditions de Minuit, 2005), 71-73.
d’Aurevilly, and Leconte de Lisle, writes Bourdieu, “sont les premiers à formuler clairement les canons de la nouvelle légitimité”; but in the end, the actions, coinages, and poetics of modernity originate with Baudelaire nomothète (RA, 107-108). The era of aesthetic autonomy and culture modernity that Baudelaire inaugurates is, according to Bourdieu and Călinescu, inaugurated by the “consuming negative passion” of letters for the edifice of bourgeois modernity, its economic structure, political ideologies, and scientific values. At its core, the struggle between aesthetic modernity and bourgeois modernity amplifies and intensifies the conflict anticipated by Bonald, which pits the republic of letters against the republic of sciences—and more precisely, poetry against the exact sciences. In other words, readers can look to the war between science and letters as fought in Baudelaire’s poetry to see how this war helped shape the era of aesthetic modernity itself.

However, these critical narratives fail to resolve problems concerning the character of l’art pour l’art—namely, why is the position not congruent with aesthetic modernity? At this point, it is necessary to wade briefly into the muck of literary-historical vocabulary to clarify the phrase “aesthetic modernity.” I have chosen this somewhat clunky term over the more conventional English analogue, “modernism,” for two reasons. First, French scholarship has tended to avoid “modernisme” as a literary-historical concept, often preferring instead to adjudicate individual schools or poets “modernes.”25 This stable population of modernes, paradoxically, forms what Compagnon calls the “tradition moderne.”26 Secondly, the French

26 Compagnon, Cinq paradoxes, 8.
tradition moderne does not map perfectly onto Anglo-American “modernism.” Since I focus on the French literary context, while at the same time considering modernity as a socio-historical phenomenon, I have settled on using “aesthetic modernity” to refer broadly to the new literary forms and new paradigms of literary production that arose in the later nineteenth and the twentieth century. For example, rather than naming Baudelaire father of the tradition moderne or an important precursor to modernism, I have followed the arguments of Călinescu and Bourdieu to show how Baudelaire’s opposition to bourgeois modernity, affirmation of aesthetic autonomy, and innovative poetics qualify his work to aesthetic modernity.

The frameworks discussed so far leave l’art pour l’art in a curious position, at once crucial to constituting aesthetic modernity and ineligible to belong to it. Similar contortions occur in the arguments of Călinescu and Bourdieu. Călinescu describes l’art pour l’art as “the first product of aesthetic modernity’s rebellion against the modernity of the philistine,” but distinguishes it from the modernity invented by Baudelaire; Bourdieu dates the autonomous field’s “phase critique” from 1830 to 1880, roughly corresponding to lifespan of l’art pour l’art, but makes a distinction between the formal claims to autonomy made by Baudelaire and those made by other poets affiliated with the movement during this period. Examining the transformative and appropriative claim made for art in the critical phase—its power to “tout

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28 Călinescu, Five Faces, 45.
constituer esthétiquement par la vertu de la forme (‘bien écrire le médiocre’), de tout transformer en œuvre d’art par l’efficace propre de l’écriture” (RA, 180-181)—Bourdieu contrasts Baudelaire’s theory of the “universelle analogie” with the poetics of Théophile Gautier and the Parnassians. Baudelaire “entend abolir la distinction entre la forme et le fond, le style et message,” in view of a poem that “est une création indépendante de la création, et pourtant unie à elle par des liens profonds, qu’aucune science positive n’aperçoit.” On the other hand, it is not enough, “comme les parnassiens, ou même Gautier, d’affirmer le primat de la forme pour qui, devenant à elle-même sa fin, ne dit plus rien qu’elle-même” (RA, 182-183). To generate aesthetic autonomy or to establish culture modernity, l’art pour l’art thus seems to be essential yet insufficient.

This insufficiency in the critical middle decades of the century becomes all the more curious when the unambiguous character of the major literary movements that bookended l’art pour l’art are considered. French Romanticism preceded l’art pour l’art, and was most vibrant in the 1820s, 1830s, and 1840s. Bourdieu argues that Romanticism was a fundamentally social art, indexed to dominant bourgeois values whether it lamented or accommodated them (ibid., 132-133). The Romantic despair in the face of bourgeois philistinism that Călinescu observes differed from the radical negativity of l’art pour l’art, which proudly declared art’s uselessness. If Romanticism is clearly not part of aesthetic modernity, then the Symbolist and Decadent movements that emerged at the end of the century just as clearly are. Announced with a flurry of programmatic publications in 1886, including Jean Moréas’s “Manifeste symboliste” and Anatole Baju’s periodical, Le Décadent artistique et littéraire, Symbolism and Decadence

29 Ibid., 43-44.
30 A recent study by John Tresch argues that the Second Empire’s “high modernity” put an end to the reign of the “mechanical romantics,” who saw continuities between science, technology, nature and humanity. See Tresch, The Romantic Machine: Utopian Science and Technology after Napoleon (Chicago: University of Chicago Press, 2012), 3-4.
obeyed a pure logic of artistic autonomy, from their incubation of shocking forms like free verse to their isolation from the market economy. These twin movements, although notoriously difficult to separate and define, appear to complete aesthetic modernity where *l’art pour l’art* alone had been lacking. Bourdieu writes that the “réaction symboliste” created a pole of pure production, aesthetically independent and commercially worthless: in the autonomous field, “la logique immanente de la différenciation permanente des styles favorise le surgissement, dans la voie ouverte par Baudelaire, d’une école symboliste en rupture avec les parnassiens attardés ou les naturalistes qui mettent en vers de pauvres discours politiques, philosophiques et sociaux” (*RA*, 199). Symbolism in particular is so closely identified with aesthetic modernity that critics and historians often reach back into the 1850s, 1860s, and 1870s to identify the period’s key figures of aesthetic modernity with Symbolism. Baudelaire becomes, retrospectively, a Symbolist, as do Rimbaud, Lautréamont, and the early works of Mallarmé and Verlaine.

The danger of consecrating this version of the *tradition moderne*, this Symbolist modernism, lies in its neglect for the poetic tradition it deems *non-moderne* within the decisive decades of aesthetic modernity’s development—Parnassianism.

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32 For a clear-eyed defense of re-motivating the term “Symbolist” to refer to these poets, see Paul De Man, “The Double Aspect of Symbolism, in *Yale French Studies* no. 74 (1988): 4-5. Written between 1954 and 1956, this posthumously published essay argues that Baudelaire, Rimbaud, Mallarmé and Verlaine, as well as Valéry and Breton, are Symbolists because “it is felt that all of these poets raised certain questions about the nature of poetic language which are the very same questions with which we are concerned today.” For a more tortuous attempt to reconcile “the fortunes of the concept as a term, first for a school, then as a movement, and finally as a period” within France and internationally, see René Wellek, “The Term and Concept of Symbolism in Literary History,” in *New Literary History* 1, no. 2 (Winter 1970): 249-170.

33 William Marx has written eloquently about the literary-historical need to attend to *arrière-gardes* and avoid the “anthological temptation” to overprivilege forward-thinking masterpieces: “Alors, si avant-gardes et arrière-gardes se complètent de façon aussi étroite, comment se fait-il qu’on ait tant parlé des premières et si peu des secondes ? C’est peut-être, comme l’écrit Walter Benjamin, que l’historien s’identifie par nature aux vainqueurs, alors que les arrière-gardes appartiennent au clan des perdants. Mais, pour aboutir à un compte rendu plus objectif de la réalité historique, il ne suffit pas, nous dit
Symbolism and Decadence after it, grew out of the tenets of *l’art pour l’art*. Théophile Gautier (*Émaux et camées*, 1852) and Leconte de Lisle (*Poèmes antiques*, 1852) preached the autonomy of art and their efforts, alongside verse by Théodore de Banville and Baudelaire, inspired a generation of poets to concentrate above all on aesthetic form. Parnassian impassivity sought to endow the lyric subject with a neutral perspective borrowed from the positive sciences. The “objectivisme pictural et descriptif,” to borrow Bourdieu’s phrase, eventually recognized as Parnassian emphasized maintaining and perfecting traditional versification, and devoted itself to traditional subjects, such as aesthetic objects (statuary, painting) and classical culture (Ancient Greece, Hindu theology and epics). But Bourdieu’s measured critique of Parnassian formalism in the context of artistic autonomization pales in comparison to the more common indictment of the kind offered by Gretchen Schultz: “Spanning the century’s third quarter, Parnassianism interrupted the liberatory aesthetics that defined so much of French poetry from the Romantics to the Symbolists and the Decadents.” Parnassians, she writes, “culled both their political and poetic values from the past and disdained provocative, visionary, or innovative poetry.”

For critics and historians, Parnassianism, which Schultz calls the “least-studied and most reactive of nineteenth-century poetic tendencies,” has generally represented a dead spot in the century and in the greater story of aesthetic modernity.

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35 Ibid., 83.
This neglect is dangerous because the poetics of Parnassianism pose a challenge to the categories that underlie the conventional understanding of aesthetic modernity that I have outlined above. Hans Robert Jauss has explained how works can become irrelevant with new generations of readers in terms of “aesthetic difference”: if a text that does not conform to prevailing literary expectations in fact radically changes those expectations, previously significant works may themselves no longer conform to their readers’ anticipations.\textsuperscript{36} In the case of a successful rupture—like the one intrinsic to the notions of culture modernity and aesthetic autonomy—Jauss writes that “the power of the altered aesthetic norm can be demonstrated in that the audience experiences formerly successful works as outmoded, and withdraws its appreciation.”\textsuperscript{37} Readers like Schultz indeed find little to appreciate in Parnassian poetry, preferring Symbolism and Decadence’s modern “liberatory aesthetics,” which respond to vital present-day concerns—in Schultz’s case, gender and lyric.\textsuperscript{38} However, Jauss’s \textit{Toward an Aesthetic of Reception} highlights the importance of \textit{synchronic} literary and cultural context for understanding \textit{diachronic} literary and cultural narratives.\textsuperscript{39} Readers looking backward, Jauss suggests, must attempt “to discover an overarching system of relationships in the literature of a historical moment” by studying how the ensemble of a given period’s texts is organized in a given period.\textsuperscript{40} While reconstituting a complete “horizon of expectations” for the decade that will interest me here, 1866 to 1876, falls outside the scope of this dissertation, I turn to Parnassianism with the aim of bringing an overlooked synchronic literary history to bear on the conventional

\footnotesize
\textsuperscript{37} Ibid., 26-27.
\textsuperscript{38} Schultz’s monograph offers an important perspective on issues of gender and sexuality in nineteenth-century French verse, from Romanticism to Symbolism. Although harsh toward Parnassianism—and, I would argue, focused on an over-generalized account of Parnassian poetics—\textit{The Gendered Lyric} remains an essential feminist reading of the era’s poetry, and I will return to it below.
\textsuperscript{39} Jauss, \textit{Aesthetic of Reception}, 18, 32.
\textsuperscript{40} Ibid., 36.
diachronic narrative of aesthetic modernity. I will make the case that, at the origins of artistic autonomization, the values and problems taken up by Parnassianism structure a period of extraordinary poetic diversity and a range of experiments with the possibilities of a scientific poetic modernity.

The Parnassian moment

Parnassianism seems most obviously to dominate the years from 1866 to 1876, which mark the first and last publications of *Le Parnasse contemporain*. This anthology of “vers nouveaux” made room for nearly every active poet of the day across its three volumes, but represented just a fraction of the decade’s poetic production. Between 1866 and 1876, a new and expanded edition of Baudelaire’s *Les Fleurs du Mal* was published (1868), and Gautier published two new editions of *Émaux et camées* (1866, expanded, and 1872, definitive). Banville’s new work included *Les Exilés* (1867), *Nouvelles odes funambulesques* (1869), and an important *Petit traité de poésie française* (1872). Mallarmé began drafting “Hérodiade” and in 1875, François Coppée collected his verse in the volume *Poésies* (1866-1874). Albert Mérat published *L’Idole* (1869), Sully Prudhomme *Les Épreuves* (1866), and Charles Cros *Le coffret de santal* (1873). Rimbaud wrote all the poems he would ever write within the decade, and Verlaine produced a trio of major works: *Poèmes saturniens* (1866), *Fêtes galantes* (1869), and *Romances sans paroles* (1874). Lautréamont toiled on *Les chants de Maldoror* (1869) and *Poésies I et II* in obscurity, while Hugo finished composing the bulk of *La Légende des siècles* in 1876.\footnote{Many of these works are studied below and full references may be found in the bibliography.} To
describe the decade that teems with such rich poetic diversity, I call this period the Parnassian moment.42

The critical opinion of Parnassianism that prevailed throughout most of the twentieth century took a dim view of the movement and saw little connection to poetic diversity. Edmund Wilson’s assessment in his pioneering study of Symbolism, *Axël’s Castle*, more or less summed up this view: Parnassians, wrote Wilson in 1931, “seem to have taken in for their aim to merely picture historical incidents and natural phenomena as objectively as possible in impassive verse.”43 There are echoes of this characterization in Bourdieu’s disregard for Parnassianism’s “objectivisme pictural et descriptif,” as well as Schultz’s sharp critique of its “rigid formalism and objective description.”44 The aesthetic difference introduced by the widespread recognition gained by the work of not just Baudelaire, but especially Rimbaud and Mallarmé in the 1910s and 1920s ensured that as the *tradition moderne* of Symbolism became better appreciated, Parnassianism suffered a critical depreciation.45

Little studied, hardly read, and generally dismissed for seventy-five years, Parnassianism has seemed ripe for a fresh look in the twenty-first century.46 Jean-Pierre Bertrand and Pascal

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42 I borrow the term from Steve Murphy, whose assessment of the post-Romantic decades 1850-1870 inspires me here: “le moment parnassien a été moins sectaire que l’histoire littéraire.” See Steve Murphy, “Versifications parnassiennes (?),” *Romantisme* no. 140 (2008): 82.
44 See discussion above; *RA*, 182-183, Schultz, *Gendered Lyric*, 83.
45 Poems by both Mallarmé and Rimbaud were included in Verlaine’s *Les poètes maudits*, published in 1884, and a number of the prose poems called *Illuminations* appeared in the journal *La Vogue* in 1886, on Verlaine’s initiative. Mallarmé’s *Poésies* were first published as a volume in 1899, after his death, and *Un coup de dés n’abolira jamais le hasard* not until 1914. Similarly, Rimbaud’s *Une saison en enfer* was not discovered until the early twentieth century, and his works continued to emerge throughout subsequent decades.
46 Following the foundation of the *Bulletin d’études parnassiennes et symbolistes* in the 1980s, in addition to the meeting of several colloquia dedicated to Parnassianism during the decade, there was a renewed call for serious study of Parnassians and Parnassianism. However, as Edgard Pich noted in his 1985 talk at the “Présent et avenir des Études Parnassiennes” conference, much of the Parnassians’ poetry was difficult to access: “L’un des handicaps majeurs, pour celui qui commençait il y a une vingtaine d’années,
Durand’s *Les poètes de la modernité*, for example, establishes a literary genealogy that connects Baudelaire, Lautréamont, Rimbaud, Verlaine, Mallarmé, and Apollinaire, but makes a point of including Parnassianism in the discussion. Calling Parnassianism an “école à tort négligée” (*PM*, 8) within literary history, Bertrand and Durand argue for the importance of synchronic context:

> Si peu ‘moderne’ que nous paraisse aujourd’hui le Parnasse et si naïve l’incantation moderniste de Maxime Du Camp, on s’expose à ne rien saisir de la modernité portée par Baudelaire si l’on méconnait qu’il est le contemporain de l’auteur fameux des *Poèmes antiques* (1852) et de l’auteur oublié des *Chants modernes* (1855). (*PM*, 10)

I will return later to the triangulation of Leconte de Lisle, Maxime Du Camp, and Baudelaire that Bertrand and Durand introduce here. For now, I wish to underline that by positing the value of Parnassianism in terms of correctly grasping the aesthetic modernity “borne” by Baudelaire, the authors stack the deck. Bertrand and Durand first center aesthetic modernity on the desire to discover new conceptions of poetic language itself (*PM*, 8-9). Then, they identify the opposite desire behind the “métaphore objet” paradigm of Parnassianism’s “révolution conservatrice.” Above and beyond the Parnassian return to “d’anciens modèles artistiques” and the classical past, write Bertrand and Durand, Parnassianism returns to valuing “l’intelligibilité et donc la transparence discursive comme critères de recevabilité et d’excellence du discours poétique” (*PM*, 179-180).

The nascent rehabilitation of Parnassian poetics has, unfortunately, focused primarily on demonstrating how they explain the genesis of Symbolism. The features that critics ascribe to

> à étudier la poésie du Parnasse, tenait au fait que ses textes les plus représentatifs étaient devenus introuvables en librairie et ne se rencontraient plus guère que chez les bouquinistes.” Since then, invaluable new critical editions of Gautier’s poetry and the *Œuvres complètes* of Banville and Leconte de Lisle have indeed been published. While these editions and the availability of texts via the Bibliothèque nationale de France’s Gallica site have undoubtedly facilitated recent research, even today there have been no scholarly editions of work by Coppée, Mérat, and Sully Prudhomme, or the *Parnasse contemporain* itself. See Pich, “Pour une relecture des textes parnassiens,” *Bulletin d’études parnassiens* no. 8, “Actes du colloque Présent et avenir des Études Parnassiennes, Lyon 17-18 octobre 1985” (June 1986): 87.
Parnassian poetry have not changed much since Wilson’s study. In keeping with the values of pure art, these poetics embrace objects and banish the Romantic lyric subject; they privilege formalism, self-reflexivity and retreat from contemporary society; they espouse the insights of contemporary positivist sciences, from biology to mythology; they favor, thematically as well as formally, the antique or exotic. The interest of these features for Bertrand and Durand, as for many other critics, lies in the ways that they were rejected or reappropriated by Symbolist poetics. *Vers libre* follows Parnassian formalism; a retreat to individual subjectivity replaces the Parnassian investment in the *métaphore objet* (*PM*, 111-112). Consistently affirming the explanatory power of this erudite, impassive verse, Bertrand and Durand insist on its ideas the poets of modernity take and make modern, on Parnassianism’s contrast to aesthetic modernity. What this approach to re-evaluating Parnassianism fails to do is revise critical understanding of Parnassianism itself.

This failure is surely due, at least in part, to the significant problems Parnassianism poses as an object of literary study, beginning with the term’s remarkably elastic scope of reference. Once again, *Les poètes de la modernité* provides an instructive example. “Le Parnasse, c’est un groupe, doté d’une enseigne, d’une tribune, et d’un libraire-éditeur, Alphonse Lemerre,” write Bertrand and Durand. “C’est toute la production poétique de la moitié du siècle que va réguler l’école, en fixant progressivement les conditions de ce qui s’imposera comme le bon usage de la poésie—jusqu’à ce que la dissidence symboliste prenne la relève” (*PM*, 111). In this view, Parnassianism refers first to a group—or school—of poets organized around a common publisher, and eventually to a doctrine determined by that school. The “doctrine commune,” described above, hews closely to the poetic manifesto set out in Leconte de Lisle’s preface to his 1852 collection, *Poèmes antiques*. However, it was nearly a decade later that the networks of
poets that would constitute the Parnassian group, or school, began to form in the weekly meetings at the Hôtel du Dragon bleu, La Conférence La Bruyère, and the salon of Leconte de Lisle. These poets would furthermore not be labeled Parnassian until the 1866 publication of the collective anthology *Le Parnasse contemporain*.

To complicate matters further, the same Parnassianism that is so easily defined by a common doctrine was almost unmanageably heterogeneous. Volumes of *Le Parnasse contemporain* appeared in 1866, 1869-1871, and 1876, all published by Lemerre, and included ninety-nine different poets in total. *Le Parnasse contemporain* thus represented a large chunk of the decade’s active poetic community, from the patron Leconte de Lisle to the old-line Romantic Auguste Vacquerie, from the young Stéphane Mallarmé to the total unknown Alexis Martin. However, stepping back from *Le Parnasse contemporain* to trace the formation of the so-called school centered on Parnassian poetics does not necessarily narrow things down. Differences existed even within the “doctrine commune,” write Bertrand and Durand; the doctrine “autorise des sensibilités diverses, ‘décoratisme’ d’un Leconte ou d’un Heredia, ‘fantaisisme’ d’un Banville ou d’un Glatigny, ‘intimisme’ plus ou moins trivial d’un Coppée ou d’un Sully Prudhomme.” Although Bertrand and Durand do not clarify how these sensibilities comfortably coexisted within the *métaphore objet*, they declare, “Ce sont des courants plus que de véritables tensions créatrices ; des inflexions, non des contestations possibles du dogme fondamental” (*PM*, 177).

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A small handful of recent critics have sought to question the link between the “dogma” widely accepted as Parnassian and actual poetry produced in connection with the Parnassian movement. Yann Mortelette, in his indispensable *Histoire du Parnasse*, outlines the false choice facing scholars of Parnassianism: either “le mouvement est considéré, à cause de l’éclecticisme du Parnasse contemporain, comme un groupe informel qui se confond avec l’ensemble de la poésie contemporaine,” or “c’est au contraire une école de poésie si stricte que ses membres sont réduits à n’être que des élèves répétant les procédés des maîtres.”

The first option leaves the critic with at least ninety-nine poets to contemplate, while the second option effectively limits Parnassianism to Leconte de Lisle, Catulle Mendès, José-Marie Heredia, Armand Silvestre, and, to a much lesser extent, Sully Prudhomme and François Coppée. In order to understand not just the hard core of like-minded poets’ work, but also the role of the dynamic Parnassian group within the period’s broad poetic landscape, a different approach toward the Parnassian moment must be found.

The first step is to recognize the tautological effect that the notion of a Parnassian school led by Leconte de Lisle has had on the history of Parnassianism. Rémy Ponton’s sociological case study of Parnassianism, published in 1973, supplies the critical blueprint of this narrative, which makes a dubious equation between aesthetic and symbolic pre-eminence. Ponton tracks

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the Parnassian aesthetic position within the autonomizing artistic field, and argues that Parnassianism represents the last poetic movement to straddle both the new, autonomous logic of rupture with bourgeois values, and vestigial forms of social consecration. In the first phase, from 1852 to 1870, Leconte de Lisle adopts an apostatical stance toward Romantic poetics and contemporary bourgeois society that creates the Parnassian position. Setting himself up as a poet-prophet in the preface to Poèmes antiques, Leconte de Lisle elaborates an aesthetic that systematically rejects Romanticism, embraces outsider status, and attracts young disciples; the poetic standards that he dictates to his followers in the 1860s accomplish a “rationalisation esthétique” and affirm the “communauté émotionnelle” of his school. In the second phase, under the Third Republic, this religious structure weakens and Parnassian poets enjoy increased social prestige, mainstream recognition, and financial success. Parnassianism’s original adherents are comfortably ensconced in the Académie française, publishing industry, and critical establishment—a bourgeois consecration that allows Parnassians to perpetuate their cultural legacy, at least until the Symbolist reaction consolidates the total autonomy of the artistic field.

However, Ponton’s analysis is concerned less with demonstrating Parnassian aesthetic cohesion than with demonstrating that certain poets generally classified as Parnassians achieved bourgeois consecration. Ponton begins his study at the end of the century, investigating an “image sociale du Parnasse” that includes Leconte de Lisle, Heredia, Sully Prudhomme, Mendès, Silvestre, and Coppée. In large part constructed by those poets themselves, in contemporary histories like Huret’s 1891 Enquête sur l’évolution littéraire, this “image sociale” artificially

53 Ibid., 206-213.
54 Ibid., 214-217.
selects a group of poets who went on to experience success after being labeled Parnassian.\textsuperscript{55} To explain their success, Ponton gives a sociological account of their group formation, in which sociological evidence outweights aesthetic proof. According to Ponton, Leconte de Lisle embodies the poet-prophetic figure largely because he possessed the independent economic capital that qualified him to assume this symbolic role, and his prophetic dictates only vaguely indicate rigorous versification, “un discours technique sur la rime ou la place de la césure.”\textsuperscript{56} Ponton excludes the aesthetic influence of Gautier, Banville, and Baudelaire in order to focus on Leconte de Lisle at the head of a Parnassian school, to say nothing of poets affiliated with Parnassianism for only part of their careers, as well as the entire \textit{Parnasse contemporain}. In so doing, Ponton eliminates the possibility of considering any other aspects, practice, outcomes, or meanings of Parnassianism.

Once the reasoning behind the reduction of Parnassianism to the school of Leconte de Lisle is made clear, new aspects of the period’s poetic production emerge as relevant to the Parnassian movement. In the important article “Versifications parnassiennes (?),” Steve Murphy urges critics to return to Parnassianism and \textit{Le Parnasse contemporain} in particular with an open mind. Murphy laments literary history’s overemphasis on the impact of Leconte de Lisle: “En filtrant à l’excès dans le but d’identifier les poètes réellement ‘parnassiens’,” writes Murphy, “on finit par exagérer l’homogénéité doctrinale de l’école et par déduire la ‘rigueur’ de la versification parnassienne du refus du romantisme des poètes ainsi homologués.”\textsuperscript{57} Murphy focuses on exposing the experimental “procédés neufs”\textsuperscript{58} that Parnassians undertake in

\begin{thebibliography}{9}
\bibitem{55} Ibid., 205.
\bibitem{56} Ibid., 210-212.
\bibitem{57} Murphy, “Versifications,” 69.
\bibitem{58} Following the metrical theory of Benoît de Cornulier, Murphy concentrates on experimentation surrounding the caesura of the \textit{alexandrin}, such as the placement of monosyllabic articles or prepositions
\end{thebibliography}
versification between 1850 and 1870, as a corrective to the critical promotion of rigorously
controlled, “marmoréen” poetics associated with Leconte de Lisle. Murphy makes a case for the
“Formistes,” influenced by Théodore de Banville, to counterbalance the grip the “Impassibles”
have on contemporary discourse surrounding Parnassianism and to problematize the intractably
factionalist critical view of the period.59 Le Parnasse can be welcoming, writes Murphy, and not
just elitist; technically innovative, not just meticulously neoclassical; interested in flights of
fancy and modern life, not just dirges and distant golden ages. Highlighting often overlooked
formal continuities between Romanticism and Parnassianism, and looking toward Parnassian and
Symbolist connections, Murphy comments that “le moment parnassien a été moins sectaire que
l’histoire littéraire.”60

Indeed, in important ways, for poets of the Parnassian moment it is possible to be both
“Parnassian” and not. This Parnassian paradox is illustrated by a figure like François Coppée.
The star author of Parnassianism’s younger generation, Coppée produces a vast poetic œuvre that
exhibits almost no features of the Parnassian “doctrine commune” that Bertrand and Durand
describe in Les poètes de la modernité. Instead of impassivity and objectivity; formal rigor;
erudite themes; uncommon vocabulary; a cult of eternal, ideal beauty; and a rejection of the here
and now, Coppée leans towards subjects drawn from modern Parisian life, a strong lyric persona,
simple forms and straightforward, almost prosaic language. These features can be observed in
the third poem of Coppée’s “Promenades et Intérieurs” series, published in the second Parnasse
contemporain:

59 Murphy, “Versifications,” 71. The new scholarship of David Evans has helped to bring Banville’s work
and influence to the fore; see Evans, Théodore de Banville: Constructing Poetic Value in Nineteenth-
Century France, (London: Legenda, 2014), which I will return to below and particularly in chapter 4.
60 Murphy, “Versifications,” 81-83.
C’est vrai, j’aime Paris d’une amitié malsaine ;
J’ai partout le regret des vieux bords de la Seine :
Devant la vaste mer, devant les pics neigeux,
Je rêve d’un faubourg plein d’enfants et de jeux,
D’un coteau tout pelé d’où ma muse s’applique
A noter les tons fins d’un ciel mélancolique,
D’un bout de Bièvre avec quelques chants oubliés
Où l’on tend une corde aux troncs des peupliers,
Pour y faire sécher la toile et la flanelle,
Ou d’un coin pour pêcher dans l’île de Grenelle.61

Coppée’s Parnassianism has presented a nagging puzzle for over a century.62 If he is not an Impassible, since his poetry lacks mythology, objectivity, cold marble women and sculpted verse, neither is Coppée obviously a Formiste, since he displayed little sustained interest in innovative versification and was so fond of the dizain form, seen above, that it became known as a “vieux coppée.”63 In terms of his poetry, Coppée seems hardly to be Parnassian at all.

A pair of alternate criteria that surface in discussion of Coppée are more revealing, and suggest the largely implicit standards at work in even revisionist studies of Parnassianism. The first is socio-political: Parnassians are conservatives. Ponton shows that the coterie of consecrated Parnassians shared bourgeois and upper-class origins, Coppée among them.64 In Murphy’s view, the political impact of the 1871 Paris Commune divided poetry’s radicals from its right wing.65 Murphy argues that the experimental phase of the Parnassian moment came to a close with the Commune; once the isolationist tendency of l’art pour l’art soured into a reactionary Parnassianism after the Second Empire’s collapse in 1870, Coppée’s bourgeois outlook perfectly embodied the pieties that marked the group’s successes under both the Second Empire and Third Republic. Here, then, a poet’s social and political positions help classify him

64 Ponton, “Programme esthétique,” 218-220.
65 Murphy, “Pauvre Coppée,” 65.
in either Parnassianism or aesthetic modernity. This criterion can shade into a second, less tenable one: taste. Coppée’s mediocrity qualifies him as Parnassian. The poet’s work, writes Murphy, mirrored the pedestrian bourgeois subject, “proférant les clichés, idées reçues et sentences de son lectorat qui s’émerveille à y reconnaître sa propre vision du monde… et sa propre intelligence.” Mediocrity itself often appears to be a subterranean qualification of Parnassianism, as when Bertrand and Durand ask, “Serait-ce se montrer trop cruel que de dire que les poèmes rédigés à l’enseigne du Parnasse, malgré certaines réussites exemplaires, tiennent de la poésie d’ameublement?” (PM, 181).

The question gets to the heart of the tautology that anchors contemporary scholarship’s definition of Parnassianism: Parnassian poetry of the 1860s and 1870s is no longer appreciated, so poetry of the 1860s and 1870s that is no longer appreciated is Parnassian. Yet at every level, from individual texts to active poets to the institutions that accommodate them, Parnassianism and poets of modernity sit side by side in ways that complicate the binary distinction. The parodies that flourished during the Parnassian moment offer one important example. Steve Murphy points out that in the 1860s and 1870s, Baudelaire and Verlaine were parodied alongside Leconte de Lisle and Ménard in the anonymously authored Parnassiculet contemporain. Similarly, the astonishing quantity of Coppée parodies created by members of the Cercle Zutique, an informal and clandestine association of poets who met in 1871 and 1872, includes efforts by Verlaine, Rimbaud, Cros and Valade. While their savage and funny attack on Parnassianism testifies to a striking aesthetic modernity, many Zutistes belonged at the same time to the Vilains Bonshommes, a group traditionally deemed Parnassian. The presence of intra-group parodies among the Zutistes and the unusual character of Coppée’s Parnassianism raise

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66 Ibid., 76-77.
67 Murphy, “Versifications,” 83.
68 Sangsue counts 23 Coppée parodies in the Album Zutique; “Pasticheries,” 88.
further questions about the significance of Coppée as a target and parody as an instrument.\textsuperscript{69}

Precisely this complexity grants special interest to works produced at the margins where what is considered Parnassian and what is considered part of aesthetic modernity overlap, because they allow insight into the period’s synchronic relations. The links that tie Coppée to his lifelong friend and devoted parodist Charles Cros, as well as their different links to the Cercle Zutique and the \textit{Parnasse contemporain}, reveal a landscape more nuanced than a desert bounded by the bright lights of modernity.

In order to get a better sense of what Parnassianism meant to poets producing in the 1860s and 1870s, I will adopt the precepts of Jauss’s key methodological concept, the horizon of expectations. His original 1967 essay, “Literary History as a Challenge to Literary Theory,” outlines three main elements that allow scholars to reconstruct “the objectifiable system of expectations that arises for each work in the historical moment of its appearance”: the “pre-understanding of genre,” the “form and themes of already familiar works,” and “the opposition between poetic and practical language.”\textsuperscript{70} Full reconstruction of this horizon according to Jauss’s procedures requires a vast survey of all material available within the given historical timeframe, and far exceeds my aims here.\textsuperscript{71} Rather, I wish to return to poetry of the Parnassian moment so as to examine how certain poems appear within a horizon of expectations defined by two overarching concerns—\textit{l’art pour l’art} and scientificity. The experimental poetry that I find there will then bring me back to questions of artistic autonomy and cultural modernity, because if \textit{l’art


\textsuperscript{70} Jauss, \textit{Aesthetic of Reception}, 22.

\textsuperscript{71} For an example of the both broad-ranging and detailed work even a highly focused case requires, see “La Douceur du foyer: Lyric Poetry of the Year 1857 as a Model for the Communication of Social Norms,” in Jauss, \textit{Aesthetic Experience and Literary Hermeneutics}, trans. Michael Shaw (Minneapolis: University of Minnesota Press, 1982), 263-293.
pour l’art is critical to poetry’s aesthetic modernity, modern science is supposed, above all, to represent its mortal enemy.

The experimental poem

While the relationship between scientific discourse and prose fiction has received ample recognition from critics, there has been remarkably limited attention to the relationship between scientific discourse and poetry. Useful frameworks exist for approaching science fiction, which has been a dominant cultural force in its modern form for more than a century; for decades, scholars have worked to interrogate a breadth of didactic and speculative literary modes, offering a range of historical and structural perspectives on scientific fiction. Yet when it comes to poetry, criticism has long displayed a serious blind spot. Despite the consensus that modern French scientific fiction appears as a genre in the mid-nineteenth century, the same period seems to mark the end of the minor genre of scientific poetry. While aesthetic modernity’s poetic tradition blossoms, the tradition of scientifically oriented verse as practiced by, for example, Jacques Delille at the turn of the century disappears from sight. The editors of Muses et Ptérodactyles, a recent anthology of nineteenth-century scientific poetry, introduce the latter

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73 The landmark anthology Muses et ptérodactyles represents the fruit of work by dozens of researchers and has already begun to facilitate new research concerning nineteenth-century scientific poetry. The Université de Paris III–Sorbonne Nouvelle, with the Agence nationale de recherche, is supporting young scholars in the project “Euterpe: la poésie scientifique de 1792 à 1939,” under the supervision of UMR 7171. http://www.univ-paris3.fr/anr-euterpe-la-poies-scientifique-de-1792-a-1939--23310.kjsp.
tradition by underlining to what extent it has become invisible: “ces textes extrêmement nombreux forment un continent disparu, tombé aux oubliettes de l’histoire littéraire.”

Without the small core of current work on this vanished continent, literary history’s rejection of scientific poetry alone would serve to intimate the genre’s former existence. Scholars focused on nineteenth century modernity routinely invoke the impossibility, or undesirability, of scientific poetry, echoing an opinion the suspicions voiced by Louis Bonald in “Sur la guerre des sciences et des lettres”:

Enfin, la poésie, généreuse, mais toujours imprudente, a peut-être hâté la rupture en voulant la prévenir. Elle est entrée de son chef en négociation avec les sciences ; mais ses intentions pacifiques ont été mal récompensées. Les sciences l’ont éconduite comme peu exacte, et les lettres l’ont tancée comme trop descriptive, et voulant, au mépris des lois de l’empire littéraire, contracter des alliances étrangères.

True to the theory in which cultural modernity first and foremost resists bourgeois modernity, critics have perceived an increasingly vitriolic response on the part of poets to the increasingly important place of positive science in nineteenth-century French society. For example, in his classic study The Structure of Modern Poetry, Hugo Friedrich attributes the period’s literary innovations in part to poetry that positioned itself “lament both the scientific deciphering of the universe and the prosaism of the general public.” Friedrich identifies a break that echoed Chateaubriand’s diagnosis of a world disenchanted by science. But the break reached beyond mere lament, and shaped the very structure of the modern poem. Friedrich defines that structure in terms of fundamentally negative categories, such as “loss of order, incoherence, fragmentism,

75 Bonald, “Sur la guerre,” in Muses et ptérodactyles, 224.
[and] irreversibility,” to name a few, and one category in particular negates the bedrock principle of modern scientific discourse.\textsuperscript{77}

At the heart of Friedrich’s account is his contention that modern poetry absolutely denies the pertinence of any empirical value. “Whenever a modern poem touches on realities—of objects or people—its treatment is nondescriptive,” writes Friedrich. “The poem is not to be measured against what is ordinarily accepted as reality, not even when it assimilates vestiges of this so-called reality as a springboard for its freedom.”\textsuperscript{78} Modern poetry, in a view shared by critics from Friedrich to Foucault, self-consciously exists in ways meant to be different, and other, from scientific knowledge.\textsuperscript{79} This epistemological claim is compounded by the critical shibboleth that places literary and scientific language in direct opposition. Inherited from formalist linguistics in the early twentieth century, the idea that scientific language is denotative, while literary language is connotative, associated the latter with complexity, ambiguity, and self-reflexivity. To affirm the values privileged by autonomous art at work in “literary language,” those values were not simply minimized in everyday language; they were also regarded as totally absent from scientific language, supposed to aim above all at simplicity, clarity, and referentiality.\textsuperscript{80} Although criticism has moved away from the binary formalism of early linguistics, this fundamental opposition remains a hurdle for studying continuities between

\textsuperscript{77} Ibid., 8-9.
\textsuperscript{78} Ibid., 5.
\textsuperscript{79} “De la révolte romantique contre un discours immobilisé dans sa cérémonie, jusqu’à la découverte maillarméenne du mot en son pouvoir impuissant, on voit bien quelle fut, au XIXe siècle, la fonction de la littérature par rapport au mode d’être moderne du langage. Sur le fond de ce jeu essentiel, le reste est effet : la littérature se distingue de plus en plus du discours d’idées, et s’enferme dans une intransitivité radicale […]. Au moment où le langage, comme parole répandue, devient objet de connaissance, voilà qu’il réapparaît sous une modalité strictement opposée : silencieuse, précautionneuse déposition du mot sur la blancheur d’un papier, où il ne peut avoir ni sonorité ni interlocuteur, où il n’a rien d’autre à dire que soi, rien d’autre à faire que scintiller dans l’éclat de son être.” Michel Foucault, Les mots et les choses. Une archéologie des sciences humaines (Paris: Gallimard, 1966), 313. My emphasis.
scientific and poetic language. The Symbolist’s declaration in Paul Bourget’s 1883 dialogue “Science et Poésie”—“la Poésie se concentre de plus en plus dans la domaine de la sensibilité, tandis que sa rivale, la Science, s’empare de plus en plus du domaine de l’intelligence”—echoes Bonald’s “Sur la guerre des sciences et des lettres” and an understanding of poetry’s aesthetic modernity that still resonates today.81

Because scientific poetry offers concrete instances of just such a continuity between apparently incompatible discourses, the genre offers a compelling starting point from which to rethink how the two interact during the mid-nineteenth century. Construed as exposing, explaining, or praising an area of scientific knowledge or technical process, scientific poetry has been consistently present in Western culture since ancient Greece. It has also, however, been consistently marginalized: Philippe Chométy and Catriona Seth describe crisis as “consubstantial” with the genre. “À chaque étape de son histoire,” they write, “l’émergence de nouveaux modèles de discours rigoureux, ou de critères différents de scientificité, a conduit à s’interroger sur la légitimité de la poésie scientifique.”82 The crisis accompanying the nineteenth-century model of positive science was particularly acute, and by the 1890s, expository and laudatory scientific poetry had mostly vanished. But from its territory, a vital history unfolds. Instead of a simple rejection of scientific discourse, this poetry takes on forms and stakes that point to another dimension of aesthetic modernity. Recalling that many of the era’s greatest writers confronted the problem of scientific poetry, Hugues Marchal argues, “Les débats sur la poésie et la science ont construit notre vision actuelle des relations entre science et littérature, de

82 Philippe Chométy and Catriona Seth, “Une tradition ininterrompue,” in Muses et ptérodactyles, 21.
leurs valeurs et de leurs fonctions respectives.” Those debates, he concludes, thus “éclairent notre présent, notre culture.”

Since part of that present includes the periodic resurgence of scientific and technological discourses in poetry, connections between works of aesthetic modernity and scientific poetry invite further study. In the twentieth and twenty-first centuries, these resurgences take place under the auspices of the avant-garde. Movements such as Futurism and Flarf have appealed to new phenomena such as machine guns and email spam in order to produce new poetic languages and effects. Generally considered distinct from modernism, or roughly the first fifty years of aesthetic modernity, the avant-garde maintains modernist emphasis on the self-critical function of literature and art. According to Peter Bürger, artistic self-criticism shifted from matters of technique toward its own institutions at the turn of the century, giving rise to the avant-garde. With its turn outward, the avant-garde by definition incorporated a range of extra-aesthetic concerns. Although politics are perhaps its foremost preoccupation, the avant-garde’s occasional appropriation of technological figures represented an extension of its self-critical structure, a confidence in the renewing power of what is new.

84 The out-of-sync chronologies of the French tradition moderne and Anglophone modernism have accompanied abundant debate over the exact boundaries of the avant-garde. In France, Breton’s Manifeste surréaliste (1923) marks the advent of the avant-garde, which picks up after the work of Apollinaire and Valéry. Major Anglo-American works of modernism, on the other hand, are published throughout the 1920s, side by side with the international avant-garde groups of Dada and Futurism. Rather than a shift from modernism to the avant-garde, Marjorie Perloff has proposed that the central fissure within modern poetics concerns the difference between a symbolist tendency and a tradition of indeterminacy. While the former rests on systematic, if idiosyncratic, metaphor, the latter promotes metonymy, valuing paratactical relations of proximity that permit no fixed linkage of sign to referent. Perloff’s stimulating reading remaps the conventional categories of “modernist” and “avant-garde” outside the narrativizing influence of the chronological problematic. See Marjorie Perloff, The Poetics of Indeterminacy (Princeton: Princeton University Press, 1981).
86 For Renato Poggioli, the avant-garde’s fascination with science and technology is mostly symbolic, tokenism bordering on “the naïve and simple cult of the miracle, prodigy, and portent.” Describing the
Between the narrowly descriptive verse of the early nineteenth century and loosely interpreted avant-garde technological enthusiasms in the twentieth and twenty-first, literary historians have recognized two modes in which the importance of science to poetry manifested in the crucial years immediately preceding the Parnassian moment. In one mode, represented by Leconte de Lisle, poetic form expresses scientifically, through a common ideal of objectivity. Calling his poems meant to reconstruct the world of Antiquity “études,” Leconte de Lisle writes in the preface to his Poèmes antiques (1852) that “L’art et la science, longtemps séparés par suite des efforts divergents de l’intelligence, doivent donc tendre à s’unir étroitement, si ce n’est se confondre.” In the second mode, represented by Maxime Du Camp, poetic content reflects scientific achievement, through the celebration of modern industry and technology. Du Camp published his Chants modernes, whose otherwise traditional lyricism makes room for an ode sung by Steam herself, in 1855. Du Camp and Leconte de Lisle traded sharp rhetorical blows for months over their opposing poetic visions, and, as explained by Bertrand and Durand’s dialectical model in Les poètes de la modernité, their neatly symmetrical approaches to the scientific pillar of bourgeois modernity together make a neat foil to the aesthetic modernity of Baudelaire. This view first positions the eternal ideal of the past pursued by Leconte de Lisle’s poetic studies against Du Camp’s moderniste lyric, enamored of the present. The synthesis is

“purely allegorical and emblematic use of the expression ‘scientific’” in “avant-garde scientificism,” Poggioli writes that it is then “the particular expression not only of the cult of technique, but also of that general dynamism which is one of the idols of modern culture.” See Renato Poggioli, Theory of the Avant-Garde, trans. Gerald Fitzgerald (Cambridge, MA: Harvard University Press, 1968), 139.


then located in Baudelaire: “La modernité de Baudelaire est dans ce dépassement. Elle est ce dépassement” (PM, 68).

This model of the relationships among poetry, science, and aesthetic modernity neither acknowledges nor accounts for the full range of experimentation that takes place during the Parnassian moment. Although the opposition between poetry with scientific form and poetry with scientific content provides useful historical orientation in broad strokes, the transgressiveness of each mode is lost. As Casimir Fusil describes Leconte de Lisle’s lyric persona, scientific objectivity replaces poetic subjectivity:

Le poète emprunte au savant non seulement ses idées, mais son attitude. Comme le chimiste devant la cornue où la matière se transforme, comme le naturaliste devant le squelette d’un animal disparu depuis des siècles, le poète lui aussi s’impose de renoncer à sa personnalité, il est impassible. Sa poésie est objective. Son modèle est extérieur à lui-même, il doit se soumettre à ce modèle, disparaître le plus possible derrière lui.89

The new understanding of the self emerging from the positive sciences contrasts sharply with the poetic conventions of the Romantic self, and indeed suggests an incompatibility with art.90 Similarly, the new industrial technology that Maxime Du Camp made the subject of poetry was considered incompatible with lyric verse. Théophile Gautier made this case with the diabolically faint praise he unleashed in the 1867 Rapport sur les progrès de la poésie, writing of Du Camp, “Si l’inspiration ne veut pas venir, effrayée par quelque sujet par trop moderne et réfractaire, il la

90 “What is the nature of objectivity? First and foremost, objectivity is the suppression of some aspect of the self, the countering of subjectivity. […] The history of objectivity becomes, ipso facto, part of the history of the self. Or, more precisely, of the scientific self: The subjectivity that nineteenth century scientists attempted to deny was, in other contexts, cultivated and celebrated. In notable contrast to earlier views held from the Renaissance through the Enlightenment about the close analogies between artistic and scientific work, the public personas of artist and scientist polarized during this period. Artists were exhorted to express, even flaunt, their subjectivity, at the same time that scientists were admonished to restrain theirs. […] The scientific self of the mid-nineteenth century was perceived by contemporaries as diametrically opposed to the artistic self, just as scientific images were routinely contrasted to artistic ones.” Lorraine Daston and Peter Galison, Objectivity, 2nd ed. (New York: Zone Books, 2010), 37.
force et lui arrache au moins des vers sobres, corrects et bien frappées […].”

Even expository and descriptive poetry about the strange new machines behind steam power and beet sugar processing avoided using technical vocabulary. Yet at the same time that it downplays the audacity of these two modes of scientific poetry, the dialectical model over-generalizes their predominance. Lyric subjectivity is alive and well in Leconte de Lisle’s poetry, and Du Camp produced only three poems about modern industrial machines.

The conclusion I draw from this disparity between the historical model and reality is not that science, technology, and industry were unimportant to poets in France during the 1850s, 1860s, and 1870s, but rather that scientific poetry of the Parnassian moment should be re-thought outside of the form/content binary. Carrie Noland’s groundbreaking study, *Poetry at Stake: Lyric Aesthetics and the Challenge of Technology*, points toward ways that poetry itself contains and incorporates mechanical qualities. With Noland’s work in mind, I propose a distinct model of scientific poetry to help understand the Parnassian moment. I call this model the experimental

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92 Marchal describes the “large consensus” in the background of nineteenth-century debates about scientific poetry: “si la possibilité de concilier poésie et science est source de polémique, on s’accorde à penser que le langage scientifique n’est guère employable en poésie, pour des raisons qui ne tiennent pas uniquement à son aspect tératologique, mais à des considérations pragmatiques,” including obscurity and obsolescence. Hugues Marchal, “L’hippopotame et le coursier amphibie: De la survie du langage poétique en un siècle de science,” *Romantisme* no. 154 (2011): 81.

93 Marta Caraion counts the opening poem of *Les Chants modernes*, “Aux poètes,” and the six “Chants de la matière” as examples of Du Camp illustrating the program set out in the collection’s preface, but only “La Vapeur,” “La Bobine,” and “La Locomotive” present modern technologies speaking in the lyric “je.” As for Leconte de Lisle, one of his most influential readers writes at length to defend the properly lyrical character of the poet’s work; Paul Bourget argues that Leconte de Lisle creates “la vision créatrice” of *l’esprit poétique*, informed by the facts and formulas of *l’esprit scientifique* but focused above all on sensation and the “travail de poésie” that happens within the poet himself. See Caraion, 55; Paul Bourget, *Essais de psychologie contemporaine*, vol. 2 (Paris: Plon-Nourrit, 1920), 95-96. Originally published as *Nouveaux essais de psychologie contemporaine* (Paris: Lemerre, 1886).

Unlike the traditional models outlined above, the experimental poem does not rely on isolated form, content, or genre to anchor the scientificity of verse. That is, if objective poetry displays scientific form; if industrial lyricism displays technical content; and if scientific poetry as a whole refers to a marginal genre, the experimental poem engages both form and content in a profoundly different way. First and foremost, the experimental poem is not identified with any one genre, subject, style, or author. A sonnet by Sully Prudhomme can be experimental, just as can the monosyllabic verse of the Cercle Zutique—which is not to say that all sonnets or all of the Zutistes’s poems are experimental. Neither Parnassianism nor works of aesthetic modernity owns the experimental poem. In fact, I argue that the potent influence of science and technology on poetry constitutes a defining characteristic of the Parnassian moment. Rather than sorting out two types of failed mid-century scientific poetry from the successes of anti-scientific modern poetry, I wish to show how a diversity of poets produce texts that act as experiments. There, internal relations among various elements of the text test poetic concerns across a technical imagination. The experimental poem provides a way to try out the possibilities that the century’s new tools of observation and communication offer, bringing scientific and technological advances into the work of poetry.

The term “experimental poem” has an obvious antecedent in Émile Zola’s naturalist idea of the roman expérimental. This parallelism, on the one hand, highlights the perceived significant disparity between poem and prose, in which only the latter is suited to integrate modern science; when Zola defined the experimental novel in 1879, he held up poetry as a counterexample, insisting on its dreamy idealism. By baptizing the type of poetry that I study

here “experimental,” I suggest a corrective to Zola’s bias toward prose.96 I will locate junctions of scientific and poetic matters, like the measurement of long distances and the distance of lyric address, in order to show how the experimental poem of the Parnassian moment demonstrated openness to contemporary science and technology. In this sense, important differences separate the experimental poem as I conceive it from Zola’s experimental novel. Although both can be dated to 1866, well into the literary field’s process of autonomization, the experimental novel developed into a form that looks explicitly toward bourgeois society.97 Zola describes a three-step process, in which extensive observation of the actual world precedes any writing and creates the basis for the novelist’s idea.98 Tested in the novel’s unfolding, the idea carries through in character, action, and situation. The results obtained by the experimental novel, as well as the author’s preliminary empirical research, tie the work closely to social reality.99 According to Zola, the novel form is best suited to analyzing moral maladies, and thus the rigor of his method can occasion not only better comprehension of pathological human passions, but also discover cures.100 In Zola’s theory, the experimental novelist’s precise, scientific method ensures that his

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96 Zola begins his 1879 essay “Les Poètes contemporains” by declaring, “Les romanciers tiennent à cette heure le haut du pavé littéraire,” pitting the novel’s “évolution” against poetry, “stationnaire,” whose defining trait after 1830 has been its lack of originality. Only at the essay’s end does Zola envision the (naturally naturalist) renewal of poetry: “C’est pourquoi j’imagine que le grand poète de demain devra commencer par faire table rase de toutes les esthétiques qui courent les rues à cette heure. Je crois qu’il sera profondément moderne, qu’il apportera la note naturaliste dans toute son intensité. Il exprimera notre monde, grâce à une langue nouvelle qu’il créera.” Émile Zola, Documents littéraires. Études et portraits, 2nd ed. (Paris: G. Charpentier, 1881), 163-164, 194.

97 Bourdieu lays out how artistic autonomization enables Zola to intervene in the political field and create the position of the modern intellectual; RA. 215-220.


99 Zola, Le Roman expérimental, 55.

100 Ibid., 70-71.
investigation of “faits humains et sociaux” results in a text that has the potential to stimulate moral progress in society.  

The experimental poem, at the crossroads of the scientific enthusiasm and l’art pour l’art that define the Parnassian moment, instead operates in line with the principle of self-reflexive, autonomous art. Autonomy and scientificity need not, I argue, be incompatible. The interior dynamics of the experimental poem are what generate its experimental character. Whereas for Zola, the text illustrates the novelist’s power to create and execute his idea, the experimental poem enacts an attempt to discover a new mode of poetic inscription. Its experimental mode is both constituted within, and self-reflexively interrogated by, the poetic text itself. In order to understand how a text can carry out a test of its own material, I turn to the process of question and answer, or problem and solution, that Jauss puts forward in “Literary History as a Challenge to Literary Theory.” For Jauss, a work has the character of an answer; the task of the critic is to determine questions that reveal the text as answer. The text can, of course, answer many different questions—though not any or every one—and Jauss is especially interested in discovering those questions posed at the work’s origins. Once reactivated, past questions give later readers access to the text’s synchronic history, by disclosing an originary identity as an answer that may have faded over time. Because the structure of question and answer mediates production and reception in the text, the reader can make use of this structure to appreciate its historical situation; she places the work in its synchronic context, but also on a diachronic continuum of

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101 Ibid., 60.
102 Zola does not give a very clear account of how the novelist is to balance the demands of objective observation and active intervention in the writing of the text. For a sympathetic effort to elucidate the mechanics, see Andrew Benjamin, “Experimentation as a Defence of Literature: Zola’s Le Roman expérimental,” Australian Journal of French Studies 45, no. 1 (2008): 59-72.
103 See discussion in “The Parnassian moment” above; the reader may be unable to see this textual identity due to changes in aesthetic expectations, which render it either irrelevant or normalized in the present.
questions and answers. Responding to concerns articulated in its present, “the next work can solve formal and moral problems left behind by the last work, and present new problems in turn.” Thus the text is a solution that arises within a constellation of problems; the text constitutes an answer to the questions it takes up.

While Jauss envisions these questions passing through processes of reception, which require an active reader, I depart from him here to contend that the interplay of problem and response may occur within the text. The questions that Jauss ascribes to readers are implicit, shaped by the horizon of expectations in effect at a given historical moment. The experimental poem moves the implicit questions being asked, tested, and answered into the framework of the text itself. In the specific arrangement of the poem’s materials, the text performs certain kinds of trials on its concerns. Rooted in the questions it asks, the poem is at once an experiment taking place to answer those questions, and that experiment’s final result. Attending to the impact that particular effects of language, from images to rhetorical figures to sounds, have on the poem’s themes discloses sites and modes of experimentation; considering the product of such effects indicates the experiment’s raw outcome. As the outlines of this model suggest, both poetics and hermeneutics are engaged in the experimental poem. How the poem achieves its investigative effects matters as much as what it investigates.

104 Jauss, Aesthetic of Reception, 32.
105 It is my hope that this model contributes to thinking through the problem that Paul Stephens observes plaguing the term “experimental” in its modern critical usage—namely, that it nearly always fails to establish any link between formal innovation and scientific method. Discussing how “experimental” has at times been a depoliticized substitute for “postmodern” or “avant-garde,” Stephens ends with a precise principle and a set of general practices: “Perhaps experimental literatures have a role in reminding us of the limits of our own knowledge. Experimentalism with regard to writing ought to signify a willingness to adopt new forms and methods, to borrow from non-literary sources, to borrow from other languages and discourses, and to seek unforeseen outcomes.” Paul Stephens, “What Do We Mean by ‘Literary Experimentalism’?: Notes Toward a History of the Term,” Arizona Quarterly: A Journal of American Literature, Culture, and Theory 68, no. 1 (2012): 168.
106 On dual poetic and hermeneutic orientation of Jauss’s work, see Paul De Man’s valuable introduction to Toward an Aesthetic of Reception, ix-x.
In this dissertation, I will study how experimental poems of the Parnassian moment mobilize three technological objects—the photograph, telegraph, and heliograph—used to investigate scientific problems of distance, representation, and communication. These scientific problems are also, broadly speaking, problems central to poetry. What is the distance between the speaker, “je,” and the subject of lyric address, “tu”?¹⁰⁷ How can poetic language best represent aesthetic objects? How can poetic language best express meaning that the poet seeks to communicate? Although such questions are often raised in regard to the lyric, I wish to suggest that the vexing poetics of Parnassianism, which seem to swing from emphasizing the subject and ambiguity toward objects and legibility, bring the issues to the fore at a time when technological advances of bourgeois modernity were revolutionizing modes of representation and communication, and the very idea of distance. I will thus be particularly interested in coincidences between the appearances of technological objects and poetic technique in the experimental poem during the Parnassian moment. In other words, both astronomers and poets debated how best to represent Venus in the 1860s and 1870s; astronomers employed photography, and in chapter two, I argue that poets experimented with poetry’s own ability to employ a photographic mode. I seek to trace ways that poets interacted with contemporary science outside the familiar binary of Leconte de Lisle’s objective form and Du Camp’s industrial content, by discovering the poétique technique at work in the period’s experimental poems.

¹⁰⁷ The long-running debate over the concrete definition of the lyric, or lack thereof, falls outside of my concerns here. Instead, I refer to Jonathan Culler’s programmatic argument in “Why Lyric?”; Culler emphasizes the particularity of lyric language, and proposes a model of the lyric through which “we should think of the poem as discourse addressed, a rhetorical transaction, so the hyperbolic forms of address characteristic of the lyric—from apostrophes to birds and clouds and urns to obsessional addresses to a mistress—would be foregrounded.” Culler, “Why Lyric?”, PMLA 123, no. 1 (Jan., 2008): 205.
Although the experimental poem requires revising notions of aesthetic autonomy and modernity to include scientific and technological presences, I wish to set clear boundaries for its stakes. Epistemological conclusions are cause for special caution. Jauss, again, is insightful in “Literary History,” writing that “the work of art can also mediate knowledge that does not fit into the Platonic schema if it anticipates paths of future experience, imagines as-yet-untested models of perception and behavior, or contains an answer to newly posed questions.” Yet, because the experimental poem remains very much a part of l’art pour l’art, the scope of that knowledge is limited to aesthetics; its testing of technologically animated “models of perception and behavior” involves only questions of aesthetic practice and possibility. That is, I do not claim, as does Jauss in an important component of his theory, ethical significance for these experimental poems. Nor do I hope to demonstrate, as does Daniel Albright in Quantum Poetics, that the “pseudomorphism” between poetry and contemporary science and technology was believed by its practitioners to reveal intrinsic truths about the nature of poetry itself. Rather, the experimental poem turns to scientific problems and technological methods as part of modern knowledge, and uses them to explore the potential of poetic language.

In other words, a technical imagination is at work in the experimental poem. This imagination entails neither explicit reference to a technological instrument, nor mystical faith in the essential congruence of technology and language. A poetic text that acts like a photograph, in order to test its questions about representation, need neither name-check photography nor imply that true poetry is itself a photograph. The technical imagination as described by Gilbert

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109 The ethical component comes to the fore in Jauss’s elaboration of literature’s “communicative value,” and receives a more complete exposition in “A Sketch of a Theory and History of Aesthetic Experience,” in Jauss, Aesthetic Experience, 3-151.
Simondon grounds my understanding of it here. Simondon’s *Du mode d’existence des objets techniques*, published in 1958, attempts to combat the durable assumption that culture and technology are antagonistic forces.\footnote{Gilbert Simondon, *Du mode d’existence des objets techniques. Thèse complémentaire pour le doctorat ès lettres présentées à la Faculté des Lettres de l’Université de Paris* (Paris: Éditions Montaigne, 1958), 9. “L’opposition dressée entre la culture et la technique, entre l’homme et la machine, est fausse et sans fondement ; elle ne recouvre qu’ignorance ou ressentiment.”} That assumption was powerfully articulated by Heidegger in his 1954 essay “The Question Concerning Technology,” where he diagnoses tekhnè as the highest danger to the Being revealed by poiesis.\footnote{Martin Heidegger, *The Question Concerning Technology and Other Essays*, trans. William Lovitt (1977; repr., New York: Harper, 2013), 27. See also Heidegger’s famous example of the hydroelectric plant versus the ode on the Rhine, 16: “In order that we may even remotely consider the monstrousness that reigns here, let us ponder for a moment the contrast that speaks out of the two titles, ‘The Rhine’ as damned up into the power works, and ‘The Rhine’ as uttered out of the art work, in Hölderlin’s hymn by that name.”} For Simondon, however, the *objet technique* is defined not by its fatal opposition to the natural object, but rather by the internal logic that maximizes the synergies of its function and structure. The *objet technique* is a complex whole, as different from the “abstract objects” of pre-industrial production as an automobile is from a wedge.\footnote{Simondon, *Objets techniques*, 34. The modern motor provides an example of the technical object, in its development and in its contrast with the abstract object; ibid., 19-27.} According to Simondon, “technicities,” or the determinate functions carried out by specific elements of a technological object, are at the heart of the technical imagination. A “particular sensitivity” to the array of already available, reliable functions is what “permits the discovery of possible assemblages” that invention represents.\footnote{Ibid., 73-74.}

But before turning to the technicities at work in the experimental poems that I will consider here, it is important to delimit the field of the technical imagination that I will study. As the preceding discussion has shown, the term *science* can quickly become unwieldy, covering myriad disciplines, hypotheses, procedures and instruments, shading into epistemology and industry. I have chosen to center my investigation of science and poetry during the Parnassian...
moment on a specific, highly mediatized, public science event: the 1874 Transit of Venus. From their connections with the Transit, I follow scientific issues that arose in the mid-nineteenth century to the technological instruments mobilized to tackle them. The Transit provides an instance of concrete scientific awareness among the general public, which grounds my view of a certain technical imagination of these years.\textsuperscript{115} While taking into account the broad presence of the photograph, telegraph, and heliograph in daily life, I examine these objects as part of \emph{poétique technique} engaged with scientific and poetic matters of distance, representation, and communication. For example, electric telegraphy, explored in chapter three, had an unquestionably revolutionary impact on societies all around the world and facilitated observation of the Transit of Venus across the globe; experimental poems test this \emph{technique} in relation to particular notions of universality, shaped in turn by particular scientific approaches to geography and code. As I will show, the experimental poem requires the reader to discover first \emph{how} a poetic text acts technically, and then to discover \emph{why}.

\textbf{Lines of inquiry: the 1874 Transit of Venus and the Parnassian moment}

To begin filling in the details of the technical imagination studied here, I will begin with a short overview of the three technologies in question: the photograph, the telegraph, and the heliograph. Next, I will discuss the Transit of Venus and its representation in the press during the Parnassian moment. I will then summarize how each technology was used in conjunction with

\textsuperscript{115} Of course, many other technical imaginations can and have been considered; in France, for example, the Formes, Théories et Discours group of the Littératures, Savoirs et Arts laboratory is currently conducting research on nineteenth-century literature and the life sciences, led by Gisèle Séginger. An overview of their work is available at http://lisaa.u-pem.fr/presentation/equipes-de-recherche-du-lisaa/formes-theories-et-discours-ftd/.
Transit observations, and outline its significance to specific issues of distance, representation, and communication.

Photography was announced to the world in 1839, when the Académie des Sciences sponsored and published Daguerre’s process for fixing an image using light-sensitive chemicals. By the end of the 1850s, however, wet plate photography had largely replaced daguerreotypes. The wet plate process relied on different chemicals to produce a negative image first, from which positive prints could be made. Wet plate photography was significantly cheaper than daguerreotypy, thanks to the glass, paper, and collodion used instead of the silver plates and mercury fumes required by the earlier process. Faster and less cumbersome to create than a daguerreotype, a photograph was also infinitely reproducible from its negative, whereas each daguerreotype was a unique positive image.\textsuperscript{116} The adoption of the wet plate process made photographic technology widely available to the paying public, a phenomenon that has been the subject of extensive scholarship, from Walter Benjamin to André Gunthert.\textsuperscript{117} Superstar photographers like Nadar and Disdéri were household names; dozens of books sought to educate those who aspired to get behind the camera; popular journals dedicated thousands of articles to uses and developments of photography; and fads such as photographic \textit{cartes de visite}, and

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eventually family albums, brought its images into everyday homes throughout the second half of the nineteenth century.\textsuperscript{118}

During these decades, the public also enjoyed increasing access to the telegraphic technology transforming global communications. The original generation of functional electric telegraphy devices emerged in the 1830s, in Germany, England, and the United States. The French government only began to install an electric telegraph system in 1845, considerably later than many neighboring countries, and that system was only opened to paid public use in 1851.\textsuperscript{119} France’s previous telegraphic network, a highly organized set of pathways for semaphore relay in secret code inaugurated in 1793, had been reserved exclusively for military and governmental communications; although French citizens could see the hulking stone towers of the optical telegraph sprinkled across the country, the power to send a message over dozens of miles in minutes was retained for the state.\textsuperscript{120} But by the 1860s, a resident of Paris wishing to send a 20-word message to Lyon, for example, needed just to stop by one of the city’s dozens of telegraph bureaus, submit the message to a telegraph operator, and pay 1F50. The operator would send the message in Morse code, depressing the telegraph’s signaling lever to form the sequence of “dots” and “dashes” that translated each letter, and the receiver in Lyon would almost instantaneously bob up and down in the same pattern. This pattern would then be translated out of Morse code back into French and expedited to the addressee. Electric telegraph networks continued to expand throughout the middle decades of the century, first linking the country’s major cities and then connecting to small villages and international destinations; they became a fixture of the

\textsuperscript{118} Patrice Flichy, \textit{Une histoire de la communication moderne. Espace publique et vie privée} (Paris: La Découverte, 1991), 108-109. See also discussion below, chapter 2.
\textsuperscript{119} Ibid., 63-68.
\textsuperscript{120} Ibid., 45.
popular press.\textsuperscript{121} In the \textit{Magasin pittoresque}, the first substantive articles explaining electric telegraphy ran in the spring of 1854; in \textit{Les Mondes}, an average of two features appeared a year between 1866 and 1876, accompanied by dozens of mentions in weekly notes and news.\textsuperscript{122}

Heliography, on the other hand, remained a comparatively specialized technology, despite being the simplest apparatus of the three. Also called a heliotrope—and not to be confused with Nicéphore Niépce’s early attempts at photography—the heliograph employed movable mirrors to concentrate sunlight and reflect its beams as a signal. The German mathematician Carl Friedrich Gauss invented the heliotrope in 1821, to be used in his survey of the Kingdom of Hanover.\textsuperscript{123} Since their signal could be seen at distances of 20 miles, heliotropes formed part of the surveyor’s toolkit, especially those engaged in \textit{geodesic} measurement.\textsuperscript{124} The large-scale surveying efforts that took place in the nineteenth century sought to measure the Earth in ways that required sizable triangulations, and complex calculations accounting for the curvature of the globe, among other complicating factors.\textsuperscript{125} However, the basic principle of the

\begin{footnotesize}
\textsuperscript{121} For a description of the mechanism, see Louis Figuier, \textit{Télégraphie aérienne, électrique et sous-marine; Câble transatlantique; Galvanoplastie [...]}, vol. 2 of \textit{Merveilles de la science, ou description populaire des inventions modernes} (Paris: Furne, Jouvet, 1868), 111-114, http://gallica.bnf.fr/ark:/12148/bpt6k24675w. Hereafter abbreviated as \textit{MS}. Details of local service can be seen on the \textit{Carte du réseau télégraphique français dressée par l’administration des lignes télégraphiques, 1er janvier 1870} (Paris: [n.p.], 1870), and international service on the \textit{Carte officielle des relations télégraphiques dressée conformément à l’article 63 de la conférence de Vienne... Juillet 1870} (Paris: Imprimerie nationale, 1871). Many periodicals, such as \textit{La Presse}, contained a regular “Dépêche télégraphique” section transcribing news from abroad. The telegraph also lent its name to a number of short-lived papers, including \textit{Le Télégraphe. Bulletin de télégraphie commerciale, agricole, financière} (Feb. 21 – April 30, 1867) and \textit{Le Télégraphe. Musique. Théâtres. Chronique mondaine} (Dec. 9, 1869 – March 3, 1870). See also discussion below in chapter 3.
\textsuperscript{122} “De l’électricité et du télégraphe électrique sur terre et sous mer,” pts. 1 and 2, \textit{Le Magasin pittoresque} 22, nos. 19 and 20 (May 1854), 151-152 and 155. See also appendix B.
\textsuperscript{123} \textit{W. K. Bühler, Gauss: An Autobiographical Study} (Berlin: Springer-Verlag, 1981), 96.
\textsuperscript{125} Bühler, \textit{Gauss}, 95.
\end{footnotesize}
heliotrope was repurposed in the second half of the century for military communications. If the general public may have learned of Gauss’s heliotrope through the occasional amateur surveying guides published from time to time in the popular press, military heliography garnered greater exposure from its utility in situations where electric telegraphy was impossible—war at home and colonies abroad. I will focus on the heliograph as envisioned by Aimé Laussedat, a geodesist and colonel in the French army, who understood the device’s potentialities and developed it for communications under the Siege of Paris. Both geodesical initiatives and new optical signal technologies held durable interest for scientists, and in 1874, Laussedat chaired a commission on defensive communications that established a French heliographic service.

While these technologies formed part of the backdrop of everyday life in Paris during the Parnassian moment, it is safe to say that one of the biggest stories in science at the time was the Transit of Venus to occur on December 9, 1874. The Transit was, in fact, one of the most highly anticipated scientific events of the century, awaited not just by professional scientists but also by amateurs, politicians, journalists, and the general public. Rarity was a crucial factor. Intervals of more than 100 years separate each pair of Transits that then occur in a eight year span, as

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127 For example, “Manière de lever une carte du pays que l’on habite,” Le Magasin pittoresque, vol. 24, no. 45 (Nov. 1856). The military usage of heliographic signaling technology during the Franco-Prussian war was a source of some controversy in the years that followed; see appendix C for relevant texts.
128 Georges Bruel, “Le Colonel Laussedat. Le Savant,” Supplément au Bulletin de la Société bourbonnaise des études locales 23, (1928): 117-118. Paul Ponsinet also argued for the development of military signal telegraphy in 1872. Although the French had largely established and dominated the field of geodesy from the seventeenth century until the 1830s, it was in sharp decline just a few decades later. François Perrier, then himself charged with revising the French meridian, laid out the situation with scorching detail: “Il est incontestable que la science géodésique a été créée en France […]. Mais, il faut bien le dire, la France a perdu sur le terrain géodésique la place d’honneur qu’elle a si longtemps occupée : les étrangers, qui étaient d’abord nos élèves ou nos imitateurs, sont devenus nos rivaux d’abord et bientôt après nos maîtres.” Paul Ponsinet, La Télégraphie militaire. Son rôle pendant le siège de Paris (Paris: Dumaine, Dentu, 1872), 41-43. François Perrier, La géodésie française. Réorganisation du service géographique dans l’armée (Paris: J. Dumaine, 1872), 3. See also discussion of heliography below, chapter 4.
viewers on Earth can twice see Venus’s orbit crossing in front of the Sun. The Transit on December 9, 1874 was the first to be observed since 1769, and would thus be the first Transit ever observed with modern scientific equipment. Observers hoped to determine the exact times of the first and last contacts between the edge of the planet and the edge of the Sun. It was expected that technical advancements would provide clear, precise, and conclusive data for Venus’s ingress and egress. This data would in turn be used to calculate the solar parallax, or the actual distance between the Earth and the Sun. The relative size of the solar system had been known for some time, but the Transit promised to supply accurate, concrete values; at stake, explains Jimena Canales, “was nothing less than the determination of the ‘scale of the universe’ and the problem of other worlds.”

The drama of the Transit received considerable attention in the period’s media. Christophe Marlot writes that “en novembre et décembre 1874, la célébrité de Vénus avait été immense ; les gazettes scientifiques puis les journaux populaires s’étaient emparés de l’affaire au point que le 9 décembre, personne n’eut d’autres pensées que pour la planète Vénus.” Indeed, a survey of several prominent daily titles reveals that the Transit was mentioned dozens of times in 1874 and 1875. As the French observation expeditions departed for Beijing, Nagasaki, Saigon, the Île Saint-Paul, Noumea, and Campbell Island, newspapers provided frequent updates. Le Petit Journal tracks the Transit across 20 articles, including one feature, and La Presse across 39 articles, including Louis Figuier’s three-part preview article and subsequent two-part recap in the “Quinzaine scientifique” feuilleton. The Revue des deux mondes ran a fifteen-page piece on...

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131 See appendix A.
the Transit in January 1874; Flammarion’s public lecture on “Le Soleil et le prochain passage de Vénus” at the Salle des Capucines took place a few months later, on May 16; Meilhac and Halévy, the librettists responsible for Bizet’s Carmen and Offenbach’s La belle Hélène, capitalized on the event to debut a new short play in the spring of 1875—Le passage de Vénus.

By examining the Transit of Venus as represented in the French popular press over a broader period of time, however, a clearer context emerges for this last-minute publicity push. Meilhac and Halévy’s Le passage de Vénus, for example, begins with Monsieur Laborderie, “professeur libre,” preparing to give a public lecture on the astronomical phenomenon. No one shows up, which leads the garçon de bureau to suggest Laborderie emphasize Venus, rather than parallax, to attract an audience. Although the hopelessly dull professor struggles against Venus’s sexy associations—protesting “Vous riez, messieurs … vous avez tort … Le mot Vénus est pris ici dans son acceptation purement scientifique”—Meilhac and Halévy go on to do just that, introducing the rakish Champvallon, romantic entanglements, and the prospect of a beautiful woman’s arrival. The authors construct a farce that amounts to an extended pun: the beautiful, unscrupulous Mimi Cassecou passes by the Faculté, causing consternation among her lover Champvallon, her former lover Laborderie, and her husband, the garçon de bureau. When Laborderie exclaims “Vénus ! Vénus !” at the play’s close, he confirms that the transit of Mimi is far more interesting than the planetary movement. Le passage de Vénus points to the place that this scientific endeavor occupied in the period’s imagination, from the importance of parallax to the jokey play on the dual meaning of Venus. Before turning to survey areas of this imagination that poets explored, I will consider the presence of the Transit in the popular press.

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133 Ibid., 197.
134 Ibid., 220.
To get a fuller sense of how the public may have understood the Transit phenomenon, I look at a variety of periodicals, aimed at different audiences, with emphasis on the decade 1866 to 1876. Regular mentions are counted alongside substantive explanations, to provide evidence that although the Transit of Venus may not have been able to compete with the charms of Mimi Cassecou, the subject nonetheless fell well within the limits of the era’s general knowledge.

In the months and years preceding the departure of French observation missions for the South Seas and far East, references to the Transit of Venus usually occurred in sections of the press reserved for the sciences. Modern scientific vulgarization, which seeks to keep the public informed of development in scientific research and events, has its roots in the proceedings of the Académie des sciences, itself founded in 1661. The first, unofficial comptes-rendus of Académie meetings appeared in 1825, and the Académie began to publish official, weekly notes a decade later. These notes formed the basis for the feuilleton scientifique, the regular science section included in almost every daily newspaper by the middle of the century and penned by such influential writers as Louis Figuier, Félix Hément, and Camille Flammarion. In *La Presse*, the Transit of Venus is mentioned five times between 1865 and 1873, and four of those five mentions are part of the “Sciences” rubric. André Samson and Figuier gave comprehensive summaries of the Transit, its stakes, and observation preparations in 1865 and 1869; in 1870, a comment on the Transit shares the pages of *La Presse* with the results of the May 8th plebiscite affirming the Second Empire. Similarly, *Le Petit Journal* contains three significant articles by Félix Hément about the Transit, published in 1869, 1871, and 1872. The latter takes up the entire

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135 Bruno Béguet, “La vulgarisation scientifique en France de 1850 à 1914: contexte, conceptions et procédés,” in *La science pour tous*, 7-10. See also appendix A.
feuilleton scientifique with a defense of the Transit observation’s scientific interest, to justify its hefty costs to the government and tax-paying readers.136

Beyond the feuilletons scientifiques of the newspapers, periodicals entirely dedicated to vulgarization flourished in the second half of the nineteenth century. Perhaps the most well-known was the Magasin pittoresque, a weekly publication “à deux sous” aimed at “très précisément tous ceux qui n’ont pas accès au savoir.”137 The Magasin pittoresque was packed with engraved illustrations and entertaining, informative texts concerning an eclectic range of subjects, from world history to chemistry to reporting on the annual Salon. Founded in 1833, the Magasin pittoresque remained popular through the end of the century, and so offers an excellent glimpse into subjects of general knowledge in the era, including a notable trend toward the sciences and technology.138 Astronomy was well-represented—Marie-Laure Aurenche counts 210 articles classed under “Astronomie” between 1833 and 1870139—and so was the Transit of Venus—eight articles between 1866 and 1876, as well as two citations in the 1850s. Four texts, published in 1866, 1870, and 1871, detailed the history and specific expectations of observations of the phenomenon, and an 1869 article titled “Le Passage de Mercure sur le soleil” offered readers abundant references to past coverage of Transits. The regular inclusion of the Transit in the Magasin pittoresque, as well as the varied depth of treatment, suggest that familiarity with this astronomical phenomenon then belonged to a common horizon of knowledge. Similarly, the more science-focused popular weekly La Science pour tous published a two-part series on the Transit of Venus in 1870, attesting to its interest in the years preceding the actual event.140

136 See appendix A.
138 Ibid., 236.
139 Ibid., 420.
140 See appendix A.
If these titles testify to an awareness of the Transit of Venus among the grand public, the narrower scientific focus of a journal such as Les Mondes, also known as Cosmos after 1873, indicates the shape of discourse among an audience of amateur and professional scientists. The publication’s “Chronique de la semaine” compiles an eclectic overview of scientific current affairs, and its regular “Académie des sciences” section draws from the Comptes rendus hebdomadaires des séances de l’Académie des sciences, providing a usefully curated index to the dissemination of scientific debate from elite confines to an interested readership. The Transit of Venus begins to appear in Les Mondes in 1869, with 12 of 13 total mentions during the year selected from the Comptes rendus. For the next four years, the journal averages six items concerning the Transit per year, including three feature articles averaging almost six pages each. In 1874 and 1875, Cosmos / Les Mondes logs 22 and 26 items about the Transit, largely under the “Chronique de la semaine” and “Académie des sciences” sections, although the July 9, 1874 issue devotes all 23 pages to the upcoming event. Cosmos / Les Mondes thus reveals that against the backdrop of general knowledge regarding the Transit in mid-century France, a steady drip of information passed to the public from the Académie.

Within the institutions of French science, observations had been discussed since 1866. Delaunay, then an astronomer at the Bureau des Longitudes, authored a “Notice sur la distance du Soleil à la Terre” as part of the Annuaire pour l’an 1866. Later collected in the Recueil des

141 In 1868, Abbé Moigno indicates that the magazine enjoys 1300 subscribers, with a total weekly print run of 1550. The next year, he offers an assessment of his readership: “Je n’ai pas, sans aucun doute, le nombre d’abonnés et de lecteurs des grands journaux, mais j’ai des abonnés et des lecteurs choisis, riches ou ayant tous une position sociale élevé.” Les Mondes 18, no. 17 (Dec. 24, 1868), 677; Les Mondes 19, no. 1 (Jan. 7, 1869), 3. On the editorial vagaries of Cosmos and Les Mondes, see Béguet, ed., La science pour tous, 92.

142 See appendix A.
mémoires, rapports, et documents relatifs à l’observation du passage de Vénus sur le Soleil, 143

Delaunay’s essay ends with a translation of the English astronomer George Biddell Airy’s 1857 comment on determining the solar parallax, and served, as Jimena Canales notes, “to point out the ‘embarrassment’ of previous observations.” 144 A first commission on Transit observations was formed in 1866, under the Ministre de l’Instruction publique. Preparatory studies began in 1868; the government publicly charged the Académie des sciences with investigations in 1869; a secret commission submitted its preliminary report in March 1870; and the Académie’s final Commission for the Transit of Venus held its inaugural meeting on January 25, 1872. 145 During these years, both professional and amateur scientists produced exploratory research on a number of Transit-related topics, from methods to calculate the parallax to protocols for standardizing the observations. 146

The scope of planning highlights the difficulty of the task, and the importance accorded to it in the mid-nineteenth century. Whereas observations in the previous century had been largely individual initiatives, with little state support and organization, governments across Western Europe, Russia, and the United States dedicated considerable resources to funding their own, official 1874 observation expeditions. Jessica Ratcliff has recently sought to contextualize these expeditions as part of what she calls “big science,” or the large-scale public initiatives


144 Canales, “Photogenic Venus,” 592.


146 Some of these are reproduced in the Recueils. For example, Laussedat presents the photographic apparatus that he devised for use in observing eclipses to the committee on December 3, 1872, vol. 1, part 1, 85-87; his letter, “Projet d’appareil pour l’observation du passage de Vénus,” dated March 11, 1872, is reprinted in Recueil, vol. 1, part 2, 223-225. Other examples may be found in appendix A, particularly through the reporting of Les Mondes.
147 But investments in the Transit were made by individual countries, and so served diverse national interests. Writing about the French effort, Christophe Marlot emphasizes the role played by political events in the turbulent late 1860s and early 1870s. Public discontent throughout the 1860s shook Napoléon III’s empire, identified with a positivist ethos; in parallel with certain democratizing reforms introduced starting in 1867, the Empire planned to finance Transit observations as a show of power and capability, and to rebut anxieties about the increasing superiority of German science.148

The Empire’s collapse during the war Napoléon III instigated against Prussia in 1870, as well as the civil discord of the Paris Commune in the spring of 1871, brought ordinary activities to a screeching halt and handicapped preparations for the Transit. In an ironic twist, the Prussian Commission for the Transit of Venus observation met to settle questions related to its expeditions between March 20 and March 28, 1871, immediately after revolution broke out in Paris.149 Following the Commune, Marlot explains, the new French government thus recommitted enthusiastically to the project, now more than ever freighted with the state’s desire for a sensational triumph on the international stage. “Engager le pays dans une nouvelle aventure militaire était impensable,” writes Marlot, “et seule demeurait la voie du rayonnement scientifique et artistique, dans laquelle la France s’était toujours montrée dominante, prolixe, et tout à fait à son aise.”150 The expeditions destined for exotic lands would capture the public’s imagination, while French astronomers would calculate the parallax differently—and, of course,

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147 Ratcliff, Transit of Venus Enterprise, 21-22.
149 Comptes-rendus de la première et la deuxième conférences tenues à Berlin en 1869 et 1871 sur le Passage de Vénus de 1874, Supplément à l’Inventaire général et sommaire des manuscrits de la Bibliothèque de l’Observatoire de Paris, MS 1140, Bibliothèque de l’Observatoire de Paris.
150 Marlot, Passages de Vénus, 236.
more accurately—than all other countries, ensuring special glory.\footnote{Ibid., 242.} The 1874 Transit of Venus, in other words, had high political stakes for France.

The scientific stakes were high, too. Six French expeditions set sail in 1873 and 1874, manned by dozens of personnel and equipped with many thousands of francs’ worth of newly made and borrowed telescopes, astronomical equipment, photographic apparatuses.\footnote{Exhaustive debate over exact expenditures, equipment, and execution of the Transit observation missions can be traced through the minutes recorded in \textit{Recueil} vol. 1, part 1. For a table of adjunct personnel to be supplied by the Ministre de la Marine et des Colonies, see 237.} Jimena Canales reports that costs ran to 300,000 francs by 1874, and an additional 150,000 francs by 1876.\footnote{Canales, “Photogenic Venus,” 592n15.} Observation stations were set up for the Northern hemisphere in Beijing, Nagasaki, and Saigon, and for the South, in the Île Saint-Paul, Noumea, and Campbell Island. In order to find the distance between the Earth and the Sun using Halley’s method, French astronomers needed to pair the times of Venus’s ingress and egress as seen from a widely spaced pair of points on the Earth’s surface. The difference in times observed would provide the material for calculating the solar parallax, and by extension, the dimensions of the solar system. In my study of the relationship between the sciences and poetry, I will focus on the specific ways that the Transit of Venus engaged with three broad issues: distance, observation, and communication.

“Distance” refers to the determination of the solar parallax, the main mission of the Transit expeditions. The previously existing value for that distance had been widely challenged in the nineteenth century, and the Transit would offer a rare opportunity to revise it using the material of direct observation.\footnote{In 1824, Encke calculated 8.58”, using Halley’s method and data collected from 1761 and 1769 Transits. See James Lequeux, \textit{Le Verrier. Savant magnifique et détesté} (Les Ulis: EDP Sciences, 2009; Paris: L’Observatoire de Paris, 2009), 239.} Parallax computations would also benefit from the era’s effort to redetermine terrestrial longitudes via electric telegraphy, whose near-instantaneity made it
possible to know the difference in position between any two connected points. Distance on both a universal and a global scale was central to understanding the Transit, and measurement was a central concern, emblematic of the century’s guiding scientific ethos.\footnote{Ratcliff, \textit{Transit of Venus Enterprise}, 4-5.}

“Representation” refers to the debates surrounding how best to observe and transcribe the data in question—the precise chronology of the planet’s passage across the sun. I distinguish two topics within the problem of representation. First, as Jimena Canales has shown, the use of photography to document the Transit proved to be a major sticking point. Skeptics argued in favor of traditional observation using the eye, telescope, and hand-drawn sketches; photography enthusiasts argued that the technology would remove the potential for personal error in recording the egress and ingress.\footnote{Canales, “Photogenic Venus,” 594-598.} Astronomical photography itself was very much a developing field, whose variety of instruments and procedures were still being invented, tried out, and improved.\footnote{See Gérard Vaucouleurs, \textit{La Photographie astronomique. Du daguerréotype au télescope électronique} (Paris: Albin Michel, 1958), 17; Holly Rothermel, “Images of the Sun: Warren de la Rue, George Biddell Airy and Celestial Photography,” in \textit{The British Journal for the History of Science} 25, no. 2 (June 1993) 137-169, doi: 10.1017/s0007087400030739.} Although the French expeditions officially adopted daguerreotypes, the leader of the Nagasaki mission, Jules Janssen, also tested his own photographic “revolver,” a precursor to Étienne-Jules Marey’s chronophotographic gun and eventually cinematography.\footnote{Canales, “Photogenic Venus,” 588; see also \textit{Recueil}, vol. 1, part 1, 259. On Janssen’s revolver, see Monique Sicard, “Passage de Vénus. Le révolver photographique de Jules Janssen,” \textit{Études photographiques} no. 4 (May 1998): 45-63, http://etudesphotographiques.revues.org/157.} Secondly, I underline the importance of location and experimentation in planning observation of the Transit. The choice of stations from which to observe the Transit was important for the parallax calculations, and required sending teams of astronomers and fragile, expensive equipment to far-flung sites for several months.\footnote{Recueil, vol. 1, part 1, 7.} Observation methods were “test-driven” in an experimental
Transit machine set up in the Paris Observatory and the Senate. Practically and technologically, observing the Transit and representing the observations posed significant challenges.

Finally, “communication” refers to the hypothesis, much-examined at the time, that life existed on other planets. A revised solar parallax would affect projects—on the fringes of “serious” science but in the mainstream of popular science, as in Flammarion’s famous *Pluralité des mondes habités*—to contact extraterrestrial beings. Transit observations were also expected to clarify certain unanswered questions about Venus’s atmosphere, which were critical to those who believed there was life on the planet, Earth’s closest neighbor.

These issues, and as they relate to the concerns of the 1874 Transit of Venus in particular, filtered into popular culture in the 1860s and 1870s. Jules Verne’s 1870 novel *Autour de la Lune* provides a compelling illustration of how problems of distance, representation, and communication are appropriated in a best-selling adventure novel. *Autour de la Lune* continues the story begun in *De la Terre à la Lune*, which sees rival American scientists Nicholl and Barbicane join French showman Michel Ardan on a voyage to the moon. The three are bundled into a bullet-shaped projectile and shot out of an enormous cannon, from Tampa,

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161 In reference to Flammarion’s more speculative preoccupations, Fox makes the link between his “élargissement du domaine scientifique” and the warm public reception of his ideas by popular audiences at the Salle des Capucines. Fox, “Conférences mondaines,” 54.
Florida, to the moon. The second novel picks up as the vessel approaches its destination, and in the final chapters, the travelers are briefly but dangerously caught in the moon’s orbit before falling to Earth. Distance, representation, and communication all become vital subjects in *Autour de la lune*, suggesting the diffusion of such questions from a learned milieu to the broader French public.

Distance is the most obvious problem and, in some ways, the plot of *De la Terre à la Lune* and *Autour de la Lune*: how can humans traverse the interval that separates our planet from another celestial body in space? Michel Ardan, inspired by the photographer Nadar and defined by his *amour de l’impossible*, gives a thundering speech in Florida which concludes, “La distance est un vain mot, la distance n’existe pas!”

He explicitly assimilates interplanetary distances—seemingly unconquerable—to already conquered distances across the globe: “On va aller à la Lune, on ira aux planètes, comme on va aujourd’hui de Liverpool à New York, facilement, rapidement, sûrement, et l’océan atmosphérique sera bientôt traversé comme les océans de la Lune ! La distance n’est qu’un mot relatif, et finira par être ramenée à zéro.”

Fittingly enough, Ardan’s first appearance in Verne’s novels is telegraphic, the signature on a twelve-word telegram announcing his plans to leave Earth in the projectile. Despite Ardan’s telegraphic utopianism about the mutability of distance, an error in measurement generates the life-threatening dramatic tension of *Autour de la Lune*. Because of incorrect calculations provided to Barbicane by the Cambridge Observatory, the travelers fall short of the moon’s surface, circling it instead. The inhabitants of this “nouvel astre” seem doomed to perish, caught between the Earth and the moon.

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165 Ibid., 161.
166 Ibid., 144.
While the travelers originally intended to overcome the distance to the moon in order to settle its territory, they end up in the role of observers. The bulk of the novel consists of Barbicane, Nicholl, and Ardan watching the changing lunar landscape through the hublots of their vessel. Through this lens, Verne offers up information about the moon’s size, location, visible surface, and satellites, but the characters demonstrate a persistent interest in the possibility of lunar civilization. When they cross to the dark side of the moon, their orbit swallowed in total obscurity, the travelers lose hope of either making observations or returning to Earth. However, the explosion of a passing asteroid changes the course of events. It nudges the vessel, eventually allowing it to exit the moon’s orbit and crash-land in the Pacific ocean. But it also illuminates the moon’s shadowed half with brief light of “une incomparable intensité,” allowing the travelers to glimpse signs of lunar life.

This key moment of Verne’s novel is unmistakably photographic. The “effluve lumineux de quelques secondes” acts as a flash that exposes previously unseen phenomena, “L’invisible Lune, visible enfin !”: mountains, craters, seas, continents, dark masses “telles qu’apparaîtraient des forêts immenses sous la rapide illumination d’un éclair.”168 The light fades, and the travelers are left to ponder the image imprinted in their minds. “Était-ce une illusion, une erreur des yeux, une tromperie de l’optique ? Pouvaient-ils donner une affirmation scientifique à cette observation si superficiellement obtenue ? Oseraient-ils se prononcer sur la question de son habitabilité, après un si faible aperçu du disque invisible ?”169 The uncertainty experienced by Verne’s lunar explorers reflects the uncertainty experienced by nineteenth-century scientists facing new kinds

168 In his memoir, Quand j’étais photographe, Nadar wrote about using magnesium flashes for taking photographs in conditions with insufficient light. He used electric lighting to photograph the Paris Catacombs, in 1862. See Nadar, Quand j’étais photographe (Paris: Flammarion, 1900), 112-115, http://gallica.bnf.fr/ark:/12148/bpt6k61731n; Stéphanie Saint-Marc, Nadar (Paris: Gallimard, 2010), 211-218.
169 Verne, Autour de la lune, 166-168.
of photographic representation. What was the value of images made by mechanical observation, many of which appeared to show things that the human eye had never seen? Framing his travelers’ most important—and entirely speculative—observation in photographic terms, Verne engages with contemporary optimism and anxiety about the modes and meaning of representation.

Finally, *Autour de la Lune* turns around the question of life’s existence elsewhere in the universe. Ardan, Barbicane, and Nicholl mount their expedition in order to discover whether the moon is inhabited, and, according to Ardan’s plan, inhabit it themselves. Communication with the Selenites, then, not only motivates the plot, but also becomes a practical concern at the story’s end. Once the travelers’ colleagues back on Earth realize that the vessel has failed to follow its expected trajectory, they discuss attempting to contact the vessel using a giant heliograph, “l’envoi des rayons lumineux groupés en faisceaux au moyen des miroirs paraboliques.” The idea of such “communications directes” with the moon and planets is evoked, hypothetically; perhaps the points of light observed on Mars and Venus represent such signals to Earth, and perhaps extraterrestrials already have the means to observe signals sent by us. Although the travelers crash-land in the ocean before they can be contacted using the heliograph, *Autour de la Lune* closes with Barbicane, Nicholl, and Ardan forming the *Société nationale des Communications interstellaires.* The novel thus strongly suggests that heliographic communication will indeed be established with the Selenites, and even inhabitants of planets and stars. Following the travelers’ photographic observation, *Autour de la Lune* gestures toward achieving Michel Ardan’s dream of the telegraphic conquest of distance.

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170 I borrow the term “mechanical objectivity” from Lorraine Daston and Peter Galison, who use it to describe the image-making paradigm that came to predominate in the nineteenth-century; see Daston and Galison, *Objectivity,* 121-186.

171 Verne, *Autour de la lune,* 420.

172 Ibid., 442.
The obvious pertinence of distance, representation, and communication, as well as the three technologies associated with these issues, in Verne’s text indicates a degree of permeation into popular culture that prompts the reader to consider different literary modes of engaging with such scientific content. *De la Terre à la Lune* and *Autour de la Lune* explicitly invoke the telegraph; they speculatively invoke the heliograph; and they metaphorically invoke the photograph. Although critics from Barthes to Noiray have studied the varied uses of technology in Verne’s work, and the role of each usage on narrative and thematic levels, the role of technology in scientific poetry essentially remains to be explored. In the following pages, I intend to show that the interest of the technologies and issues adopted by Verne in his Michel Ardan novels has been tested and appropriated in poetry, and especially in the experimental poem.

It is no coincidence that all three of the technologies under discussion share a common etymological root in –*graph*, from the Ancient Greek verb “to write.” At stake in the photograph, the telegraph, and the heliograph are specific technicities whose functions are to write. The photograph depends on a suspension of light-sensitive chemicals, painted over plates of glass or silver, to write an image in light, then exposed to new chemicals that fix the picture permanently to the mirror or page. The telegraph depends on the transmitter mechanism, which doubles as receiver on the other end of the line; the human hand closes the electric circuit, creating an electromagnetic force that trips the receiver for the length of the signal, and dozens, or hundreds or thousands of miles away, these bursts of electricity write a message in code. The heliograph depends on the reflection of light in a plane mirror to write with the sun, and so combines

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components of photographic technicity with the telegraphic language of Morse code. The
technical imagination that Simondon described as an aliveness to the possibility of technicities,
the potential of their functions and of their combinations, is at work in poetic experimentation
with these new modes of writing. In what follows, I will show how three intersections of
technological instrument, scientific issue and poetic concern each give rise to experimental
poems in the Parnassian moment.

Chapter two focuses on photography and the representation of Beauty in the figure of
Venus. I read a wide selection of poems by writers closely associated with Parnassianism,
including Sully Prudhomme, Mérat, Leconte de Lisle, Banville, Martin, Coppée, Aicard, Gautier,
and conclude with a reading of Rimbaud’s “Vénus Anadyomène.” I place the central aesthetic
question in the context of the issue of representation as outlined above; key questions related to
astronomical photography relate to precision, reproducibility, mechanization and objectivity,
scientific evidence and artistic worth. By studying the impact of Venus as a photographic
subject, both planetary and statuary, I trace the shape of these values in Parnassian poetry. I pay
special attention to the conjunction of sculptural and photographic media in poetic language
concerned with aesthetic purity and autonomous beauty: experimental poems test the technicity
of inscribing the figure of Venus in light.

Chapter three focuses on telegraphy and the idea of a universal language. The first part of
the chapter closely reads two poems by Rimbaud, “Le bateau ivre” and “Fêtes de la faim,”
drawing out their intertextual lineage in a Romantic model of the poet as beacon. The chapter’s
second half discusses telegraphic poems by Corbière and Banville alongside the curious
monosyllabic sonnets of the Parnassiculet contemporain and Album zutique. The communication
enabled by electric telegraphy involves scientific problems including code, concepts of totality,
and optimization for relations of aggression—military and colonial telegraphy—or of understanding—utopian and revolutionary telegraphy. I identify two modes of the principal telegraphic technicity, the electric signal as used in Morse code: through the poetic text’s geographic imagination, or through its rhyme and rhythm. Poets interested in telegraphic poetry experiment with the feasibility, and the value, of a language that could express anything to anyone, anywhere, from the drunken boat unmoored in the Atlantic to the parodic inanity of the monosyllabic form.

Chapter four focuses more narrowly on the heliographic poetry of Charles Cros, in connection to the notion of distance. I begin with the problem of Cros’s Parnassianism, comparing his short-lived *Revue du monde nouveau* and Émile Blémont’s *Renaissance littéraire et artistique*. In addition to several interesting poems about Venus and distance, *La Renaissance* published a short story by Cros centered around an interplanetary heliographic love affair. Although Cros’s interest in heliographic communication with Venus is well attested in his scientific work, this chapter examines how the poet’s 1873 collection *Le coffret de santal* is inscribed with heliographic concerns of reflection, signaling, and measurement. I examine the interaction between Cros’s careful disposition of mirrors and light, particularly “éclairs,” with the classic structure of lyric address from the poet to his beloved in *Le coffret de santal*. Analyzing the ways in which Cros’s poems themselves act as heliographic instruments, I focus on the techniques of rhyme, repetition, and rhythmic ambivalence. The heliographic technicities tested by Cros incorporate photographic and telegraphic elements (mirrors and Morse code), and experiment with observational and communicational issues (representation and universal language), even as they ultimately explore problems of distance and Venus—love.
To conclude, I consider Cros’s poem “Gagne-petit,” which depicts the poet as pauper, procurer, and glass peddler banking on eclipse observations. Published in 1876 in the Dixains réalistes, a collaborative, parodic effort by poets excluded from the third and final Parnasse contemporain, “Gagne-petit” thematizes successes and failures that are highly pertinent to this transitional moment. Returning to the Transit of Venus, I link the failure of the 1874 observations to the end of the Parnassian moment and its experimental poem. At the same time, I point to the new poetic and scientific structures emerging with the 1882 Transit of Venus observations, fumisme, Decadence, and Symbolism.
CHAPTER TWO

“Arrière les pinceaux !”: Photography and Poetry in the Parnassian Moment

In February 1855, Maxime Du Camp published the highly provocative preface to his forthcoming collection of poetry, Les Chants modernes, in the Revue de Paris. As the long-simmering rhetoric of a war between the sciences and the arts heated up, Du Camp forced the issue of poetry’s ability to confront a society shaped by modern science, the industrial economy, and new technologies. He decried the “époque de décadence manifeste” of contemporary art, and excoriated poets who turned toward the past: “La science fait des prodiges, l’industrie accomplit des miracles, et nous restons impassibles, insensibles, méprisables, grattant les cordes faussées de nos lyres, fermant les yeux pour ne pas voir ou nous obstinant à regarder vers un passé que rien ne doit nous faire regretter.”

Du Camp’s rhetoric takes clear aim at Leconte de Lisle, whose Poèmes antiques in 1852 had offered its own provocative preface laying claim to “impersonnalité,” “neutralité,” and the sober “étude” of classical Greco-Roman society.

Rather than studying the past, argues Du Camp, poets should be inspired by the “mille choses admirables,” the “mille féeries incompréhensibles” of mid-nineteenth-century life: “les applications de la vapeur, l’électricité, le gaz, le chloroforme, l’hélice, la photographie, la galvanoplastie,” to name just a few. Most of these technologies take the floor in the final

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174 Maxime Du Camp, “Les Chants modernes. Préface à un recueil de poésies,” La Revue de Paris 24 (1855): 324, http://gallica.bnf.fr/ark:/12148/bpt6k112690x; Caraion, Philosophes, 81. Du Camp’s preface, along with key poems from Les Chants modernes and an array of texts concerning the reception and cultural context of the collection, has been republished in a scholarly edition by Marta Caraion. When applicable, I will cite this edition in addition to the original edition.

175 Leconte de Lisle, Œuvres complètes, 1:91.

176 Du Camp, “Préface,” 326; Caraion, Philosophes, 83.
section of Du Camp’s poem “La Vapeur,” stepping forward to declare themselves “les dieux nouveaux” (l. 96) in lyric language.\textsuperscript{177}

In the 1860s, the verve of Du Camp’s allegorical approach to this pantheon of technologies had faded, while Leconte de Lisle, with all his austerity and enthusiasm for vanished worlds, was attracting a clutch of fans within a younger generation of poets. Leconte de Lisle himself had unsurprisingly and categorically rejected Du Camp’s poetic vision. In the preface to his own 1855 collection, \textit{Poèmes et poésies}, Leconte de Lisle professed horror at the prospect of “je ne sais quelle alliance monstrueuse de la poésie et de l’industrie”; he claimed to be unmoved by “les hymnes et les odes inspirés par la vapeur et la télégraphie électrique,” and deemed the “périphrases didactiques” that riddled such verse fundamentally non-artistic.\textsuperscript{178} Despite the growing prominence of Leconte de Lisle at the head of the Parnassian \textit{mouvance}, and the failure to launch of a DuCampian movement, technology did not disappear without a trace from the period’s poetry. Among those surrounding Leconte de Lisle, a number of poets turned toward photography in particular.

One such Parnassian example that bears more than a passing resemblance to Du Camp’s \textit{Chants modernes} is Sully Prudhomme’s “Réalisme,” published in his 1866 collection, \textit{Les Épreuves}. Both volumes group poems celebrating technology into a single sequence. \textit{Les Épreuves} honors simple, ancient tools (“La Roue”) and the complex discipline of modern chemistry (“Le monde à nu”) alike, devoting each a single sonnet to each of the eight technological marvels that the collection describes. \textit{Les Chants modernes} populates “La Vapeur” with the greatest number of technological figures among the six “Chants de la matière,” which vary in form and length. In “La Vapeur,” Photography is presented to the reader by Steam:

\begin{itemize}
  \item \textsuperscript{177} Du Camp, \textit{Chants modernes}, 271; Caraion, \textit{Philosophes}, 135.
\end{itemize}
Écoutez la Photographie
Qui parle et réclame son tour :
« Tous les crayons, je les défie !
« Et mon seul maître c’est le jour !
« Les contours les plus difficiles,
« Les dessins qu’on n’ose aborder,
« Ne me sont jamais indociles,
« Et je n’ai qu’à les regarder ! »179 (l. 65-72)

Depicted by Du Camp as a prideful and boastful “new goddess,” Photography is nonetheless defined in terms of “crayon” and “dessin,” “peinture” (l. 77) and “contours.” She acts above all as an auxiliary to the fine arts, representing with ease elements the artist might struggle to portray. “Peintres qui courez les chemins,” promises Photography, “Je m’empare de la nature, / Et je la mets entre vos mains !” (78-80). According to Du Camp’s Photography, the only limit to her usefulness is the availability of sunlight.

Indeed, by the mid-century, photography had become a powerful tool. Nicéphore Niépce’s research into photochemical reactions in the early 1800s had resulted in several fragile but successful “héliographes,” created with sensitized plates and a simple camera obscura. The handful of innovators who followed Niépce, however, pursued other types of chemical combinations intended to improve on these early, extremely delicate images. His associate Daguerre discovered a different process, in which mercury vapor directly developed copper plates that had been exposed to sunlight. Each daguerreotype was a unique image; they were noted for their small size, the shining greyscale tones of their silver-coated surface, and exact detail. The French state bought Daguerre’s invention in 1839 and made it public without patent restriction. As a result, in principle anyone could make a daguerreotype. In reality, the procedure required expensive materials, as well as chemical expertise, physical dexterity, long exposure

179 Du Camp, *Chants modernes*, 269-270; Caraion, *Philosophes*, 134-135. The line numbers provided here refer to the third and final section of this three-part poem.
times, and good light conditions that were rarely guaranteed. Daguerreotypy was nevertheless
dominant, particularly in France, for at least a decade, and continued to be used into the 1870s
and 1880s.

Emerging in parallel with the daguerreotype, alternative methods such as Fox Talbot’s
calotype relied on fixing a negative on prepared paper, itself then exposed to create a positive
image. The addition of the negative crucially allowed the image to be not just photographically
produced but also reproduced, since one or one hundred identical positives could be made from a
single negative. Also simpler than the daguerreotype, such methods had the disadvantage of
offering significantly less clear pictures. The “wet-plate” process introduced in 1851 combined
the greatest precision, speed, economy, and ease yet possible for producing photographs. Glass
plates were prepared with a thin layer of photosensitized collodion and exposed for as little as
seconds in a camera obscura outfitted with a dual focalizing lens. Developed in a series of
chemical baths, the plates then served as negatives. These negatives could be wiped clean and
the glass re-used; positive prints were made on cheap albumen paper. Photographers no longer
had to choose between precision and reproducibility, and within a few years, the daguerreotype
and calotype were both dethroned. The term “photographie” was then widely used to describe
images formed this new way.

While Du Camp’s praise of photography in Les Chants modernes subordinates the
medium to the traditional fine arts of painting and drawing, Sully Prudhomme’s sonnet
“Réalisme” embraces photography at the expense of fine arts. The poem starts with a departure:

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180 For a comprehensive presentation of this early history, see Michel Frizot, “Les machines à lumière. Au
seuil de l’invention” and “1839-1840. Les révélations photographiques,” in Nouvelle histoire de la
supporting daguerreotypes over calotypes within the Académie des sciences, see Teresa Levitt, “Biot’s
paper and Arago’s plates: Photographic Practice and the Transparency of Representation,” Isis 94, no. 3
(September 2003): 457.
Facing his beloved’s absence, the poet declares his desire to keep her present via a perfect portrait. The first stanza sets up the opposition that will define the perfection of the lady’s representation. By emphasizing completeness (“la garder tout entière,” “rien ne me sera soustrait”) and specifying that her faults be included alongside her charms, the poet forecloses any idealization of the subject. The next stanza identifies such idealization with painting:

Arrière les pinceaux ! sur la toile cruelle
Le profane idéal du peintre sourirait :
C’est elle que je veux, c’est elle trait pour trait
Belle d’une beauté que seul je vois en elle. (l. 5-8)

With painting disqualified, the poet addresses his request for a portrait to the sun. “Mais, ô soleil, ami qui la connais le mieux” (l. 9), he entreats:

Artiste dont la main ne cherche ni ne tremble,
Viens toi-même au miroir que je t’offre imprimer
Chacun de ces rayons qui me la font aimer. (l. 12-14)

The process described here is clearly photographic: the sun’s rays “print” the woman’s image on a “mirror,” which alludes to silver coating of the daguerreotype’s copper plate.

The triumphalism of “Réalisme” is worth pausing over. In 1855, Du Camp consecrated a figure of photography meant to assist the arts; in 1866, Sully Prudhomme not only hails photography as an art, but also considers it superior to painting and drawing. Yet neither poem contains the “périphrases didactiques” that Leconte de Lisle so scornfully denounced. Indeed, neither poem is really didactic, to the extent that a reader unfamiliar with photographic

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technology is not likely to learn anything about how photography works. Du Camp and Sully Prudhomme simplify and emphasize the role played by sunlight in photography, eliding any mention of the camera apparatus, the preliminary phase of chemically treating a photographic plate, or the multiple steps of the picture’s eventual development. “Réalisme” does not even name photography as the explicit subject of its praise, and prefers instead to extol the photochemical objectivity that allows the poet to possess his love wholly. If the painter’s portrait inevitably shows the beauty that he sees in the subject, as the poem maintains, then the portrait made by the sun gives its viewer the subject as she is, which in turn leaves the poet free experience the beauty that he sees in her: “C’est elle que je veux, c’est elle trait pour trait, / Belle d’une beauté que seul je vois en elle” (l. 7-8). But the poet’s language here conflates desiring the company of his beloved with her image, and “Réalisme” thus glosses over the difference between even the most scrupulously accurate picture and a physically embodied presence. To illustrate the perfection of photography, the poem actually devalues the technique as a process, and creates the fiction of an unmediated photographic image—the sun is simply a better “artiste” (12) than the painter.

Another poem published the same year as “Réalisme” takes a very different approach toward the photographic phenomenon. Written by Sully Prudhomme’s friend Albert Mérat, “Le Carreau” appeared in the 1866 volume of Le Parnasse contemporain. Where “Réalisme” married the classically lyrical topos of the poet’s departing beloved with a hearty endorsement of

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183 The 1866 Parnasse contemporain was published in eighteen weekly installments sent to subscribers between March and June 1866, before appearing several months later as a single volume. Mérat’s contributions were originally sent in the thirteenth livraison on May 26, 1866. See Mortelette, Histoire du Parnasse, 177-179.
photographic technology, “Le Carreau” omits any concretely present human subject and valorizes art itself. The sonnet offers its reader a “miniaturized winter landscape”:\textsuperscript{184}

\begin{flushright}
Derrière l’épaisseur lucide du carreau
Un paysage grêle, une miniaturé,
Fait voir chaque détail plus petit que nature
Et tient entre les quatre arêtes du barreau.

Ce transparent posé d’aplomb sur le tableau
Montre un ciel triste encore et d’une couleur dure,
Des gens qui vont, les champs, des arbres en bordure,
Et des flaques de pluie où l’azur luit dans l’eau.

Il semble qu’un burin très-aigu n’ait qu’à suivre
Le trait fin des maisons, les branchages de cuivre
Où le pâle soleil glisse un regard sournois.

Décalque compliqué comme une broderie,
Dont le caprice peut tenter la rêverie
D’un poète amoureux ou d’un peintre chinois.\textsuperscript{185}
\end{flushright}

References to different artistic media are densely packed in “Le Carreau,” which cites painting, engraving, embroidery, calligraphy, and poetry itself. Appreciative of the poem’s “meticulous detail,” Monica Nurnberg has described “Le Carreau” as making a view from the window into a work of art: “we are presented a scene which is in the process of turning into a painting, is becoming indistinguishable from one,” she writes, “and we are invited to follow its transformation into a yet more stylized form, that of engraving.”\textsuperscript{186} However, the poem’s unusual attention to the picture’s \textit{frame}, in theme and in form, suggest that its principal medium is photographic.

The scene, as it is represented in the quatrains, draws on defining aspects of photography’s representational mode from the very beginning of “Le Carreau.” For a poem


\textsuperscript{186} Nurnberg, “Art, Irony, and Nature,” 19-20.
distinguished by its “meticulous detail,” as Nurnberg puts it, “Le Carreau” provides surprisingly little description of the scene behind the glass. The first stanza establishes only that the scene is a landscape and a miniature. The second stanza spends adds that the landscape is composed of the sky and some fields bordered by trees; there are “gens qui vont,” although it is not clear who or where, and puddles of rain reflecting the sky. The actual details of the image seem to be less important than the fact that the image is detailed, so to speak: the little landscape behind the glass “fait voir chaque détail plus petit que nature” (l. 3). This minute precision brings a photographic quality to the poem’s visual vocabulary, otherwise dominated by a somber color scheme. Neither rich nor riotous, or even demurely pastel, the color here is “dure” (l. 6), and after the rain, the sky is “triste encore” (l. 6). The overall impression is tones of grey and black—exactly the tones of the photographic image.

Beyond evoking the look of a photograph for the image it describes, “Le Carreau” also explores the creative potential of mediation and reproduction by privileging the frame, and especially the titular glass pane, over the image itself. Each of the quatrains begins at the glass surface. Although the poem’s first word, “derrière” (l. 1), sets up an explicit movement from the glass windowpane toward the landscape outside, the stanza remains paradoxically focused on the window; it reveals only that there is a “paysage grêle, une miniature” (l. 2) behind the glass, then concentrates on the frame, “les quatre arêtes du barreau” (l. 4). The end of the first stanza thus encloses the scene in prison-like language, but the second stanza returns to the glass, which now becomes part of a picture frame: “Ce transparent posé d’aplomb sur le tableau / Montre un ciel triste encore […]” (l. 5-6). Confirming that the landscape behind the window has transformed into a painting mounted and framed under transparent pane, the poem again insists on the relationship between image and glass. In the first stanza, the windowpane made the scene outside
appear smaller, “plus petit que nature,” although the glass’s “épaisseur lucide” preserved remarkable clarity and detail. In the second, the frame’s glass shows (“montre”) the image, making it visible in the descriptive lines that follow.

This attention to the frame around an image, as well as the key mediating role played by the “carreau,” is reflected in the poem’s form. In Pictorialist Poetics, David Scott has argued that idea of the frame was closely linked to the sonnet for many post-Romantic French poets. Consisting of fourteen lines built on just five rhymes, and four stanzas naturally divided between the two quatrains and two tercets, the sonnet’s “compact, self-contained framework” resembles the “spatial unity of the painting.”187 According to Scott, the end-rhymes in particular serve to delimit that spatial unity and establish a frame for the sonnet; the end-rhymes provide semantic structure and a vertical dimension to the poem. In such a highly compressed poetic format, writes Scott, the sonnet’s end-rhymes have special phonetic preponderance, which creates a vertical axis within the horizontal syntax of the line. At the same time, since the choice of end-rhymes was crucial to the composition of a poem, they necessarily helped to determine its semantic content, as well. In Scott’s view, the sonnet form offers a contrast between quatrains and tercets, and a tension between horizontal syntax and vertical rhymes, that uniquely frame the space of the poem and proved to be of great interest to Baudelaire, Mallarmé, and other sonneteers of the second half of the nineteenth century.188

Mérat’s “Le Carreau” plays on each of the formal qualities that Scott ascribes to the sonnet’s framework, pointing to the photographic character of the glass. In the quatrains, the end-rhymes undergo a transformation in which poetic language takes on the “épaisseur lucide” of the windowpane. The uniformly rich and leonine rhymes of the first stanza (“carreau,”

188 Scott, Pictorialist Poetics, 73-76.
“barreau”; “miniature,” “nature”) are noticeably reduced in the second stanza (“tableau,” “l’au”; “dure,” “bordure”). More surprisingly, when examined across both stanzas, the B-rhyme deteriorates from rich to sufficient (-u/r) and the A-rhyme declines all the way to poor (-eau). The impressive density of four rhymed phonemes fades, leaving just one rhymed phoneme by the end of the quatrains, as if the end-rhymes themselves were becoming transparent like the glass. “Le Carreau” calls attention to the similarity that identifies its own language with the medium that intervenes between the image and its viewer (or reader): like the glass frames and mediates the image almost invisibly, the form of the poem’s language frames and mediates its content in transparent but easily forgotten ways.

Where the quatrains describe a singular image, the tercets envision various modes of copying that image. The most prominently discussed of those modes is engraving, which brings the singular (artistic) image toward the processes of mechanical reproduction. The poem depicts the engraved image traced by hand, but of course, an infinite number of prints could be produced from it:

Il semble qu’un burin très-aigu n’ait qu’à suivre
Le trait fin des maisons, les branchages de cuivre
Où le pâle soleil glisse un regard sournois.

Décalque compliqué comme une broderie… (l. 9-12)

Each tercet contains a technical element of artistic reproduction in its initial line. The engraver’s tool, “burin,” and the result of its usage, “décalque,” stand out within the poem’s lexical field, which is otherwise marked by extreme simplicity. This disembodied technical presence signifies the potential to reproduce the image, not only as an engraving but also—astonishingly—as a poem and a painting. The enchanting “caprice” of the copy, the engraved image, can in turn solicit the imagination of the painter and poet, “la rêverie / D’un poète amoureux ou d’un peintre
chinois” (l. 13-14). Far from representing “a loss of direction,”¹⁸⁹ as Nurnberg argues, the final lines of “Le Carreau” project a chain of artistic creations that reproduce the image again and again, while looping autoreferentially back to its own quatrains, which themselves offered poetry that transformed the image into a painting. Yet this entire fantasy of reproduction depends on the poetic medium of the glass and its photographic functions. The glass first allows the image to be seen, like the glass that had to be angled over daguerreotypes for their display; without the reflective surface, the fine detail of the daguerreotype’s low-contrast image was impossible to perceive. The glass then allows the image to be reproduced, like the glass plates that were the principal medium of the photographic negative by the 1860s. Wavering in and out of focus within the poem’s frame, photography mediates artistic representation and reproduction in “Le Carreau,” a spectral but critical presence in its poetic language.

With this photographic reading of “Le Carreau” in mind, the experimental dimension of Sully Prudhomme’s “Réalisme” emerges more clearly. Aside from its shared references with Du Camp’s *Chants modernes*, “Réalisme” and the entire sequence of sonnets celebrating technology belong to a carefully designed collection. *Les Épreuves* recounts the passage of a central lyric persona from love to doubt, from dream to action. The scientific poems, slotted into the closing “Action” section, commit the poet’s allegorical journey to a scientific vision. “O savant curieux, mais dur,” pleads the poet, “qui soulevas / Les langes chauds encore de la vive nature, / Prouve au moins l’Idéal si tu ne le sens pas!”¹⁹⁰ (l. 12-14). Here, in “En avant!”, the poet distinguishes himself from the man of science, but still demands *proof* of the ideal. This demand anticipates the poet’s insistence that the photograph of “Réalisme” can supply him an image that proves beauty and presence. This intersection of idealism, aesthetic and philosophical, with scientific

proof echoes the polysemy that defines the entire collection, *Les Épreuves*. These sonnets are a ritual and a test, a galley text and a photograph print: each poem is a proof. In *Les Épreuves*, the sonnet appears as a technology that is photographic and poetic, part of a quest for an aesthetic ideal and scientific evidence. The mediation and reproducibility of photography generates, at least in principle, new possibilities for understanding the poetic text.

A cautious poem on its surface, “Réalisme” nonetheless indicates several significant issues within broader poetic trends of the decade following its publication. In this period that I call the Parnassian moment, bookended by the first and last volumes of *Le Parnasse contemporain*, mechanical reproducibility and scientific evidence confronted the primacy of aesthetic idealism. I will argue that the descriptive poetics of the Parnassian moment included a range of experimentation with different media in the pursuit of representing ideal beauty. My discussion will center on the figure of Venus, and how sculpture, photography, and poetic form all inform the representation of Venus in texts from the early years of the Parnassian moment. First, I will examine the Parnassian poets’ famous aesthetic ideal of statuary in terms of its relation to photography. Drawing on Benjamin’s concept of *aura* as described in “The Work of Art in the Age of its Technological Reproducibility,” I will analyze examples of auratic anxiety in poems by Leconte de Lisle, Théodore de Banville, and Alexis Martin. Next, I will highlight ways in which the cultural context of Venus as a photographic object shapes Venus as a poetic

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191 “To those familiar with the usual characterizations of Parnassian poetry, a schematization making of the descriptive (that is to say, pictorial, sculptural, or architectural) genre merely one of a variety of modes in which that poetry manifests itself may seem an effort to fly in the face of the facts. For Parnassian poetry is, as witness the definition of M. Thérive quoted above, descriptive or decorative poetry. The truth of the matter, however, is that the exclusively descriptive poet, even among the Parnassians, is a very rare, if not actually a non-existent, phenomenon; the best exemplification of the type is Heredia, and even he has his lapses from grace. Whenever we pick up a volume by a Parnassian whose verse is reputed to be strictly descriptive, we soon discover that its descriptions are often colored by sentiment or extended into symbols or made to serve as the basis for philosophical truths or questionings. It is, none the less, true that the Parnassians produced a relatively large amount of purely descriptive poetry [...]” Schaffer, *Genres*, 26.
symbol, and consider the importance of her place in the Lucretian tradition of scientific poetry. Finally, I read a series of poems, by Théophile Gautier, Jean Aicard, François Coppée, Sully Prudhomme, Albert Mérat, and Arthur Rimbaud that test diverse methods of representing the Parnassian moment’s photographic Venus.

**Statues and Statuettes: *Le Parnasse, Venus, and Auratic Anxiety***

Despite his firm rejection of Maxime Du Camp’s technological lyricism in *Les Chants modernes*, Leconte de Lisle actually championed the unity of art and science. In the preface to *Poèmes antiques*, published in 1852, he wrote, “L’art et la science, si longtemps séparés par suite des efforts divergents de l’intelligence, doivent donc tendre à s’unir étroitement, si ce n’est à se confondre.”

Paired with his dismissal of technology, Leconte de Lisle’s embrace of science seems somewhat contradictory, as he both adopts a positivist ideology for his poetic “études” and declares that “je hais mon temps.” This contradiction can be accounted for by the chronological of Leconte de Lisle’s thought. In Second Empire France, science and art appear diametrically opposed, but in the poet’s view, this opposition is not an inevitable condition. Leconte de Lisle hopes for a future that resembles the past: Greco-Roman Antiquity, where artistic, scientific, and spiritual pursuit were one and the same. “L’étude,” explains Caroline De Mulder in her work on the poet, “qu’il envisage comme une ‘épreuve expiatoire,’ devrait permettre de revenir à la spontanéité primitive. En attendant ce renouveau, elle permet déjà de ressusciter les époques passés […]”

In Leconte de Lisle’s view, the poet’s mission is to decontaminate poetic language whose sources have become polluted. Only then, “la langue

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poétique une fois assainie,” with clean forms and clear understanding, can the poet help advance society back to its beginnings—even if it consigns him to obscurity in the present.

One of Leconte de Lisle’s most well-known poems, “Vénus de Milo,” neatly illustrates these notions of intellectual and formal rigor. As Anthony Earl has shown, this poem synthesizes the extensive “arrière-pays intellectuel” of early nineteenth-century Hellenism in order to create a distinctive representation of Venus. This statue of the goddess was discovered in 1819 on the Greek island of Milo, brought back to France, and displayed in the Louvre starting in 1821. The scholarship of Quatremère de Quincy, alongside cultural phenomena from travel narratives about Greece to Greek mythology printed on wallpaper designs, contributed to interest in Venus generally and the Venus de Milo specifically. According to Earl, the first half of “Vénus de Milo” reflects Leconte de Lisle’s awareness of contemporary research about Greek religious ritual and the multiple manifestations of Venus. The first stanza apostrophizes the statue:

Marbre sacré, vêtu de force et de génie,
Déesse irrésistible au port victorieux,
Pure comme un éclair et comme une harmonie,
Vénus, ô beauté, blanche mère des Dieux !

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195 Leconte de Lisle, Œuvres, 1:95.
198 For a scholarly overview of the Venus de Milo and its reception, which includes a citation from Leconte de Lisle’s poem, see Francis Haskell and Nicholas Penny, Taste and the Antique: The Lure of Classical Sculpture, 1500-1900, 2nd ed. (New Haven, CT: Yale University Press, 1982), 328-330. For an entertaining history of the statue in the modern era, see Gregory Curtis, Disarmed: The Story of the Venus de Milo (New York: Knopf, 2003).
200 Leconte de Lisle, Œuvres, 1:211-212.
The apostrophe “fait de cet écrit une sorte de prière qui aurait censément pu être adressée à l’image, érigée dans son temple de Milo à l’origine,” writes Earl. Moreover, each of the following four stanzas defines some aspect of Venus that this statue does not represent, a strategy Earl deems both rhetorical and academic. “Tu n’as pas Aphrodite” (l. 5); “Tu n’as pas Kythèreé” (l. 9); “Et tu n’es pas la Muse, [...] / [...] ni la molle Astarté” (l. 13, 15); she is not accompanied by any of her retinue of minor goddesses (l. 17-18). Whether or not these negations engender suspense, they certainly lend the poem intellectual credibility.

Once the poet makes a positive identification of the statue, he represents it in iconic terms. This Venus is marmoreal, proud, eternal and untouchable:

Du bonheur impasible ô symbole adorable,
Calme comme la Mer en sa sérénité,
Nul sanglot n’a brisé ton sein inaltérable,
Jamais les pleurs humains n’ont terni ta beauté. (l. 21-24)

Earl shows that Leconte de Lisle’s potent alliance of impassivity and ideal beauty excludes key elements of contemporary scholarship, such as the coloration of statues in ancient Greece, in order to make of the Venus de Milo “un symbole dont la pureté blanc du marbre transmet un message différent de ce que le sculpteur original aurait voulu communiquer”; and its dispassion, writes Earl, is better suited to the Hindu and Buddhist ideas that later interested Leconte de Lisle. Gretchen Schultz, on the other hand, has singled out Leconte de Lisle’s definition of a poetry of “hardness” as an obsession. Schultz argues that for Leconte de Lisle, statues of

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201 Earl, “Réveil helléniste,” 566. These intellectual sources are reviewed in greater detail by Christophe Carrère, Leconte de Lisle ou la passion du beau (Paris: Fayard, 2009), 124-126.


203 Ibid., 568. The poem also bears the marks of the poet’s own social and political disillusionment. The first version of “Vénus de Milo” appeared in La Phalange in 1846, when Leconte de Lisle was an ardent supporter of Fourierism. He subsequently abandoned the movement, suffered the failure of the 1848 Revolution and the success of Napoléon III’s coup d’état. The poem as published in 1852 was stripped of its overtly Fourierist vocabulary and utopian gestures, although Edgard Pich argues that enough of the original Fourierist inspiration remains for the poem to lack coherence. See Leconte de Lisle, Œuvres, 1:213n1; Pich, Leconte de Lisle, 128-132.
beautiful women, idealized bodies, “capture femininity” and safely contain it within (masculine) poetic language, carved in stone.\textsuperscript{204}

Approaching the issue of statuary from a different angle, David Scott demonstrated that key features of the poet’s symbol are grounded in aesthetic precepts about sculpture reaching back to Lessing’s \textit{Laocöon}. Sculpture, and classical sculpture especially, excels at representing a single instant of a movement or pose. In sculpture, the dynamic becomes static, still, motionless even as it remains expressive. Indeed, Scott remarks that the form was “prisée par les poètes et les théoriciens de l’esthétique pour ses qualités d’immobilité et d’impassibilité” in the eighteenth and nineteenth centuries, becoming the “symbole de la beauté—pure, éternelle, immuable.”\textsuperscript{205} At the end of “Vénus de Milo,” Leconte de Lisle makes a significant analogy between sculpture and the poet’s own work. He appeals to the goddess in the Louvre for inspiration:

\begin{quote}
Allume dans mon sein la sublime étincelle,  
N’enferme point ma gloire au tombeau soucieux;  
Et fais que ma pensée en rythmes d’or ruisselle,  
Comme un divin métal au moule harmonieux. (l. 37-40)
\end{quote}

Commonly remarked upon, the trope of the Parnassian assimilation of poetry to sculpture promoted by “Vénus de Milo,” or more infamously by Gautier’s “L’Art,” calls for close attention.\textsuperscript{206} Scott argues that the in the mid-nineteenth century, longstanding oppositions between poetry and sculpture animated the each form’s interest in the other. Scott singles out the

\begin{footnotesize}


\textsuperscript{206} Critical attention to this identification of poetry with statuary tends to rely, somewhat lamely, on the sculpted quality of stanzaic forms. Indeed, Scott himself is guilty of this in an earlier work, where he describes Parnassian themes as “converted within the sonnet’s chiseled and mathematical framework, into a series of fixed and memorable marmoreal images” (David Scott, \textit{Sonnet Theory and Practice in Nineteenth-Century France: Sonnets on the Sonnet} [Hull: University of Hull Publications, 1977], 35). The crucial contribution of Scott’s later discussion is to connect poetic form with the conflict between stasis and motion that sculpture and poetic language represent. By showing stasis and motion to be central preoccupations of sculpture and poetry in this period, Scott offers a way to understand sculptural poetics that distinguishes them from the broader use of poetic form.
\end{footnotesize}
property of movement assigned to poetry, the counterpart to sculpture’s stasis. Whereas the modern sculpture that slowly emerged from the mid-century embraced the potential of movement, poets of the same period sought to achieve the stillness of statuary.²⁰⁷

For Scott, their renewed emphasis on poetic form suggests not merely a superficial comparison to the delicacy and difficulty of the sculptor’s chiseling, but rather a prosodic strategy aimed at producing static effects within verse. Fixed and compact forms, challenging rhymes and strict meter, and stanzaic divisions help to confine and spatialize the movement of poetic language.²⁰⁸ “Tout en incorporant du mouvement rythmique, syntaxique et narratif,” writes Scott, “le poète essayait en même temps de circonscrire les éléments dynamiques afin de les offrir à la réflexion et à la contemplation esthétiques du lecteur/observateur.”²⁰⁹ In light of Scott’s observation, the outpouring of the poet’s thoughts “en rythmes d’or” (l. 39) that meets with a “moule harmonieux” (l. 40) seems reflective of the tension between poetic rhythm and stanzaic “mold.” Indeed, “Vénus de Milo” offers ten quatrains of perfect 6/6 alexandrins, whose ABAB rhymes are all either rich or sufficient; enclosed within this “harmonious” form, Leconte de Lisle’s statue is caught in a perpetual step forward. The poet cries, “Un flot marmoréen inonde tes pieds blancs ; / Tu marches, fière et nue, et le monde palpite, / Et le monde est à toi, Déesse aux larges flancs !” (l. 26-28).

But of course, the goddess on display in the Louvre no longer exercises the power of divinity she enjoyed in ancient Greece, as Leconte de Lisle is well aware. While asking for inspiration, the poet laments not having been born “[a]ux siècles glorieux” (l. 31) when the gods walked among humans and answered their prayers. In addition to creating a potent poetic symbol out of the Venus de Milo, Leconte de Lisle’s poem thematizes a historical change in ways of

²⁰⁷ Scott, “Tensions,” 133.
²⁰⁸ Ibid., 146.
²⁰⁹ Ibid., 144.
understanding the statue. Both the poem and its theme can be elucidated by Walter Benjamin’s “The Work of Art in the Age of Its Technological Reproducibility.” This now-canonical essay theorizes an epochal shift in art’s ontological and social character. For centuries, Benjamin argues, the art work’s unique existence goes hand-in-hand with its role in religious belief and ritual practice. The presence of *aura* defines this type of art: a power accrued to the irreplaceable object, which at once puts its spectator at a distance and confronts her in the here and now.²¹⁰ Beginning in the mid-nineteenth century, however, new technologies permit the exact, and even unlimited, reproduction of the work of art. Benjamin locates a radical break in the advent of photography; the sacred function, or cult value, of the auratic art work gives way to the situation of the reproducible art work within modern society’s political context. The “Work of Art” essay focuses primarily on this political significance, and Benjamin proclaims that “for the first time in world history, technological reproducibility emancipates the work of art from its parasitic subservience to ritual.”²¹¹ But Benjamin’s brief historical narrative connects *l’art pour l’art* to rupture and aura in ways that are useful for relating Parnassian moment and experimental poem.

According to Benjamin, the appearance of *l’art pour l’art* is a symptom of the profound discontinuity that separates art’s auratic and technologically reproducible ages. A strong continuity marks the work of art’s sacred aspect across differing historical traditions:

An ancient statue of Venus, for instance, existed in a traditional context for the Greeks (who made it an object or worship) that was different from the context in


which it existed for medieval clerics (who viewed it as a sinister idol). But what was equally evident to both was its uniqueness—that is, its aura.

In post-medieval Western culture, Benjamin dates the “secular worship of beauty” to the Renaissance, but describes its permutation in *l’art pour l’art* as “a theology of art.” Photography, “the first truly revolutionary means of reproduction,” undermines the art work’s cult value and provokes a sense of “crisis”; partisans of *l’art pour l’art* double down in a reaction that constitutes, in Benjamin’s view, a conscious, extreme, and indeed desperate effort to re-assert art’s auratic existence in a changed world. Thus Benjamin’s account holds that photography’s technical possibilities spur the affirmation of art’s autonomy particular to *l’art pour l’art*, as well as its ideal of “‘pure’ art” matching secular beauty with spiritual ritual.212

From a Benjaminian perspective, Leconte de Lisle’s “Vénus de Milo” perfectly illustrates both the poet’s acute awareness of the art work’s desacralization, and his attempt to restitute a secular cult value to the aesthetic object. The homology between the Venus state and a certain Parnassian poetic model, discussed above, which privileges the “bonheur impassible” of marble beauty also privileges auratic art: the work is a finely crafted, complete and one-of-a-kind object.213 For mid-nineteenth-century poets, producing verse at the dawn of the age of technological reproducibility, these qualities are of critical interest. The poem represents and glorifies Beauty, and so serves as a support for the “theology of art.” Barbara Johnson, writing

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212 Ibid.
213 This predilection, alongside Parnassian weakness for myth, Orientalist exoticism, and footnotable vocabulary, was seized upon immediately after the first *Parnasse contemporain* appeared, by the anonymous authors of the parody *Le Parnassiculet contemporain*. In the long prose narrative that introduces nine satirical poems, published on December 15, 1866, the visiting Chinese poet Si-Tien-Li enters a Parnassian gathering at L’Hôtel du dragon bleu and finds the group contemplating “[…] une jeune fille en costume de statue qui fait des poses plastiques.” Though she does eventually speak, to scathing effect, a Parnassian representative equates “la fille-statue” to “le spectacle des belles formes.” *Le Parnassiculet contemporain. Recueil de vers nouveaux*, 2nd ed. (Paris: Librairie centrale, 1872), 12, 14, http://gallica.bnf.fr/ark:/12148/bpt6k74920g. See also Daniel Grojnowski, ed., *La Muse parodique: Le Parnassiculet contemporain, Album Zutique, Dixains réalistes, La légende des sexes, Les délirances d’Adoré Floupet, Mitrophane Crapoussin* (Paris: José Corti), 61-63. For an overview of the *Parnassiculet’s* composition and reception, see Mortelette, *Histoire du Parnasse*, 210-215.
about *Le Parnasse contemporain* and “The Dream of Stone,” argues that the taste for statuary reflects the “cult of form.” Yet in spite of Johnson’s dry reference to the “large number of Parnassian poems about sphinxes and Venuses,” the 1866 volume of *Le Parnasse contemporain* provides relatively few examples of poems about Venus or statuary. Among the two hundred poems, by thirty-seven different poets, that make up this first “Recueil de vers nouveaux,” only eleven texts even mention Venus. I will examine a pair of poems that prominently feature the figure of Venus. The first, “L’exil des dieux,” was written by a headlining name of *Le Parnasse contemporain* and published in the prestigious opening installment; the other, “Vénus de Milo (Statuette),” was written by the totally obscure Alexis Martin and buried deep in the volume’s penultimate installment. Yet these two poems use the figure of Venus in order to present two different approaches to the problem of auratic anxiety.

Instead of a marble Venus, “L’exil des dieux” stages the scene of a flesh-and-blood Aphrodite pronouncing a curse upon the human society that has abandoned her. Banville’s poem sprawls across 204 *alexandrins*, rhymed in couplets and divided into stanzas of unequal lengths, from eight to 36 lines. The poem does separate neatly into two halves; the first part

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215 Ibid., 747.
216 Many of these are touched on by Monica Nurnberg, who focuses on the surprisingly rare allusions to art in the *Parnasse contemporain*: “One is immediately struck by how few poems in the collection are inspired by works of art or even make reference to painting or sculpture.” Nurnberg, “Art, Irony, and Nature,” 11.
217 The decline in quality toward the end of the first *Parnasse contemporain* has practical and financial explanations; Lemerre took over publication after the eighth installment, and required that the next ten appear as advertised, with installments fourteen through seventeen scraping the barrel of available new verse. Mortelette, *Histoire du Parnasse*, 175-176, 180.
218 Dated 1865, the poem first appeared on March 3, 1866 in the inaugural installment of *Le Parnasse contemporain*, then in the collected volume, published in October 1866. Banville placed “L’exil des dieux” at the head of his own collection, *Les Exilés*, in 1867, which subsequently was reissued with a preface by Banville in 1875. Mortelette, *Histoire du Parnasse*, 175-178. This poem occupies only a small place within Banville’s larger output of Hellenistic poetry, which has been studied in depth and detail by Myriam Robic, in *Hellénismes de Banville: Mythes et Modernité* (Paris: Honoré Champion, 2010).
lingers over the poem’s setting, while Aphrodite begins to speak in the second part.219 “L’exil des dieux” opens in a Gallic wood, where bruised and bedraggled deities parade across the horizon. In the background, “les vaisseaux de l’empereur Constance”220 (l. 16) in the background signal the historical context of the Roman Empire’s conversion to Christianity, and the suppression of polytheistic tradition in its territories. As the gods make their way out of the world, Aphrodite addresses man, demanding, “Homme, vil meurtrier des dieux, es-tu content ?” (l. 141). Thus engaging with the phenomenon of shifting belief systems, Aphrodite assigns these shifts direct consequences for art. The disenchanted world, she proclaims, will remain silent to men, such that poetry without its proper cult value must cease to exist: “Tu ne finiras pas les chants inachevés” (l. 158), and the poet will have to explain to his descendants “ce que tu nommas Lyre !” (l. 160).

In Banville’s poem, Aphrodite acts as a figure of the poet, rather than an impassive feminine object.221 She quite literally expresses the profound sense of rupture that threatens art’s very existence in a period of social upheaval. “L’exil des dieux” undoubtedly dramatizes the bitterness of the exile’s defeat when faced with the reality of a historical break, but the poem equally represents a defense of historical continuity.222 Despite Aphrodite’s curse, poetry

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221 This parallel is made more explicit in Banville’s later preface to Les Exilés, in which he makes it clear that the modern poet is himself an exile from society. Dated November 24, 1874 and published in 1875 as part of the new edition of Banville’s works, the preface envisions an uncertain future for the exile’s poetry, “car nous aurons vécu dans un temps qui s’est médiocrement soucié de l’invincible puissance du Rythme, et dans lequel ceux qui ont eu la noble passion de vouloir enfermer leurs idées dans une forme parfaite et précise ont été des exilés.” Banville, OPC, 4:5.
222 Aphrodite herself shows an awareness that continuity can subtend apparent rupture, when she alludes to the Olympian gods’ victory over the Titans:

O nos victimes ! rois monstrueux, Dieux titans
Que nous avons chassés vers les gouffres du Temps !
manifestly did not disappear from the world. Her curse is imagined in a poem, itself written in epic form, and the cross-currents of flashback and flash-forward in “L’exil des dieux” both affirms the menace of change and defuses its power. As the divine incarnation of Beauty is replaced by the poet capable of representing it, the cult value of art indeed changes. The perfection of form takes on spiritual significance. If Banville’s exile of the gods is “la disparition sur terre des idéaux artistiques propres à l’art du paganisme,” as François Brunet writes, then “son poème, d’ailleurs, est pour une bonne part, une description plastique, qui mêle adroitement les notions de beauté et de déchéance physique des dieux grecs […]”223 Although a coarse society may degrade it—like the “neige pure” (l. 103) of Aphrodite’s shoulder reddened by exposure to the elements—poetic form promises to anchor the work of art’s continued existence and to protect its auratic value.

Whereas “L’exil des dieux” casts form as poetry’s bulwark against existential portents, Alexis Martin’s “Vénus de Milo (Statuette)” provides an intriguing meditation concerning precisely the issues of reproducibility, identity, and value.224 It does so in spite of, or perhaps because of, an apparent lack of the refinement and sophistication that characterize the work of Banville and Leconte de Lisle. Yet its vulgarity reveals another side to auratic anxiety in Le Parnasse contemporain. Like “L’exil des dieux,” Martin’s lengthy poem also plays on a flashback. The poet addresses a plaster miniature of the Louvre’s marble masterpiece, which has witnessed the entire arc of his failed relationship from its niche in a Paris apartment. Within the

[...] Voyez, l’homme nous chasse et nous hait à son tour, Votre sang reparaît sur nos mains meurtrières, Et nous errons, parmi les fondrières. (Banville, OPC, 4:11, l. 125-126, 134-136.) Spiritual value is regularly displaced, the poem suggests—yet poetry continues to exist. On the Titanomachy as a theme in Parnassian poetry, see De Mulder, Leconte de Lisle, 74-75.

223 Banville, OPC, 4:346.
224 Parnasse contemporain, 1:268-272.
poet’s predictable tale of conjugal happiness, betrayal, and finally misery, however, unsettling
evidence of fungibility surfaces. The poet realizes that his own role has been duplicated, and
suspects his mistress of integrally reproducing the lover’s discourse to another:

Depuis longtemps déjà, sa voix au son si doux,
Pour un autre résonne et près d’un autre chante,
Sans que l’écho jamais en vienne jusqu’à nous !

A cet autre, elle donne en folâtrant, sans doute,
Les adorables noms dont elle me comblait…
— Pèlerine d’amour, elle a changé de route
   Et non de chapelet. — (l. 42-48)

The billets d’amour she leaves forgotten on the poet’s table (l. 60) further heighten the tension
between original and copy; an ersatz text occupies the space the poet’s own romantic writings
should be. Formally, the poem explores the idea that it is itself copy, a pale imitation of the
Romantic masterpiece. As Gretchen Schultz observes, Marti

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As Gretchen Schultz observes, Marti’s poem borrows the distinctive
stanzaic form of Lamartine’s “Le lac”—a poem that the poet recalls his lover singing (l. 39),
raising the possibility that the poem is a copy of a reproduction. Uncertainty troubles every
layer of the poem. The lover’s words, both his mistress’s and his own, can be copied and
replaced, until it becomes impossible to distinguish any singular form of singular worth, to
distinguish the authentic object from the fakes.

The title object captures just this ambiguity, and in the space between the famous statue’s
name and the parentheses denoting the statuette, the stakes of the whole poem are set in place. A
hesitation separates and binds together the work of art and its reproduction. The cheap miniature
first overlooks the lovers’ (imitation?) bliss from a high bookshelf. As a symbol of their love

Aaron Schaffer calls the poem “an elegy lamenting, after the manner and almost in the words of
Muset’s ‘Nuit d’octobre,’ the treachery of a mistress; a product of Romanticism at its worst […]” Aaron
Schultz, Gendered Lyric, 129.
nestled among text, the placement reinforces an awareness of the poem’s uncomfortable
closeness to its literary predecessors. But by the end of “Vénus de Milo (Statuette),” the poet
confuses the plaster copy with both his absent lover and the original marble: “Et tu restes muette
! — En ce monde moqueur / Parlerai-je toujours à des Vénus de pierre, / A des femmes sans cœur ?” (126-128). Monica Nurnberg may be right in that Martin “may have thought that he was
displaying taste and sensibility by centring his emotional crisis around the replica of a prestigious
work of art,” but she concludes too quickly that “the sole interest of its physical appearance is
that it is mutilé (l. 1), incomplet (l. 6), and sans bras (l. 8).” The presence of the reproduction
in fact complicates the comparison of poem to this statuary Venus, and the defense of poetry’s
value as auratic art. Martin may not have set out to interrogate the reproducibility of the work of
art via the techniques of mechanical reproduction and poetic form, but “Vénus de Milo
(Statuette)” brings these questions uncomfortably to the surface at the beginning of the
Parnassian moment.

For as much as Leconte de Lisle’s “Vénus de Milo” sought to make the statue the
“symbole adorable” par excellence of auratic art, the Venus de Milo was becoming one of the
most familiar subjects of early photography. Rather than setting up shop in the Louvre, like
Leconte de Lisle’s pious poet before the goddess, mid-century photographers usually took
pictures of scale replicas, like the plaster statuette of Martin’s poem. Such statuettes were
manufactured using the Collas process, whose very first successful product in 1839 was a two-
fifths reproduction of the Venus de Milo. The daguerreotype debuted the same year, and
practitioners of the new technology turned almost immediately toward the new Venus de Milo

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Statuettes\textsuperscript{228}: Alphonse Hubert’s 1839 daguerreotype titled “Nature morte, bas-relief et sculptures dont Vénus de Milo” actually represents a reproduction of the statue. Indeed, Hubert made no attempt to hide the fact that he was working with a statuette, photographing it as part of a larger composition with other Greco-Roman décor. The same is true of Hippolyte Balard’s “Nature morte avec des statues,” a wet-plate process image made in the early 1850s that placed a Venus de Milo statuette between two different statuary columns and beneath a medallion.\textsuperscript{229} Discussing photography’s close relationship to sculpture in the nineteenth century, Geoffrey Batchen observes that early photographers privileged statues because of their whiteness, immobility, and artistic prestige; for Hubert, Bayard, Fox Talbot, and many others, these qualities made statuettes, medallions, and bas-relief panels the ideal subject for photographic processes with long exposure times and need for high dark-light contrast images.\textsuperscript{230}

Statuary photography also contributed to defining the visual conventions emerging in the 1840s and 1850s, as photographs moved toward becoming a popular commercial product. Batchen argues that in addition to their advantageous physical qualities, statuettes pulled axes of “the photographic experience” defined by technological reproducibility into focus, “help[ing] to locate photography within an existing economy of copies and reproductions.”\textsuperscript{231} This alliance of sculpture replicated by machine and photographically reproducible images recalls Benjamin’s


\textsuperscript{229} “In each picture we get what seems to be a celebration of copying itself, of the ability to own copies, and of the act of copying these copies; these still lifes are therefore paeans to art as potential property.” Batchen, 22. For Hubert’s daguerreotype, see Roxana Marcoci, ed., \textit{Original Copy: Photography of Sculpture, 1839 to Today} (New York: The Museum of Modern Art, 2010), 51. A print of Bayard’s photograph was auctioned by Sotheby’s in 2005, and can be viewed on their website: http://www.sothebys.com/fr/auctions/ecatalogue/lot.25.html/2005/photographs-l05430.


\textsuperscript{231} Batchen, “Almost Unlimited Variety,” 20.
declaration that beginning in the mid-nineteenth century, “the work reproduced becomes the reproduction of a work designed for reproducibility.” Images of the statue continued to proliferate during the Second Empire, and more and more people were able to buy them. By the 1860s, photographs of the Venus de Milo were no longer limited to the type of artistic compositions created by Hubert and Bayard. Consumers taken by the fashion for photographic cartes de visite could fill up their albums with images of statuary masterpieces; consumers taken by the fashion for stereoscopes could slot in images of Venus and enjoy her in three dimensions.

Thus while the Venus de Milo resonates with Leconte de Lisle because of its singular beauty and cult value—because of its aura—the burgeoning availability of photographic Venus de Milos suggests an alternate set of values attached to the figure. For one thing, both cartes de visite and stereoscopic photography lent themselves to somewhat scandalous association with pornography. Under the guise of offering académies, or images of female nudes destined for study by the artist or sculptor to improve his technique, dozens of photographers sold pictures of

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233 With the introduction of the wet-plate process, the photography industry grew rapidly and prices decreased dramatically, making photographs a mass market consumer item. Elizabeth McCauley reports that in Paris, there were 58 photographic establishments in 1848 and 207 by 1860; the price per unit of a six-by-nine-centimeter photographic carte de visite was around one franc in 1862. Elizabeth Anne McCauley, A. A. E. Disdéri and the Carte de Visite Portrait Photograph (New Haven, CT: Yale University Press, 1985), 53, 204.  
234 Disdéri, popularizer of the photographic carte de visite, authored a monograph concerning the Application de la photographie à la reproduction des œuvres d’art in the format that he made famous. As for the stereoscope, Denis Pellerin writes that stereoscopy “excelled” at capturing “la figure sculptée”: “Des séries importantes reproduisent soit les œuvres exposées dans les salles du Louvre, soit les ‘Statues de Pradier’ ou les chefs-d’œuvre sélectionnés dans les expositions universelles.” McCauley, Carte de Visite, 53; Denis Pellerin, La photographie stéréoscopique sous le second Empire (Paris: Bibliothèque nationale de France, 1995), 20.  
235 Stereoscopy in particular has suffered from associations with pornography since the mid-nineteenth century; Jonathan Crary has sought to show that because “the simulation of tangible three-dimensionality hovers uneasily at the limits of acceptable verisimilitude,” the representational mode of the stereoscope was “inherently obscene.” See Denis Pellerin, “Les lucarnes de l’infini,” Études photographiques no. 4 (May 1998), 28; Jonathan Crary, Techniques of the Observer: On Vision and Modernity in the Nineteenth Century (Cambridge, MA: MIT University Press, 1990), 127.
women partially or fully nude; some offered more frankly pornographic images of sexual
situations to be tucked away in a pocket or viewed in the privacy of the stereoscope apparatus.  
This prurient gaze casts over pornographic bodies and the marble curves of the photographic
Venus de Milo alike, drawing the goddess’s statue more toward the sphere of sexual desire than
toward the pure beauty of the aesthetic ideal. Leading up to the Parnassian moment, the Venus
de Milo—a prime symbol of “bonheur impassible,” aesthetic power, the cult of form in
Parnassian poetry—was shrunk, sold, shot, printed, and peddled alongside other smut, thanks to
the photographic economy of reproducibility. In view of this history, Martin’s “Vénus de Milo
(Statuette)” appears not merely to be a terrible poem, but also, however unexpectedly, to join
Sully Prudhomme’s “Réalisme” and Albert Mérat’s “Le Carreau” in indicating the resources of a
poetics of reproducibility within the auratic anxiety of the Parnassian moment.

The Photographic Venus and the Lucretian Tradition

The Venus of the Parnassian moment, for all its sculptural beauty, is also and
unavoidably a photographic Venus. In the preceding section, I have drawn on Benjamin’s “Work
of Art” essay in order to examine how photography creates tension between the singular object
or image and its technological reproducibility. By concentrating on the Venus de Milo and
statuary photography in particular, I have largely concentrated on the artistic leanings of
photography. Throughout the nineteenth century, partisans of artistic photography pushed to shift
acceptance of the new technology from its role as a servant to the arts, as described in Du


236 McCauley, Carte de Visite, 105; Pellerin, Photographie stéréoscopique, 24.
237 The catalog of stereoscopic images established by Pellerin confirms the continuity between statuary
and pornographic images. Here, I will refer principally to the collection of eighteen stereoscopic prints
produced by Duriaux. This collection consists of 8.4x17.5 cm positive prints on albumin paper, from
collodion glass plate negatives. Pellerin, Photographie stéréoscopique, 105; Duriaux, Recueil. Vues
stéréoscopiques de Duriaux. Sculptures (Paris, 1859), image 9, “La Vénus de Milo.”
Camp’s “La Vapeur,” to an art itself, exhibited in conjunction with the 1859 Salon. But to consider photography only in relation to art is to neglect the tremendous importance of photography’s relationship to science. Photographic technology was presented to the world in terms of its applications to the arts and to the sciences; Arago’s famous 1839 *Rapport* on the daguerreotype surveyed novelty and speed of the discovery, while exploring its “utilité artistique” and the “ressources précieuses que la science lui empruntera.” According to Michel Frizot, the existence of these two poles within photography decisively shaped the medium: “À la croisée de la science et de l’art, la photographie, telle qu’elle existera à maturité dans les années 1850, est un objet inclassable, une invention hors normes [...],” writes Frizot. In the following section, I will show how photography’s artistic and scientific polarities reflect a scientific, as well as artistic, significance for the figure of Venus. I will then trace this aspect of the symbol back through the tradition of scientific poetry, analyzing the alternate ways that its sculptural and photographic forms interact.

Although many photographs of the Venus de Milo were in circulation by the Parnassian moment, no photographic image had yet been made of the planet Venus in 1866. To capture a photograph of Venus became an increasingly pressing preoccupation in advance of the 1874 Transit of Venus, which astronomers hoped to document with the new technology’s new precision. Ever since daguerreotypy’s debut in 1839, scientists had invested a great deal of energy into astronomical photography, often with mixed results. Quentin Bajac has highlighted the series of “faux départs” punctuating the three decades of astronomical photography’s

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240 Frizot, “Machines à lumière,” in *Nouvelle histoire*, 15-16.
241 See chapter 1 and appendices for further details.
infancy: scientists made halting progress toward meeting the goal of clear, sharp, useful pictures, improvising as photographic technology and techniques developed. Fizeau and Foucault made a daguerreotype of the sun as early as 1844; by the 1850s, reliable images of the sun, moon, and stars were available for photometric and spectroscopic analysis, among other uses. Despite the difficulty of executing images of such distant objects, astronomical applications were prominently envisioned for photography with the daguerreotype’s initial introduction. The first project that the Académie des sciences assigned to Daguerre was to take a picture of the moon. Arago’s speeches at the Chambre des députés and the Académie des sciences anticipate not just photographic support for current research problems, but indeed, the immensity of its benefits that no one can anticipate. “En ce genre,” declares Arago, “c’est sur l’imprévu qu’on doit particulièrement compter.” The photographing of eclipses proved to be one such area. After Warren De La Rue documented stages of the 1860 solar eclipse, considerable time, funds, and effort were invested into improving eclipse photographs, which held the promise of establishing a refined measure of the universe’s dimensions. The planet Venus, without having been photographed, was thus very much a photographic subject in the mid-nineteenth century.

The planet Venus was also a poetic subject, fashioned out of the same language that represented the Greco-Roman goddess as a statuary of ideal beauty. I have already discussed the audacious modernizing approach to the ancient Pantheon adopted by Maxime Du Camp in “La

244 Ibid., 460.
245 Arago, Rapport, 43-44. He describes the new technology’s potential use for astronomy and compares its possibility to that of the telescope; ibid., 40-47.
Vapeur,” from his *Chants modernes*. Here, I turn to the first poem of the collection, “Aux poètes,” to observe that Du Camp consciously performs a similar operation on the figure of Venus. “Aux poètes” evokes the goddess of Beauty, only to redefine Venus as a planet in the sky. The poet begins by explaining that the classical gods have no power in the contemporary world: “Jupiter est sans foudre et Vénus est ridée” (l. 9). From defining the goddess by the lack of her traditional attribute, beauty, the poet moves to replace the personified divinity with an object of study in the natural world. “S’il faut chercher les dieux au fond du firmament,” the poet argues, “Ce n’est pas en priant, c’est avec des lunettes; / De tous ces détrônés on a fait des planètes” (l. 29-31). The strategy employed by Du Camp to change the frame of reference for poetic language, from the spiritual and aesthetic to the material and scientific, notably works within the symbol, rather than importing technical discourse into the poem. This strategy bears worthwhile similarities to the sculptural poetics advocated by Du Camp’s Parnassian adversaries. David Scott argues that the analogy between poem and statue posits language as “comme le marbre, une matière qu’il faut travailler comme le sculpteur la pierre.” That work is formal, but it is also semantic, because words are not a raw material: language “est une matière déjà travaillé, qui comporte déjà un sens.” By shaping it in poetic forms, the poet sculpts the sense of language. In “Aux poètes,” Du Camp carves out a new meaning for the symbol of Venus, which other poets, including Victor Hugo, took up in turn. “Vénus, que parles-tu de Vénus ? elle est là. / Lève les yeux” (l. 51-52), the poet urges in Hugo’s “Cérigo.” Venus may have

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247 On the “high” strategy of reactivating mythology with new technological metaphors, see Wanlin, “L’imaginaire technique,” 58-59.
249 Scott, “Tensions,” 146.
disappeared from the modern world, her mythical home of Cythera now in disrepair, writes Hugo, but meaning is to be found in the skies.  

Another preface from 1855, the polemical year of Du Camp’s *Chants modernes* and Leconte de Lisle’s *Poèmes et poésies*, provides a detailed view of changes taking place within the symbol of Venus, as well as their connections to the tradition of scientific poetry. Hellenist, scientist, and poet Louis Ménard introduced his own 1855 collection of *Poèmes* with an idiosyncratic essay that displays both deep pessimism about contemporary poetry and profound interest in contemporary science. Ménard lays out a critical theory aimed at analyzing multiple modes of signification in ancient and modern times. His central claim involves the passage from the *symbol*, the mode of representation proper to classical culture, to the *formula*, the mode appropriate to expressing knowledge of the world in fragmented modern society. Both Antiquity’s understanding and that of positive science are, Ménard writes, equally valid ways to access the same truths about nature:

> La science moderne, qui admet des molécules indivisibles mais étendues, qui croit aux deux fluides électriques, qui personnifie le calorique, qui explique la vie minérale par l’affinité, comme si un mot expliquait un fait, sourit dédaigneusement des Grecs, qui rêvaient une Dryade dans chacun des chênes de Dodone, et une Océanide dans chaque flot de la mer […]. Là où nous voyons des forces et des principes, les anciens voyaient des dieux ; si nous appelons l’attraction ce qu’ils appelait Vénus, c’est une question de mots, et l’un n’est pas plus clair que l’autre.  

Although Ménard appears to side with classical Grecian epistemology in this portion of his argument, his final verdict of equality is decisive. Expert in Antique religious traditions and

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251 Hugo seems to have read Baudelaire’s “Un Voyage à Cythère,” originally published in the *Revue des deux mondes* on June 1, 1855, and been moved to write on the same theme (Hugo, *Contemplations*, 680). Baudelaire himself was inspired by Nerval’s anecdote about seeing a hanged man during the trip to Cythera in his *Voyage en Orient*, published in 1851. On the transmission of the image, see Jonathan Culler, “Trouver du nouveau? Baudelaire’s Voyages,” in *Writing Travel: The Poetics and Politics of the Modern Journey*, ed. Jonathan Zilcosky (Toronto: University of Toronto Press, 2008), 91-92.

mythology, but also trained in advanced chemistry, Ménard does not reject the possibility that Venus might accurately be placed in analogies outside of the artistic convention that restricts her to incarnating Beauty.

Indeed, by suggesting that the symbol in fact decomposes into two different elements, Ménard speaks to an essential tension between aesthetic and scientific functions in nineteenth-century culture. The formula of modern science cannot simply take over the Antique symbol’s work of signification in full, which adds complexity to the dynamic of prefiguration shaping Venus’s transformation from goddess to gravitation.\(^{253}\) While Ménard never argues that modern poetic language is capable of representing contemporary knowledge of nature, or—more elusive still—new knowledge of nature, he underlines its kinship with the scientific language of the formula. A duality replaces the symbol’s unity: as societies age, “alors l’esprit se sépare du corps, les mots se dédoublent, l’idée, pour se dégager, rejette l’image, la science brise l’unité du symbole où s’abreuvaient les peuples jeunes et forts.”\(^{254}\) In the symbolic mode of signification, form and meaning coalesce perfectly. In the modern mode, however, form and meaning split. The idea and spirit line up with abstract meaning, expressed through the formula; image and the body line up with sensuous form, embodied in the figures of poetry. “Les mots se dédoublent,” writes Ménard: language itself must double in order to accommodate this difference within representation. Even if Humanity asserts, “j’ai, depuis longtemps, remplacé les symboles par des formules, et je suis trop vieille pour écouter des légendes,”\(^{255}\) the aesthetic value of poetry parallels and complements the practical and epistemological value of science. According to


\(^{254}\) Ménard, Poèmes, xxv; Caraion, Philosophes, 300n21.

\(^{255}\) Ménard, Poèmes, iv; Caraion, Philosophes, 297.
Ménard, a poetic image of Venus may correspond to another meaning in contemporary scientific discourse: the force of gravity, or the bright planet between the Earth and Sun.

Ménard’s theory of the symbol and Du Camp’s approach to reworking it share an important assumption about the possibilities of poetic language. Both the replacement strategy practiced by Du Camp and the analogizing model outlined by Ménard concern the relationship between poetic language and scientific discourse.256 Discussing Les Chants modernes, Caroline De Mulder writes that “le poète ne traduit donc pas (ou plus) la nature, mais un discours scientifique. En d’autres termes, le hiéroglyphe à déchiffrer n’est plus la nature, mais un discours qui préexiste.”257 Similarly, the polarized character of modern language that, for Ménard, assigns the figure of Venus counterparts in contemporary scientific discourse does not offer fresh insight into the mechanisms of the material universe. Ménard nevertheless situates the ideas of his preface in the tradition of a poetry that does seek to interpret nature directly: Lucretius’s *De rerum natura*.258 Dating from the first century BCE, *De rerum natura* is a Latin poem spanning thousands of lines divided into six books. The poem accounts for the world through Epicurean philosophy, and Epicurean physics in particular. Although major parts of the text have been lost, the celebrated prologue addresses the poet’s expectations for his project to Venus, who represents creative force.259 Issued from the ideal of unified classical culture, this symbol reveals

256 It should be recalled here that various sub-genres of popular didactic poetry stemming from the model of Jacques Delille flourished during the first half of the nineteenth century, and probably constituted the works most familiar to the largest number of readers well afterward. For further discussion, see chapter 1. However, the chief readers of “literary” poetry during the age of its autonomization were its producers, so I will study the alternate model privileged within the circle of prefaces, collections, and criticism of the 1850s and 1860s.


258 Interestingly, Ménard indicates the possibility of scientific poetry’s future renewal along somewhat different lines from his friend Leconte de Lisle, writing, “il est de hautes régions où la philosophie, la poésie et la science se confondent, et la théorie des nébuleuses, la statique chimique des êtres organisés, offriraient des tableaux à Lucrèce.” Ménard, *Poèmes*, iii.

striking resonances with photographic technology in the mid-nineteenth century in ways that give shape to the period’s poetic experiment with the image of Venus.

By invoking Venus at the outset of *De rerum natura* to help him compose the text, Lucretius assigns her the possibility of scientific poetry. A symbol of Lucretius’s poetic project, Venus equally symbolizes the natural force of creation through reproduction. Lucretius insists on the goddess as the power of fertility:

> C’est toi qui par les mers, les torrents, les montagnes,  
> Les bois peuplés de nids et les vertes campagnes,  
> Plantant au cœur de tous l’amour cher et puisant,  
> Les pousses d’âge en âge à propager leur sang !  
> Le monde ne connaît, Vénus, que ton empire ;  
> Rien sans toi, rien n’écloît aux régions du jour,  
> Nul n’inspire sans toi, ni ne ressent d’amour !  
> A ton divin concours dans mon œuvre j’aspire !

Preoccupied with explaining how physical forms are generated, the atomism of Lucretius’s physics is placed under the sign of the will to reproduce, symbolized by Venus. Two key features emerge from Lucretius’s representation of Venus at the beginning of his poem. First, scientific poetry is linked with notions of generation and reproduction. Second, the emblem of scientific poetry is not a chilly, distant beauty, but rather the warm-blooded source of sex itself.

For poets of the mid-nineteenth century who venerated Venus, admired the scientific poetry of Lucretius, and idealized the unity of ancient Greco-Roman culture, the essentially reproductive nature of *De rerum natura*’s “alma Venus” thus poses an interesting challenge. Michel Serres has read Lucretius’s text as a site of encounter between two radically dissimilar scientific paradigms. If the opening invocation calls to Venus, writes Serres, then the poem’s end turns instead to the temper of Mars, recounting the gruesome deaths caused by the plague of Athens. But Serres argues the enfolding, generative, eternal nature of Venus disrupts any

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trajectory leading *De rerum natura* toward destruction. “Or cette décision est d’une importance historique et d’un poids culturel auprès de quoi, peut-être, rien ne peut être pensé plus grand. Il se trouve,” writes Serres, “[…] que la science de l’Occident n’a jamais cessé de choisir autrement que Lucrèce.” Preferring Mars, scientific culture rejects the “chant à la volupté” that Venus symbolizes and instead chooses “la guerre, la peste,” blood and death.  

Serres’s view of the symbol is consistent with the attitudes of Ménard and Leconte de Lisle, convinced that humanity’s golden age was in Antiquity.

Yet the Lucretian symbol of Venus as the power of reproduction also suggests provocative connections to the photographic era that was starting in the mid-nineteenth century. Sex personified, the Lucretian Venus is suited to photography’s most disreputable gaze, at home among the risqué stereoscope cards and pocket-sized pornographic images on the market. Moreover, the obvious scientific analogy for the goddess’s ability to make endless copies of every thing on Earth is photographic technology, able to make endless copies of endless images of every thing on Earth. Lucretius’s Venus can thus be located within the mid-nineteenth century’s new photographic economy of reproducibility; during the Parnassian moment, the scientific poem *par excellence* is presided over a photographic Venus. This association between the poetic genre and poetic figure is important because it brings out a new dimension of the photographic Venus that I have discussed above. Images of both the statuary and planetary Venus, on the one hand, exacerbate auratic anxiety and, on the other, encourage the search for new symbols in poetry of this period. Both involve sculptural work on behalf of the poet, who shapes poetic form and even poetic language itself in order to represent a particular image of Venus. Thanks to the photographic Venus of *De rerum natura*, questions of reproducibility and

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scientific poetry are inevitably part of the background of such images. With such a rich array of intertexts, instruments, cultural phenomena and poetic techniques surrounding the figure of Venus during the Parnassian moment, it is no surprise that poets found it attractive. Far from addressing Venus by merely following the example of Leconte de Lisle—“Du bonheur impassible ô symbole adorable”—poets of the Parnassian moment discover abundant material for experiment.

“Comme une invention de Vénus impudique”: Picturing Venus in the Experimental Poem

The impact of Lucretius’s scientific poem is conspicuous in the work of Sully Prudhomme, who published a new translation of De rerum natura in 1869. The penultimate poem of Les Épreuves, “Au Désir,” draws on Lucretian subtext to create a curious image of Venus, as well as a meditation on the nature of scientific poetry. On the surface, neither Venus nor science is explicitly present in the poem:

Ne meurs pas encore, ô divin Désir,
Qui sur toutes choses
Vas battant l’aile et deviens plaisir
Dès que tu te poses.

Rôdeur curieux, es-tu las d’ouvrir
Les lèvres, les roses ?
N’as-tu désormais rien à découvrir
Au pays des causes ?

Couvre de baisers la face du beau,
Jusqu’au fond du vrai porte ton flambeau,
Fils de la jeunesse !

Encor des pensers, encor des amours !
Que ta grande soif s’abreuve toujours
Et toujours renaisse !

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262 I have cited Sully Prudhomme’s translation of the text above.
263 Sully Prudhomme, Œuvres, 1:369.
The identification of Sully Prudhomme’s “divin Désir” with Lucretius’s “alma Vénus” is straightforward, since both represent a eternal, universal sexual drive. As in Lucretius’s poem, this force is linked to knowledge of the world, first when Sully Prudhomme suggests that Desire attend to discovering causes, then that it lights the path to truth. Finally equating thoughts (“pensers”) and loves (“amours”) as products of desire, the poet indicates that Venus must return to a place where she enables understanding of the world.

Without describing Venus as an embodied figure, or even naming her, “Au Désir” engages with the central concern of sculptural poetry, and indeed, photographic poetics. The Desire of “Au Désir” is caught between movement and stillness. The first stanza uses the vocabulary of flight and rest to address Desire, evoking a bird or the traditional winged figure of Eros. Desire is always moving, “battant l’aile” (l. 3), until rest transforms it into something else, becoming pleasure “dès que tu te poses” (l. 4). The poet associates this statuary pose with death; according to the poem, Desire is only Desire when it is in motion, compared to a “grand soif [qui] s’abreuve toujours / Et toujours renaisse !” (l. 13-14). The poem’s preference for movement, constantly renewed, to sepulchral stillness relates to its Lucretian vision of Desire as the world’s animating force. “Encor des pensers, encor des amours !” exclaims the poet, who began the poem by entreating Desire to keep circulating over the world. Desire touches everything (“toutes choses”), and its poetic motion has a specifically generative character. The poet gives a handful of examples that describe the effects of Desire’s movement, including parting lips, for speech or a kiss, and discovering the “fond du vrai” (l. 10). The reference to De rerum natura anchors these effects to the infinitely reproductive Venus of Lucretian physics.

The formal features of “Au Désir” reinforce its emphasis on poetic motion and endless propagation. Although “Au Désir” maintains the sonnet form used throughout Les Épreuves, it is
the only poem in the collection not composed in *alexandrins*. Instead, it alternates 10-syllable and 5-syllable lines, following the alternating rhyme scheme in the quatrains and the Marotic rhyme scheme (CCD/EED) in the tercets. The rhymes and meter contribute to regularity of this alternating effect. Within each stanza, the rhymes alternate between rich and sufficient; a caesura neatly splits each decasyllable down the middle into two 5-syllable halves. Sully Prudhomme thus does everything in his power to give the impression that the poem’s 5-syllable units could continue forever, regenerating themselves to form an eternally sing-songy verse that echoes the eternally renewed generative force of Desire. The fixed, fourteen-line limit of the sonnet seems to be the only thing preventing “Au Désir” from producing more and more poem.

Indeed, the conclusion of the sonnet brings not only “Au Désir” to a close, but also leads into the end of the entire collection, and its placement within *Les Épreuves* also has interesting implications for Sully Prudhomme’s view of scientific poetry and the figure of Venus. Lucretius’s invocation of Venus arrives, logically enough, at the very beginning of *De rerum natura*; the poet both praises Venus and asks for her help in writing the poem. Strictly speaking, “Au Désir” also invokes the figure of Lucretian desire via its vocative apostrophe, “ô divin Désir,” but the timing is suspect, since the work is already almost finished once the invocation is made. Sully Prudhomme, however, never asks Desire/Venus for its help to write. He seeks to restore its place “aux pays des causes” (l. 8), suggesting the kind of voluptuous science that Serres saw in Lucretius’s poem. I propose that Sully Prudhomme’s main aim here is to repurpose the invocation to Venus, in order to re-value understanding of the world as part of poetry. In other words, the poet remotivates the image of Venus with the scientific and generative meaning introduced by Lucretius, while at the same time dematerializing her statuary form and aesthetic
value. This reappropriation of Venus is both well within the range of Parnassian concerns, and
offers a different take on the symbol than seen in the poems studied above.  

Desire and a dematerialized body are also key elements of “La Nue,” in which Théophile
Gautier brings aesthetic questions to the sky. Originally published in La Revue du XIXe siècle, in
1866, Gautier added “La Nue” to the fifth edition of Émaux et camées, the collection he had
steadily revised and expanded since its first appearance in 1852. The poem is built around the
homophone of its title, “La Nue,” meaning both cloud and nude woman. From the start, artistic
genre mediates this ambiguity:

A l’horizon monte une nue,
Sculptant sa forme dans l’azur :
On dirait une vierge nue
Emergeant d’un lac au flot pur. (l. 1-4)

The cloud in the sky is also a female nude of portraiture or sculpture. On the horizon, the cloud
sculpts into a woman’s form, while this “vierge nue” characterized as emerging from pure waters
evokes the goddess of Botticelli’s Birth of Venus. The reference to Botticelli’s painting continues
in the next stanza, which compares the nue to “une Aphrodite éthérée” (l. 7) riding the waves in
“sa conque nacrée” (l. 5). Sculptural vocabulary returns when the poet describes the “blancheurs
de marbre et de neige” of the nue (l. 13), compared in turn to the beautiful nymph of Correggio’s
Jupiter and Antiope. The sublime figure of “La Nue” is thus fundamentally modeled on classical
Greco-Roman statuary, and at the poem’s midpoint, approaches a pure aesthetic ideal. Bathed in

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264 This type of reappropriation is evident in the section titles of Les Épreuves. Richard Chadbourne writes
that Leconte de Lisle and the generation of 1848 “learned, first, that the words action and rêve could not
have for them the same sense which they had for a Lamartine or a Hugo, confident actors in political
events, poets who launched out recklessly to explore the infinite”; by calling parts of his collection
“Rêve” and “Action,” Sully Prudhomme defines the terms differently than his Parnassian elders. Richard
Literature no. 5 (1968): 4. See also Mortelette, 190-191.


266 Gautier, OPC, 557-558.
light, higher than the Alps, the *nue* is a “[r]eflet de la beauté première, / Sœur de l’éternel féminin” (l. 19-20).

However, this vision of female beauty is also a cloud, which inspires an amusing dialogue between “la raison” (l. 25) and “le sentiment” (l. 29) on the part of the poet. His soul rushes to the *nue* “sur l’aile de la passion” (l. 22), but unlike Ixion, the poet knows full well that the figure is not a real woman. Although Reason dictates that he see the cloud as a cloud, “vague fumée / Où l’on croit voir ce qu’on rêva” (l. 25-26), Sentiment has the last word. After declaring the transience of beauty, “[s]pectre charmant qu’un souffle emporte” (l. 31), Sentiment commands the poet to love:

À l’Idéal ouvre ton âme ;
Mets dans ton cœur beaucoup de ciel,
Aime une nue, aime une femme,
Mais aime ! — C’est l’essentiel !” (33-36)

Expressed by Sentiment itself, this categorical call to love is about as far away from Parnassian impassiveness as possible. The essential love alluded to at the end of “La Nue” is totally indiscriminate, to the point of applying equally to women and clouds, and thus resembles the Lucretian notion of love, or desire, as a literal force of nature. Without being conclusive, this resemblance adds complexity to the poet’s debate of Reason and Sentiment. Reason has its say in the poem’s seventh stanza, and Sentiment in the eighth; the ninth stanza, though a continuation of Sentiment’s speech, follows thesis and antithesis to take the position of a synthesis. “La Nue” might then, like Sully Prudhomme’s “Au Désir,” suggest the potential of a Lucretian poetry that surpasses the division of feeling and intellect.

Even if such an interpretation pushes the envelope of Lucretianism a bit too far, the sculptural and poetic preoccupations of “La Nue” relate to the tensions between aura and reproducibility within the photographic Venus. The poem concerns above all the advantages and
possibilities of a fixed versus a shifting form. On one side, there are the dynamic forms of the cloud and poetic language. On the other side, there are fixed sculptural and poetic forms; “La Nue” uses the octosyllabic quatrains with alternating rhymes firmly identified with Gautier.\footnote{In his \textit{Histoire du Parnasse}, Mortelette refers to the quatrain in octosyllables with alternating rhymes as “la strophe d’\textit{Émaux et camées}” (184, 193, etc). For a trenchant critique of this (over)identification, see Murphy, “Versifications,” 72n15.} The poem thus displays the statuary-poetic tension described by David Scott in heightened ways, since the ephemeral cloud becomes a sculptural symbol of ideal beauty only by virtue of its representation in poetic form. Yet the poet’s insistence on the very fleetness of the cloud’s changeability leads to a set of paradoxical conclusions. First, the form of the \textit{nue} is as unique in time and space as an ancient statue of Venus, or even a Renaissance painting: it is unreproducible, like auratic art. Second, in order to capture this sculptural form before it changes, the poet requires a mobile, instantaneous mode of representation: like statuary Venuses, the \textit{nue} is photographic. The clash of these various imperatives in Gautier’s poem indicates how influential the issues represented by the figure of Venus were for poets during the Parnassian moment.

Jean Aicard’s poem “La Nuit” looks to the sky in order to test the relationship between poetry and knowledge. “La Nuit” shares elements of its outlook with “Au Désir,” as well as with Hugo and Du Camp’s planetary turn. One of five poems that made up Aicard’s inaugural contribution to the 1869 volume of \textit{Le Parnasse contemporain}, “La Nuit” also points back to Banville’s “L’exil des dieux” in several respects. Its somewhat unusual form consists of one 12-line stanza, followed by a 6-line stanza. Both are written in the same twelve-syllable heroic couplets of Banville’s quasi-epic poem, and their use here lends “La Nuit” an accordingly epic quality. Moreover, both poems focus on the disappearance of sacred presence animating nature. Whereas “L’exil des dieux” mourned that disappearance, Aicard’s poem adopts a less than...
regretful attitude toward the desacralized world and purposefully undercuts its own epic tone. Aicard declines to depict the old gods fleeing the world, preferring to show his readers a nighttime landscape. First abuzz with mysterious spirits, then fixed and understood by man, the sky represents a field populated by either gods and monsters or by simple stars.

The first stanza of “La Nuit” describes the “heure féerique” (l. 4) of nightfall as a period of distortion. Throughout the landscape, “le contour des objets tremble” (l. 1); hills, trees, and even the horizon itself contort. At the poem’s halfway mark, spiritual elements explain the seeming transformation of matter:

Un frisson court. Les bruits ressemblent à des voix ;
L’horreur sacrée emplit les plaines et les bois ;
Les vagues déités sortent de la matière ;
On voit passer l’esprit dans la vague et la pierre ;
La nuit cyclopéenne, oh ! terrible moment !
Pâle, rouvre son œil au fond du firmament. (l. 7-12)

Insofar as the disturbing noises “ressemblent à des voix” (l. 7), this scene recalls Aphrodite’s curse in Banville’s “L’exil des dieux,” which condemned humanity to inhabit a silent nature and lose the true sense of poetry. But in Aicard’s poem, the voices sounding in the night sky inspire a “horreur sacrée” (l. 8), and the night itself becomes monstrous, “cyclopéenne” (l. 11), when it displays a single pale eye in the starry firmament. Invested with cult value, the sky offers none of Antiquity’s harmony, and clarity comes instead from a human source. A “chanson de paysan qui retourne au foyer” (l. 15) dispels the unsettling movements and uncontrolled distortion of the natural world’s aura. “Le flot n’est plus qu’un chien que l’on laisse aboyer, / Le vent n’es qu’un oiseau nocturne aux cris funèbres”: now compared to a tame dog and harmless bird, the sounds of wave and wind are no longer frightening. The sound of the poem itself takes on new structure, as the couplets’ end-rhymes now build from sufficient (“s’élève,” “grève”) to rich (“foyer,”

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268 Parnasse contemporain, 2:253-254.
“aboyer”) to rich *and* leonine (“funèbres,” “ténèbres”). These rhymes frame the sure, clear image of the night that the stanza captures, which contrasts sharply against the first stanza’s unstructured rhymes and distorted image of the sky. With this photographic landscape, “La Nuit” connects song, and thus poetry, to the demystifying understanding of nature, proclaimed in the poem’s final line: “Et l’on sent l’homme encor plus grand que les ténèbres!” (l. 18).

While Aicard’s poem clearly engages with the scientific pole of the photographic Venus, the tensions within this figure come to the forefront in a strange, short poem by François Coppée about the demise of the Greco-Roman gods. Published in the second volume of *Le Parnasse contemporain*, this untitled poem appears tenth in a sequence of seventeen *dizains* by Coppée. All the rest of these poems are about life in modern Paris and were later collected alongside a dozen new verses in *Promenades et Intérieurs*. This poem has enjoyed a long afterlife despite being cut from Coppée’s final collection, perhaps because it is strikingly weird:

Les dieux sont morts. Pourquoi faut-il qu’on les insulte ?  
Pourquoi faut-il qu’Hellas et son noble culte  
Ne puissent pas dormir de ce sommeil serein  
Que prêta le pinceau classique de Guérin  
Au Roi des rois vers qui rampe le sombre Égiste ?  
Pourquoi faut-il enfin qu’un impur bandagiste  
Donne à Hercule antique un infâme soutien  
Des bas Leperdriel à Phœbus Pythien,  
Et, contre la beauté tournant sa rage impie,  
Pose un vésicatoire à Vénus accroupie ?

Beyond the problem of its fit with the rest of the *Promenades et Intérieurs* series, this poem grafts contemporary medical discourse onto questions of artistic representation, with remarkable results. “Les dieux sont morts” seeks to defend an ideal of auratic art, and promptly undermines that ideal by subjecting its symbols to not only the ravages, but also the remedies of time.

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269 Mortelette, *Histoire du Parnasse*, 265. The poem was included in the installment sent to subscribers in April 1870 and reprinted in the complete volume, published in July 1871.  
The challenges that take up most of the poem’s first half could have been directly addressed to the modernizing verse of Maxime Du Camp. Coppée admits straightaway that the Greco-Roman gods are dead, rather than exiled or dormant, then attacks those who attack the gods’ memory: “Pourquoi faut-il qu’on les insulte ?” (l. 1). The poet argues that the gods deserve the tranquil sleep “[q]ue prêta le pinceau classique de Guérin / Au Roi des rois vers qui rampe le sombre Égiste” (l. 4-5). Although Coppée here associates the eternal rest of death with painting, and specifically the neoclassicism of Pierre-Narcisse Guérin, David Scott has pointed out the close allegorical ties among sculpture, serpents, and death in the nineteenth century, making Coppée’s description of the murderous Aegisthus as a snake suggestive of statuary. In either case, neither the serpentine Aegisthus nor Clytemnestra in Guérin’s painting of the scene has yet assassinated Agamemnon, foregrounding the idea that the gods are not exactly resting in peace. The second half of the poem describes the outrages committed against the gods, or statues of the gods, by “un impur bandagiste”: this scoundrel gave Hercules crutches, varicose vein stockings to Pythian Apollo, and put a sticking-plaster on Venus. Curiously, Coppée does not provide a rejoinder to the claims made by Du Camp in “Aux poètes,” such as “Jupiter est sans foudre et Vénus est ridée” (l. 9). What the poet objects to is the attempt to rehabilitate the figures of the gods with modern methods; this rehabilitation itself mutilates them, presumably more than the natural passing away of “Hellas et son noble culte” (l. 2) or the fragmentations and missing limbs of ancient statues could.

Within the blocky dizain, then, Coppée attempts to produce classical sculpture’s serenity and stasis for the dead gods, but ends up framing the image in terms of modern technological language. Although Maxime Du Camp insulted the gods, he also tried to redefine them using

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273 Du Camp, Chants modernes, 44; Caraion, Philosophes, 115.
scientific discourse: “De tous les détrônés on a fait des planètes,” wrote Du Camp, “Et Mercure, aujourd’hui, n’est qu’un médicament” (l. 31-32).\textsuperscript{274} Coppée’s poem both resists this kind of redefinition aimed at the auratic work of art and, at the same time, creates an infinitely more compelling image of it than did Du Camp.\textsuperscript{275} The compact form of “Les dieux sont morts” has a strong vertical axis along the caesura of each twelve-syllable line, as well as a horizontal axis between lines 5 and 6, when the poet moves from Guérin’s painting to the medicinal crimes of the bandagiste. Shorter than even a sonnet, Coppée’s dizain imposes strict, square limits on its material, which makes the oddities of its poetic language stand out even more.\textsuperscript{276} The richest end-rhyme in the poem on lines 5 and 6 (“Égiste,” “bandagiste”) pairs classical and medical vocabulary; a pair of four-syllable technical words placed just before the caesura on lines 8 and 10 (“Leperdriel,” “vésicatoire”) emphasizes their contrast with more traditional poetic language in the same position, as in line 7 (“Hercule antique”). In a word, Coppée sets out to protect the gods by constructing a funerary monument to their undisturbed rest, but trips up as he tries to “work the material” of poetic language in the gods’ defense. Introducing technical words and binding them to classical figures, Coppée represents Venus in a fascinating way, and despite his efforts to discard this poem, certain elements of it will later be reproduced by Rimbaud and the Zutistes.\textsuperscript{277}

\textsuperscript{274} Du Camp, Chants modernes, 45; Caraion, Philosophes, 116.  
\textsuperscript{275} Citing the “réalisme volontairement outré” of the poem, Mortelette seems to suggest this was intentional. Mortelette, Histoire du Parnasse, 274.  
\textsuperscript{276} On the prosaisms of Coppée’s poetic form, see Murphy, “‘Pauvre Coppée’,” 63-65 and above, chapter 1.  
Poems from Albert Mérat’s collection *L’Idole* also proved an inspiration to Rimbaud, and explored the poetic possibilities of the photographic Venus. Published in 1869, *L’Idole* is entirely made up of sonnets, each of which praises some part of the female figure. The “Prologue” honors the meticulous detail of the Mona Lisa, and announces the poet’s plan to compose a similarly complete work: “À l’exemple du peintre insigne, je voudrais / Saisir tous les accents et rendre tous les traits / De la Femme, en laissant chacun une œuvre entière” (l. 9-11). A “plastique lien” (l. 12) will tie the work together into “[u]ne grande figure au front olympien” (l. 14). Present from the beginning of the collection, the model of classical sculpture returns to the forefront once Mérat finishes his first pass over the woman’s body. This sequence starts with “Le Sonnet des yeux” and ends with “Le Sonnet des pieds,” a head-to-toe movement that respects the vertical axis of the traditional blason. But *L’Idole* does not stop at the feet, and instead, its focus travels back up the body to “Le Sonnet de la nuque.” Statuary vocabulary has a prominent place in the poem that describes the nape of the neck, whose “beauté modelée à loisir / A les perfections antiques d’un moulage” (*Id.*, 32, l. 7-8); it reappears in the following poem, “Le Sonnet des épaules,” in which the shoulders have the “impeccabilité de marbre des déesses” (*Id.*, 35, l. 11). Praising how the collection’s sonnets “compos[e], in their ensemble, a ‘statue’ of the beloved,” Aaron Schaffer has singled out *L’Idole*, calling it “Mérat’s most successful specimen of sculpture turned poetry and one of the noteworthy achievements of the Parnassians in this domain.” The representation is, however, not quite as complete as Schaffer suggests when he describes the poet “refusing to draw the veil of modesty over his nude model.”

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278 Once again, this inspiration took, at least in part, the form of parody in the *Album Zutique*; see Saint-Amand, 143.
280 Schaffer, *Genres*, 49.
dernier sonnet” and “Dernier sonnet,” Mérat precisely finds himself obliged to drape the buttocks and sex of his own work.

It is no accident that these two sonnets are the only poems of the collection to reference Venus, and this conjunction of Venus, statuary, and poetic form reveals the experimental contours of Mérat’s poetic project. Both sonnets present a defense of the female figure from the indignities of the modern gaze; before Coppée tried to defend the bodies of the gods from the eyes of modern medicine in “Les dieux sont morts,” Mérat tried to defend the body of his idol from the sexual hypocrisy of “sots faussement ingénus / À qui l’éclat du beau fait baisser la paupière” (Id., 36, l. 5-6). If the poet manages to eke out a few lines—“ô blancheurs, ô merveilles!” (l. 12)—to celebrate the idol’s behind in “Avant-dernier sonnet,” he is unable to describe its sex in “Dernier sonnet”:

Mais ce siècle est menteur bien plus que délicat ;
Sa pudeur a poussé les feintes à l’extrême.
Voici qu’il a flétri ce dernier sujet, même
Avant qu’un simple trait de plume le marquât.

Donc mon œuvre sera par moi-même meurtrie :
Au lieu du nu superbe, un pli de draperie
Dérobera la fuite adorable des flancs. (Id., 38-39, l. 5-11)

Referring to Venus in these two poems, then, serves a practical purpose by allowing the reader fill in details of the missing body parts with his memory of Greco-Roman statuary. “Avant-dernier sonnet” opens with a reminiscence of the Vénus Callipyge, whose famous pose emphasizes her naked backside, while “Dernier sonnet” closes with a play on Vénus Pudique, as the fully nude Cnidian Aphrodite of Praxiteles was known in France. Although the latter statue was lost in Antiquity, several of the works it inspired were well-known in the nineteenth century.
One of these, the Venus de’ Medici, even appeared alongside the Venus Callipyge in a lot of stereoscope photographs taken by Joseph Duriaux in the 1850s.\footnote{281 Duriaux, image 7, “La Vénus Médicis,” and image 18, “Vénus Callipyge.” For information on the statues and their reception, see Haskell and Penny, Taste and the Antique, 316-318, 325-328.}

At the end of L’Idole, the poet purports to disdain the stereoscope viewer’s sexualized gaze, and adopts a worshipful posture toward the figure of pure beauty that he describes. “Je veux voir et nommer la forme tout entière / Qui n’a point de détails honteux ou mal venus” (\textit{Id.}, 36, l. 7-8), the poet declares in “Avant-dernier sonnet.” Yet several formal aspects of the two poems complicate the direct parallel between sculpture and poetry of L’Idole, both centered around the word “nu.” Contained within “Vénus,” “nu” constitutes the core of the quatrains’ enclosed A-rhyme in “Avant-dernier sonnet”; Mérat rhymes “Vénus,” “et nus,” “ingénus,” and “venus.” A rich rhyme that is also leonine, this rhyme has the inconvenient fault of being merely a sight-rhyme, since the terminal –s of “Vénus” is pronounced and all the others are silent. Myriam Robic points out that poetic license of the period permitted this particular sight rhyme, variations of which were widely used by Hugo, Gautier and others, although the master rhymer of the Parnassian moment, Banville, studiously avoided it.\footnote{282 Myriam Robic, \textit{Hellénismes de Banville}, 159-160; Evans, \textit{Théodore de Banville}, 33.} Rhyme holds a key place in Mérat’s work as well, indicating that the prominent placement of such a problematic license was no accident. Indeed, the end-rhymes of the tercets are not rich but sufficient (“merveilles,” “pareilles”; “composer,” “baiser”) except for the interesting, leonine pairing of “chambre” and “d’ambre” (\textit{Id.}, 37, l. 12, 14). The warm glow of the idol’s posterior curves are not glimpsed here in the hallowed halls of the museum, as was the marble beauty of Leconte de Lisle’s “Vénus de Milo.” Far from these temples to auratic art, Mérat’s idol is located in the bedroom, her buttocks “[s]uperbes dans le cadre indigne de la chambre” (l. 12). That “unworthy frame” recalls the quatrains’ questionable rhyme built on “nu,” setting the poem’s sculptural form in a poetically
and sexually suspect structure. Similarly, the word “nu” haunts “Dernier sonnet,” where it signifies what cannot be properly represented in poetic language (the “nu superbe” and prurient “Vénus impudique”). As though admitting defeat, the end-rhymes of “Dernier sonnet” are all just sufficient, until the last two pairs of rich rhymes give the reader what he wants: “flancs” rhymes with “blancs,” “indique” with “impudique.”

The last poem of L’Idole, “Épilogue,” deepens its investigation of the interplay among poetry, sculpture, and photography that the final rhymes of “Dernier sonnet” suggest. The latter mode in particular comes to the forefront, producing an intriguing and ambivalent sense that the poet is more like the stereoscope photographer, Duriaux, than the sculptor, Praxiteles. Focusing on the poet, the first stanza sets up a clear opposition between the artist and his idol:

Mon esprit, secouant ses ailes de corbeau,
A voulu fuir le poids de l’ombre coutumière,
Et son vol a monté vers la splendeur première,
Pour étreindre et fixer le poème du beau. (*Id.*, 40-41, l. 1-4)

Several features of the poet’s comparison of his soul to a raven are worth noting. Whereas the idol is white marble, an immobile statuary beauty, the raven is inky, feathered, and alive. The raven is also not a songbird, and so when it does find beauty, poetry is not connected to song. Instead, the poet presents the “poème du beau” in terms of matter and light. The shadow that he flees has weight (“poids”), as does the “splendeur première” that the poet tries both to embrace (“étreindre”) and fix. The verb “fixer” plays into the tension between stasis and movement that David Scott has highlighted in sculptural poetics, while also signaling the importance of photography: to fix the image is the last step of the photographic process. By ascribing himself qualities opposed to the statuary idol, the poet aligns himself with the vocabulary of light and shadow that he introduces here alongside the collection’s sculptural vision.
The second stanza demonstrates that this sculptural vision is interwoven with the failure of the collection to realize a complete work of auratic art. “Si tu n’as point surgi, déesse, tout entière, / C’est qu’au moule parfois l’œuvre laisse un lambeau” (l. 7-8), explains the poet. Since the mold is at once a sculptural form and a poetic one, however, this metaphor is somewhat peculiar. It seems to imply that a portion of verse got stuck in the sonnet form, like a part of sculpture that broke off in its unmolding. Moreover, this defect is held responsible for the work’s failure as an invocation, or sacred prayer; the “goddess” did not wholly arise, “surgir,” to fill the poet’s sonnets. Admitting his own failure to sculpt such a perfect work of poetry, the poet meditates on the value of the form that he created, and suggests that this form is inherently photographic. The goddess may not have appeared due to the poems’ sculptural defect, but the poet’s hands were already shaking without holding a chisel: “Si je n’ai pas tenu sûrement le flambeau, / C’est que j’aurais tremblé, vaincu par la lumière” (l. 4-5). He did not succeed in his aim to grasp and fix the “splendeur première” of beauty, and indeed was overwhelmed by the light, lost the steadiness of his grip. The form of the poet’s creation is thus inseparably photographic and statuary.

In the tercets, the poet imagines how he might have been able to represent the dual form of his work. He returns to the notion of materiality evoked in the first stanza. There, it was associated with “le poids de l’ombre coutumière,” in contrast with lightness. Here, materiality is again something to be overcome:

Pourtant j’aurais voulu te dresser tout nue,
Blanche création de la force inconnue,
Dans le rayonnement de ta réalité ;

Et j’aurais simplement montré du doigt ta forme
Dépassant, par le seul effet de la beauté,
Les efforts monstrueux de la matière énorme. (l. 9-14)
For a poem and a collection so seemingly obsessed with statuary, the conclusion that materiality constitutes above all a burden is very interesting indeed. Mérat’s “Prologue” asserted that form is the “honneur de la matièr” (l. 13), but by the last lines of the “Épilogue,” the poet wishes to be rid of materiality’s “efforts monstrueux.” Those monstrous efforts produce the idol for the poet to raise, “te dresser.” Yet the poet also hoped, simply, to show the “blanche création” in its radiance, to point a finger at the “rayonnement de ta réalité.” The form in which to achieve the work of L’Idole resembles statuary photography, which represents the reality of the figure through its light, not the weight of its marble or brass. “Épilogue” imagines the beauty of sculpture without stone, composed of poetic forms and photographic images. Such beauty might not be as pure as the classical statue, just as stereoscope photographs of the Venus Callipyge bought for twelve francs were almost certainly less pure than the real thing. At the end of L’Idole, Mérat nonetheless indicates that such beauty might have other unknown forces worth exploring.

The figure of Venus hangs heavy over the “Épilogue” of L’Idole and its photographic imagination. Unlike “Avant-dernier sonnet” and “Dernier sonnet,” the final poem does not contain the actual word “Vénus.” The poet’s address to the “déesse” (l. 7) implies its presence in the quatrains, as does the critical end-rhyme “nue” (l. 9) in the tercets. Placed immediately after two poems where “nu(e)(s)” echoed “Vénus,” the couplet in “Épilogue” is almost jarring for rhyming “nue” with “inconnue.” Mérat’s explicit comparisons of his idol to Greco-Roman statues of Venus, combined with the photographic turn of his sculptural poetics in the collection’s “Épilogue” gesture toward the advantages and inconveniences of the photographic Venus for poetry of the Parnassian moment. In exchange for compromised aesthetic purity and auralic power, the photographic Venus promises the radiance of reality: the anatomical frankness

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283 Pellerin, Photographie stéréoscopique, 17.
sought by Mérat, perhaps, and perhaps even the poetic acceptance of a world changed by new technologies and scientific understanding. It is with this reading of *L’Idole* in mind that I wish to approach Rimbaud’s “Vénus Anadyomène” and the conclusion of the chapter. Mérat has long received little critical attention outside of his association with Rimbaud, and even then, tends to receive little critical esteem. Rimbaud deemed Mérat one of two the “voyants” named in his May 15, 1871 letter to Paul Demeny, but his parody of *L’Idole* in the 1871-1872 *Album Zutique*, “Le Sonnet du trou du cul,” has largely defined the modern parameters for interpreting Mérat’s work.\(^{284}\) I argue that the photographic Venus of Mérat’s *L’Idole* provides an valuable intertext for reading Rimbaud’s “Vénus Anadyomène.”

This early sonnet, included in a letter dated July 1870, displays tremendous sophistication in its treatment of the photographic Venus, synthesizing questions of aesthetics and form, beauty and sexuality, reproduction and commodification, science and poetry. “Vénus Anadyomène” is also truly, impressively off-putting.\(^{285}\) The first line opens on a head emerging from a bathtub as from a coffin, and then things go downhill:

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Comme d’un cercueil vert en fer blanc, une tête
De femme à cheveux bruns fortement pommadés
D’une vieille baignoire émerge, lente et bête,
Avec des déficits assez mal ravaudés ;

Puis le col gras et gris, les larges omoplates
Qui saillent ; le dos court qui rentre et qui ressort ;
Puis les rondeurs des reins semblent prendre l’essor ;
La graisse sous la peau paraît en feuilles plates :
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The most obvious quality of Rimbaud’s Venus is, of course, her ugliness, which the poet describes in vivid detail from head to anus. Michael Riffaterre has written that by systematically inverting the beauty of individual female body parts into ugliness, “Vénus Anadyomène” belongs to the formal tradition of the contreblason, while Steve Murphy has viewed the poem as the reversal and indictment of a specifically Parnassian aesthetic ideal and Second Empire society. Citing Albert Glatigny’s “Les Antres Malsains” and Coppée’s “Les dieux sont morts,” Murphy emphasizes the damning portrait that “Vénus Anadyomène” offers of prostitution, and in particular, the medical, masculine gaze that examines the prostituted body “à la loupe.” I will argue that Rimbaud’s Venus is not just an ugly, ailing Beauty, but indeed a photographic Venus that unites art and science in provocative ways. In “Vénus Anadyomène,” the scientific gaze meets the figure of Venus on the surface of a photograph.

The first three stanzas of “Vénus Anadyomène” develop the image of a woman rising out of a bath. The poem thus enacts a quintessentially photographic process: treated paper is dunked in a chemical bath and causes the image to appear, as if by magic. The description of the body in

288 Murphy, Le Premier Rimbaud, 193-209. “Enfin, cette posture montre que le lecteur est mis, peu ou prou, dans la peau d’un inspecteur sanitaire dont le travail consiste à scruter le corps de la femme ‘vénale’ afin de dépister les traces et symptômes d’affections vénériennes. La loupe est un ersatz du speculum,” he writes. Murphy also cites Coppée’s “Les dieux sont morts” as an intertext for “Vénus Anadyomène.” Ibid., 207, 204.
lines one through twelve represents the development of the reader to the image, who watches the head, neck, back, and rear emerge out of the bath and onto the page. “Émerger,” in fact, is the first word in the poem to describe the body’s action, and although the poet’s description of the Venus gives the impression of movement, the body itself simply appears. Through the quatrains, only three verbs are attributed to the body: “émerger” (l. 3), “sembler” (l. 7), and “paraître” (l. 8). The verbs of motion that occur on line six—“saillir,” “rentrer,” “ressortir”—are contained within relative clauses that characterize them as descriptive of the body’s appearance; on line seven, the lower back seems to take flight (“prendre l’essor”). Rather than representing a movement, then, this part of the poem represents an image of a female body seen from behind. The figure exhibits the marble stillness of the Venus Callipyge, captured forever mid-movement.

While the body is sculptural, the image that the poem develops is highly photographic. The body’s various parts materialize wobblingly, echoing the gentle agitation of the chemical bath, and the poem’s color scheme of reddish browns and greys matches the sepia tones of a developing photograph. Moreover, the unusual form of the quatrains in “Vénus Anadyomène” point to an experiment with framing structure of rhyme. Rimbaud uses alternating rhyme (ABAB) in the first quatrain, then switches to enclosed rhyme (CDDC) in the second. In addition to disrupting the expectation of symmetry between the two stanzas, Rimbaud ignores the

289 My view differs from the interpretation of Seth Whidden; for Whidden, the movement of Rimbaud’s Venus is vital to his reading of the poem as a critique of a Parnassian ideal of immobile feminine beauty. Seth Whidden, “Rimbaud Writing on the Body: Anti-Parnassian Movement and Aesthetics in ‘Vénus Anadyomène’,” Nineteenth Century French Studies 24, nos. 3-4 (1999): 336-337.

expectation that both quatrains use the same pair of rhymes. Instead of creating a tight square in which to contain the image, Rimbaud’s off-kilter quatrains reinforce the alchemical wonder of its photographic becoming. As though marking off the end of that process, the first tercet follows the quatrains’ sufficient and rich rhymes with a couplet of poor ones (“goût,” “surtout”) that introduce a strange smell: “le tout sent un goût” (l. 9). Mixed up with taste, the smell suggests the sharp odors of nitrates and bromides used in photographic baths. The tercet concludes by revealing the explicit presence of a lens, which will correspond to the poem’s shift in focus on the surface of the image it is developing. Announcing that “on remarque surtout / Des singularités qu’il faut voir à la loupe” (l. 10-11), the poem zooms in on a detail—or two—of interest.

If the figure developed across the first three stanzas of “Vénus Anadyomène” demonstrates a sculptural stillness, the examination of its photographic image in the final tercet leads to a startling movement of poetic language. I will cite the lines again in order to read them closely:

— Les reins portent deux mots gravés : Clara Venus,
Et tout ce corps remue et tend sa large croupe,
Belle hideusement d’un ulcère à l’anus. (l. 12-14)

The pairing of “Clara Venus,” the words seen tattooed just above the figure’s buttocks, with the diagnostic locution “ulcère à l’anus” creates a remarkable dynamic of contrasts. That the two phrases echo each other is no accident. As first noted by Marc Ascione, the Latin “ulcera anus” is an anagram of “clara venus,” better visible when written in the Latin alphabet (“VLCERA

291 Berger has pointed to the disruptiveness of this line in order to argue that smell, rather than taste, is the primary vector of the poem’s experience: “Mais c’est surtout la mention, au début du premier tercet, de l’odeur peu ragoûtante de Vénus, qui fait voler en éclats le cadre du tableau. […] La nécessité de recourir à un tel instrument [la loupe] signifie l’insuffisance de la vision de loin. L’unique allusion métapicturale à l’activité scopique du voyeur sert donc à en souligner le défaut.” Ibid., 54.

292 Murphy notes that three periods become six in the version of the poem that appears in the Cahier de Douai, the poems collected by Rimbaud in September 1870. Murphy, Premier Rimbaud, 194.
The name of Venus indelibly links the woman’s image to the goddess of Beauty and aesthetic ideal, whereas the anal ulcer is clinically scientific language and a blighted form. The two terms seem to be exact opposites, but oppositions contained within each complicates their dynamic. First, let’s look at CLARA VENUS. Instead of a variant on “Clara dea,” as Seth Whidden has suggested, I read “Clara Venus” to rewrite the opening apostrophe of Lucretius’s *De Rerum natura*: “Alma Venus.”

Rimbaud certainly knew Lucretius’s poem, and he knew its invocation to the fruitful, life-giving Venus. Just a few months earlier, Rimbaud had won a school prize for plagiarizing and lightly correcting the first few dozen lines of Sully Prudhomme’s 1869 own French translation. By changing “Alma” to “Clara” in “Vénus Anadyomène,” Rimbaud not only produces a sobriquet with burlesque overtones for his modern goddess but also a new invocation, reminiscent of the astronomical signification promoted by Du Camp. “Oh bright Venus,” becomes a vocative that irrevocably evokes the planet, whose brightness in the night sky is second only to the Moon. So on the one hand, Beauty herself is travestied, and on the other, a beautiful planet is apostrophized. The internal tension between artistic and scientific significance is replicated for the “ulcère à l’anus”: “anus” also means “old woman” in Latin, whose rhyme with Venus again inscribes the classical deity inside a scientific analysis of the diseased body.

The polarization of artistic and scientific discourses is redoubled between Clara and the ulcer,

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296 Noting that the tattoo represents “an incongruous cliché suggestive of celestial Venus,” Riffaterre fails to elaborate upon the observation. Riffaterre, “Stylistic Approach,” 45.
creating a field of complex interactions. And each of poem’s Venuses—medical diagnosis, statuary goddess, planetary body—is photographic.

Sculptural, photographic, and poetic technique come together at the site of inscription in “Vénus Anadyomène.” Seth Whidden has already called attention to the figure’s tattoo to show how Rimbaud treats “flesh as text,” writing the body and writing on it alike.298 Here, I want to highlight the different but simultaneous functions that the words “Clara Venus” perform, and the effects of this extraordinary work on the material of poetic language. As a name engraved on the body, they represent the figure carved in stone. As part of the image represented in black and white, they represent the figure written in light—photographed. As a Latin vocative, the inscription addresses the figure in classically lyric language. The tattoo marks a space where the meeting of all three media is thematized, and opens on to the array of artistic and scientific significations I have sought to demonstrate above. At the crucial juncture between the inscription of “Clara Venus” and the revelation of its corresponding “ulcère à l’anus,” the figure moves, provocatively: “Et tout ce corps remue et tend sa large croupe.” The stillness of statuary, the reproducibility of photography, the discovery promised by the planet, and the tradition of scientific poetry intersect and produce an extraordinary movement of poetic language. Even the otherwise staid alexandrins of “Vénus Anadyomène” shift in these two lines, scanning perfectly in two meters at once: “— Les reins portent | deux mots / gravés : | Clara Venus” and “Et tout ce corps | remue / et tend | sa large croupe.” Its syllables segmented into both 6/6 and 4/4/4, the form of the poem itself takes on a new dimension as for a brief movement, its Venus moves.

“Vénus Anadyomène is just one example of the compelling experiments that poets of the Parnassian moment performed on the photographic Venus. From questions of reproducibility to theories of the symbol, the photographic Venus engaged with the forms of sculpture, planetary

images, and the Lucretian tradition. Amongst the Parnasse’s adherents to the “cult of form” of l’art pour l’art, there was plenty of space to explore the consequences and possibilities of photographic representation in poetry, and indeed, for some, to test new notions of scientific poetry.
CHAPTER THREE

Two lyres: Rimbaud, parody and the Paris Commune

The Paris Commune marks an important turning point in the history of Parnassianism, cleaving the Parnassian moment into periods before and after the 1871 revolt. Political upheaval began with the French declaration of war against Prussia the previous summer. Bismarck’s army closed in around Paris in September 1870, keeping up a brutal siege of the city the collapse of the Louis-Napoléon’s Empire, the struggle of France’s provisional government to defend the country and, in January 1871, to negotiate an armistice with the Prussian victors. On March 18, 1871, citizens of the capital rebelled against Thiers’s conservative national rule, which retreated to Versailles. Paris formed an autonomous Commune, but this audacious social and political experiment ended just over two months later in bloody violence, as Thiers’s government finally defeated the Commune’s forces on May 28. Many participants in the Commune were blacklisted, tried, and deported in the following months and years, and political ideologies concerned with order would shape the rest of the decade and the piecemeal establishment of the Third Republic.\textsuperscript{299}

This year of intense turmoil had far-reaching impact on poetic production. On a practical level, war, siege, and revolution interrupted the printing and distribution of the second Parnasse contemporain, which would eventually reach subscribers in twelve installments over twenty-one months.\textsuperscript{300} Changes to everyday life affected everyone in France to some degree, from serious famine in Paris to reduced railway service in the provinces, from the loss of state-financed


\textsuperscript{300} Mortelette, \textit{Histoire du Parnasse}, 265.
sinecures to death at the ends of rifles. These changes laid bare political divisions within the Parnassian *mouvance*. Some poets, especially those with strong links to the Empire, excoriated the Commune; others, reactionary, issued public pleas for peace; a small set of revolutionaries openly supported or joined the Commune.\(^\text{301}\) The return to order failed to erase the differences revealed among Parnassians, and indeed, recent critics have suggested that the group was irreversibly fragmented by summer 1871. For the literary sociologist Denis Saint-Amand, the aftermath of the Commune is defined by the “divergences en matière d’opinion politique qui ont dynamisé le champ littéraire”: a veritable “schism” sets the radicals—Verlaine, Cros, Valade—apart from the reactionaries—Mendès, Leconte de Lisle, Coppée.\(^\text{302}\)

In such a division, the young Arthur Rimbaud must appear on the side of the radicals. Over the past several decades, a generation of scholars has deepened critical understanding of Rimbaud’s relationship to the Commune, from Kristin’s Ross foundational study to the indispensable exegeses of Steve Murphy.\(^\text{303}\) Due to its importance in Rimbaud’s work, the Commune forms a compelling background against which to read the pair of letters that Rimbaud sent to Théodore de Banville, which straddle the line between these “before” and “after” periods within the Parnassian moment. The first of these letters, dated May 24, 1870, strikes a supplicatory tone, asking the older poet to consider publishing “Sensation,” “Ophélie,” or “Credo

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\(^\text{303}\) Kristin Ross, *The Emergence of Social Space: Rimbaud and the Paris Commune* (Minneapolis, MN: University of Minnesota Press, 1988; London: Verso, 2008). Citations refer to the Verso edition. The Commune has been central to many of Steve Murphy’s analyses of Rimbaud, published over more than twenty-five years; an excellent place to begin reading is his *Rimbaud et la Commune. Microlectures et perspectives* (Paris: Classiques Garnier, 2010), and particularly the introduction, 17-65.
in unam” in a future installment of the *Parnasse contemporain* (ROC, 324).\textsuperscript{304} The second, dated August 15, 1871, is more openly ironic. Signing the letter “Alcide Bava A.R.,” Rimbaud asks the “Cher Maitre” to read the confounding poem “Ce qu’on dit au Poète à propos des fleurs,” and in closing, deadpans, “Ai-je progressé?” (ROC, 362). Indeed, the question of Rimbaud’s *progression* is at stake in the critical juxtaposition of the two letters and the poems that they contain.\textsuperscript{305} The comparison between “Credo in unam” and “Ce qu’on dit” is particularly instructive. Both poems borrow from Banville’s poetic playbook, but whereas the former reads like an homage, the latter reads somewhat uncomfortably like an attack.\textsuperscript{306} By examining the figure of the lyre represented in each poem, I aim to show that an interest in scientific poetry offers a continuity between the two. This continuity, I argue, points toward the role played by new technology in Rimbaud’s post-Commune poetics of *voyance*.\textsuperscript{307}

The world, and the lyre, that Rimbaud described in “Credo in unam”\textsuperscript{308} are unequivocally Lucretian. Opening with an image of the sun and earth burning with life, the poem shifts to frame its tableau in the past: “— Ô Vénus, ô Déesse ! / Je regrette le temps de l’antique jeunesse” (ROC, 41, l. 9-10). The scenario of “Credo in unam,” in which the poet addresses his nostalgia for a Greco-Roman past, thus complements the scene dramatized in Banville’s own

\textsuperscript{304} Noland reads this letter as evidence that the young Rimbaud consciously attempted to launch a literary career; *Poetry at Stake*, 24.

\textsuperscript{305} Comparing the two letters, Bienvenu observes, “ce n’est plus en termes d’admiration qu’il faut raisonner en 1871, mais en termes d’ambivalence et d’opposition. C’est l’élève qui se dresse contre le maître, comme le fils s’oppose au père, mais qui a besoin de lui pour se construire.” Jacques Bienvenu, “Ce qu’on dit aux poètes à propos de Rimes,” in *Parade sauvage, Colloque no. 5, “Vies et poétiques de Rimbaud,”* ed. Steve Murphy with Gérard Martin and Alain Tourneux (Charleville-Mézières: Musée-Bibliothèque Rimbaud, 2005), 251.


\textsuperscript{307} Parts of this chapter have been previously published; see Bridget Behrmann, “‘Le temps d’un langage universel.’ Rimbaud et la poétique télégraphique,” *Parade Sauvage* no. 26 (2015): 85-106.

“L’exil des dieux,” in which Venus foretells the impoverishment of humanity’s future. The “antique jeunesse” that “Credo in unam” imagines is the Antiquity mourned by Banville’s exiled Venus, but Rimbaud portrays desire at the heart of this world. In chapter two, I sought to show the breadth of Lucretius’s influence on poetry of the Parnassian moment, and De rerum natura is a clear intertext for “Credo in unam.” The “one” to whom the poet here professes faith is the goddess of love, as in Lucretius’s invocation to Venus, and in Rimbaud’s vision, she presides over an extravagantly reproductive universe. Nymphs and satyrs frolic lustfully; sun, sap, and water stir; Cybèle’s capacious breast contains “[l]e pur ruissellement de la vie infini” (Rimbaud, OC, 41, 29). But in addition to the Lucretian past of this infinitely generative, harmonious world, “Credo in unam” represents a Lucretian future, symbolized by the lyre.

Rimbaud’s audacious “parodie du discours chrétien” predicts the return of a pagan spirit that unites poetry, physics, and desire. The poet exclaims:

Splendide, radieuse, au sein des grandes mers,
Tu surgiras, jetant sur le vaste Univers
L’Amour infini dans un infini sourire !
Le Monde vibrera comme un immense lyre
Dans le frémissement d’un immense baiser ! (ROC, 43, l. 75-80)

As Venus emerges once again from the waves, a vibration spreads throughout the universe.

For Lucretius, the generative power represented by Venus issues from the swerving of atoms,

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310 Michel Serres writes evocatively of the “phénoméologie de la caresse, le savoir volupté” that Lucretius’s Venus incarnates; the time and space of this science are thermodynamic, setting the irreversible movement toward entropy against the circular generativity of tourbillons. See Serres, Naissance de la physique, 133, 155-156.

311 Berger, Banquet de Rimbaud, 267. “Credo in unam” revises the beginning of the Apostle’s creed, “Credo in Deum Patrem omnipotentum,” in order to praise Venus. Berger considers the poem’s revisionism in terms of the substitution of Venus for Mary; ibid., 266-267.
whose collisions give rise to all combinations of matter.\textsuperscript{313} The vibration that propagates throughout the world with Venus’s return thus sets the universe’s creative power in motion, under the sign of desire. This power is in turn identified with the creative power of the lyre—the instrument that produces poetry—and the perfect harmony between the vibration of world and strings coincides with the advent of a new human understanding.\textsuperscript{314} In sharp contrast to the narrow, “pâle raison” (ROC, 43, l. 107) exercised under the regime of Christianity, liberated knowledge will accompany humanity’s renewed faith in the goddess of love: “L’Homme veut tout sonder, —et savoir ! La Pensée, / La cavale longtemps, si longtemps oppressée, / S’élance de son front ! Elle saura Pourquoi !...” (ROC, 43, l. 85-87). The lyre becomes, then, a means to fathom Venus’s universe, of which it is an expression and an echo. Although a second version of “Credo in unam” eliminates the thirty lines that articulate the stakes of this vibration, the poem as sent to Banville is clear about the juncture of lyric, sexuality, and Lucretian science. For Rimbaud in 1870, inspired by Lucretius’s model, poetry is a way to get at the nature of things, on a universal scale.\textsuperscript{315}

A year later, “Ce qu’on dit au Poète à propos de fleurs”\textsuperscript{316} ends with a very different image of the poet’s lyre. While the poet in “Credo in unam” addressed himself to Venus, the Poet in “Ce qu’on dit” is himself addressed by the speaker of the poem, and the main point of

\textsuperscript{312} Rimbaud’s use of mythology here differs substantially from the scrupulousness of poets like Leconte de Lisle and Catulle Mendès. Although Rimbaud adopts some “Parnassian” spellings, like “Aphrodite,” “Credo in unam” appears strikingly syncretic. See chapter 2; see also Pierre Brunel, “Le motif mythologique de Vénus dans l’œuvre de Rimbaud,” in Rimbaud, cent ans après. Actes du Colloque du Centenaire de la Mort de Rimbaud tenu à Charleville-Mézières, 5-10 septembre 1991, ed. Steve Murphy (Charleville: Musée-Bibliothèque Rimbaud, 1992), 5-8.

\textsuperscript{313} Copley, introduction to On the Nature of Things, xi-xii.

\textsuperscript{314} For Jean-Pierre Bobillot, Lucretius’s clinamen reappears in Rimbaud’s work as the “toutes premières torsions” that the poet operates on the meter of traditional versification, which Bobillot links to Rimbaud’s conception of the lyric subject. Jean-Pierre Bobillot, Rimbaud ou le meurtre d’Orphée. Crise de Verbe & chimie des vers ou la Commune dans le Poème (Paris: Honoré Champion, 2004), 223-224.

\textsuperscript{315} Guyaux argues that Rimbaud cut the poem’s most overtly Lucretian content from another version, titled “Soleil et chair.” Rimbaud, OC, 825.

\textsuperscript{316} Rimbaud, Poésies, 495-504.
contention is the type of flowers worthy of his attention. On the one hand, the speaker of the poem spends dozens and dozens of lines reproaching the titular Poet for the pretty flowers he confects in pretty verse, and cites “Banville” (ROC, 150, l. 29) as a source of such tired clichés. On the other hand, the speaker proposes that the Poet instead seek out strange, and strangely functional, plants: he wants to know how much “Pedro Velasquez, Habana” is worth, and commands “Quelques garances parfumées / Que la Nature en pantalons / Fasse éclore ! — pour nos Armées !” (ROC, 152, l. 95, 110-112). At the end of the poem, the speaker predicts that the Poet will rise, in the landscape of “étranges fleurs” and electric butterflies emitted from his poems, with telegraph poles sprouting from his shoulder blades:

Voilà ! c’est le Siècle d’enfer !
Et les poteaux télégraphiques
Vont orner, —lyre aux chants de fer,
Tes omoplates magnifiques ! (ROC, 153, l. 149-152)

What is Banville to make of this telegraphic lyre and its iron song?\textsuperscript{317} According to Steve Murphy, Rimbaud parodies not only the Poet, but also the techno-enthusiast voice of “Ce qu’on dit.” The poem, like the letter to Banville, is signed “Alcide Bava,” a cheeky pseudonym that Murphy attributes to the patriotically militaristic, commodity-curious speaker. By parodying both the l’art pour l’art pretensions of Parnassianism and the industrial zeal of capitalist culture, Murphy situates Rimbaud in a position that he calls “l’art pour la révolution.”\textsuperscript{318} From this perspective, “Ce qu’on dit” testifies to Rimbaud’s identity as a radical poet, at odds with Parnassian and capitalist values.\textsuperscript{319}

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\textsuperscript{317} Jacques Bienvenu argues that Banville may have recognized a reference to his own Petit traité de poésie française, and especially “les ailes postiches qui sont attachés du faux poète que Banville décrit dans sa tirade sur Musset.” Bienvenu, “Ce qu’on dit,” 258.

\textsuperscript{318} Steve Murphy, Stratégies de Rimbaud (Paris: Honoré Champion, 2004), 185-186.

\textsuperscript{319} See Kristin Ross’s reading of the poem, in Emergence of Social Space, 83-93. Rather than showing how this radical identity is constituted by the text, Ross merely asserts that it is: “For although his use of technical vocabulary allies him with a class culture whose concerns—science, politics, social organization—are distinct from the aesthetic and metaphysical interests of orthodox Parnassian culture, it
The parodic value of the telegraph to “Ce qu’on dit au Poète à propos de fleurs” is then obvious. Like the Parnassian violets and lilies compared to nymph spit and enemas evoked elsewhere in “Ce qu’on dit,” the telegraph is a ridiculous version of the lyre. Its poles and wires stand for a mechanized and merchandised degradation of the lyric voice as surely as crachats and clystères stand for an unruly and corporeal degradation of ideal beauty. Although the image is astonishing, Murphy insists that the fusion of telegraph, poet, and lyre is a joke, because Alcide Bava is a joke. Far from “une sorte de poète futuriste ou surréaliste, porteur d’une nouvelle poésie, encyclopédique,” Bava “serait un imbécile,” writes Murphy, “mais un imbécile de génie puisqu’il est le pantin d’un ventriloque qui l’anime avec une rare puissance de fantaisie.” Yet even if Rimbaud writes “Ce qu’on dit” exclusively from the revolutionary position that Murphy assigns to him, the telegraphic figure calls for closer attention. Carrie Noland has interrogated the historical construction of an anti-commercial myth around Rimbaud, savage genius and enfant terrible, and uncovered the enabling role technology played in shaping Rimbaud’s work. Exploring the effects of market forces on his poetry, Noland argues that “a distinction needs to be made between works that listen only to the voice of commerce and works that attempt to harmonize this voice with the complex melodies of individual expression.”

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321 Noland, *Poetry at Stake*, 33. “One of the sharpest ironies of literary history is that a poet centrally concerned with the material conditions of the literary occupation should have become the idol of critics devoted to saving poetry from the taint of the commercial.”

322 Ibid., 35.
Noland suggests that Rimbaud’s poetic adoption of new technologies can be understood outside of a rigid opposition between capitalist and Communard. In this vein, I contend that both Rimbaud’s Lucretian lyre and his telegraphic “lyre aux chants de fer” testify to his interest in the possibilities of the experimental poem during the Parnassian moment.

In this chapter, I will argue that the telegraph has poetic stakes beyond pure parody for Rimbaud, and indeed for the work of several other poets in this period, as well. I do not intend to deny that the telegraph had any parodic value whatsoever, and I will return to issues of parody throughout the chapter. However, it is curious that the telegraph should remain, as Nicolas Wanlin reports, “une image antipoétique” during the nineteenth century, although many of the era’s technologies found a variety of avenues into verse. The electric telegraph was a transformative medium in the history of communications, and it had an extraordinary impact on the landscape and language of the nineteenth century. In Telegraphic Realism, Richard Menke examined “the deep ways in which new technologies, and the wider understanding that a culture could derive from them, register in literature’s ways of imagining and representing the real.” Menke focuses on Victorian fiction, privileging its preoccupation with facts and information, as well as the formal continuity that connects telegraphic and fictional prose. I will seek to show that in the Parnassian moment, poetry, too, registers the impact of the telegraphic medium, and tests its expressive capacities. I argue that this telegraphic function brings scientific and

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324 Richard Menke, Telegraphic Realism: Victorian Fiction and Other Information Systems (Stanford, CA: Stanford University Press, 2008), 3-4. Menke upholds the usual distinction that deems poetry less susceptible to scientific and technological influences: “I find this connection [between literature and technology] especially strong in nineteenth-century fiction, where it helps illuminate the logic and fortunes of realism. And in contrast to the era’s poetry, fiction minimizes the formal markers that might separate it from a larger world of everyday printed information.”
technological frameworks of universality to bear on poetry’s geography and language. Because that function rests in part on universal code, the telegraph proves an especially useful instrument for exploring the play among codes implied by parody and pastiche.\textsuperscript{325} Turning their attention to the landscapes and the rhythms of contemporary poetry, the poets that I will study use parody and the telegraphic function to experiment with new poetic codes.

In “Ce qu’on dit au Poète à propos de fleurs,” for example, the referential diversity of poetry requires geographic diversity: in order to express the whole universe of unknown phenomena, the poet-telegraph must escape to parts unknown. Rimbaud’s text makes the link between form and space remarkably clear.\textsuperscript{326} The “octrois” (\textit{ROC}, 149, l. 21) of strict versification and the “constrictors d’un hexamètre” (\textit{ROC}, 151, l. 72) are homegrown in the Hexagon, so the poet who travels widely could hope to say—“Dis” (\textit{ROC}, 152, l. 89, 91, 93)—the “exotiques récoltes” (l. 93) found elsewhere across the world: astonishing flowers that drool gold tinctures from snouty petals, fry eggs of fire in the juice of their calices, and conceal

\textsuperscript{325} The relationship between parody and pastiche has long posed a vexing problem to literary scholars, and to settle the question is far beyond the scope of the present study. Fredric Jameson and Gérard Genette provide two theoretical axes that have oriented critical approaches to post-Romantic parody and pastiche since the 1980s; the latter proposes a set of defining categories, while the former distinguishes modernist parody, anchored in the imitation of individual authorial styles, from post-modernist pastiche, a recombination of free-floating discursive codes. Daniel Sangsue, examining parody as relationship, and Steve Murphy, analyzing Rimbaud’s parodic procedures, both modify Genette’s taxonomy considerably, but retain a definition of parody in the abstract as \textit{transforming} a specific hypotext. Although Sangsue and Murphy offer valuable insights, Paul Aron’s suggestion that parodies be viewed as “imitations à visée comique d’un texte, donc une forme particulière de l’activité pastichante” allows us to understand a broad range of ways that poetic codes can be reappropriated to satirical and constructive effect, without implying a fixed relationship between a given parodic text and its putative hypotext. See Fredric Jameson, \textit{Postmodernism, or, the Cultural Logic of Late Capitalism} (Durham, NC: Duke University Press, 1991), 16-19; Daniel Sangsue, \textit{La relation parodique} (Paris: José Corti, 2007), 14-15, 103-125; Steve Murphy, “Détours et détournements: Rimbaud et le parodique,” in \textit{Parade sauvage colloque no. 4, “Rimbaud: textes et contextes d’une révolution parodique”} (Charleville-Mézières: Musée-Bibliothèque Rimbaud, 2004), 121-124, 78; Paul Aron, \textit{Histoire du pastiche. Le pastiche littéraire français, de la Renaissance à nos jours} (Paris: Presses universitaires de France, 2008), 5-18.

\textsuperscript{326} In addition to Ross’s ground-breaking work on the spatiality of Rimbaud’s work, see Seth Whidden’s more recent study, \textit{Leaving Parnassus: The Lyric Subject in Verlaine and Rimbaud} (Amsterdam: Rodopi, 2008).
gemstone tonsils. The telegraphic function here is unmistakably parodic, subverting a traditional code which conceives of the lyric voice as natural and authentic to the individual poetic subject. Yet, in subverting that traditional convention, the text generates the rudiments of a new lyric code, which emphasizes a new, telegraphic universality of poetic language and space. Despite Murphy’s insistence otherwise, the unnatural, unfamiliar, technologized body that Rimbaud imagines here does more than mock Banville and Alcide Bava, and its telegraphic poetics exceed the putative antagonism that simply pits Parnassianism against technology. Moreover, this excess fails to map neatly onto the political issues raised by the Commune. Rimbaud’s text neither recuses Parnassian aestheticism nor subverts bourgeois modernity as an ideological totality. Instead, on the flip side of its parodic axes, “Ce qu’on dit” tests an intersection of aesthetics and modern science.

In the first section of this chapter, I turn to the work of Victor Hugo, where I follow the codification of the telegraphic function through his Romantic equation between poet and beacon. The unifying universality of Hugo’s poetic figure, which beams a message of hope for the whole world to see, is parodied by the electric “lampe poétique” of Lautréamont’s Les Chants de Maldoror. In the next section, I return to Rimbaud, concentrating on the telegraphic function in his May 1871 description of voyance and exploring its referential and geographic orientation. I then read “Le bateau ivre” and “Fêtes de la faim” as offering two types of experiment with that telegraphic function, tested in the landscapes and rhythms of poetic language. Landscape and rhythms are equally at stake in the formal experimentation that I examine in the final section. Tracing a tradition that combines innovative versification and parodic verse in the Parnassian moment from Tristan Corbière to Théodore de Banville, I focus on the role of rhyme within the landscape of the poem. I connect this tradition to the monosyllabic sonnets of the Cercle Zutique,
which, by reducing the entire poem to rhymes, also form a provocative engagement with the telegraphic function.

“O lampe poétique”: Telegraphic technology and the Romantic universe

By the mid-1860s, the electric telegraph was a well-established part of life in the Second Empire. Thousands of bureaux télégraphiques dotted the country, from the 46 locations in Paris to the village of Rocroi’s single outpost. In 1866, 22 million telegraphic messages were exchanged within the Hexagon. An additional 10 million messages were sent to international destinations. Under the purview of the International Telegraphic Union, founded in Paris in 1865, communications crossed not only national boundaries, but also traversed entire oceans and continents. The installation of electric telegraph lines advanced in tandem with the European colonial enterprise, so that by the mid-century, wires stretched from London and Lyon to Calcutta and Tangiers. The first transatlantic cable was successfully laid in 1865, connecting Europe to North America. Telegraphic networks served diverse needs, including official state communications and railway service information. In their use by the public, however, telegraphic messages circulated financial data, news of current events, and private correspondence. Anyone could send twenty words across Paris for just fifty centimes and across the entire Empire for just fifty centimes more—a fact with revolutionary consequences for everyday ways of understanding space, time and communication. On the global scale, the ability to be informed

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327 Figuier, MS, 130; Alain Beltran and Patrice Carré, La fée et la servante. La société française face à l’électricité, XIXe-XXe siècle (Paris: Belin, 1991), 45. The latter suggest a figure of nearly 9,000 for telegraph offices operating in France in 1866, whereas the former records only 2,136.


329 Figuier, MS, 130. In La Télégraphie française, Jacques-Melchior Villefranche writes that “l’emploi du télégraphe tend chaque jour à entrer dans nos mœurs comme un besoin et une habitude. Depuis le 1er novembre 1869, les télégrammes, qui déjà ne payaient que 50 centimes entre les bureaux d’un même
in almost real time on situations around the world, like stock prices, shipwrecks, political unrest, had an enormous impact on the expansion of colonial interests and Western capitalism. 330

In a way that is hard to imagine today, electric telegraphy transformed space and time in the mid-nineteenth century world. Before the introduction of electric lighting, which was slowly installed in Paris’s public spaces only from the late 1860s onward, the general population encountered electricity primarily by means of the telegraph. 331 The anonymous author of “Il y a cinquante ans,” a four-part article published in Le Magasin pittoresque, scolded the public of 1870 for the complacency it exhibited toward the wonder of electric telegraphy. He recalls the incredible pace of technological change:

J’entends quelquefois les jeunes gens se plaindre. Tout ne va pas à leur souhait. Le temps présent ne les satisfait guère. Ils savent bien qu’on doit à ce siècle des découvertes merveilleuses ; mais ils estiment qu’on n’en tire pas assez bon parti. Les convois de chemins de fer, par exemple, ne vont pas aussi vite qu’ils le pourraient. Les rues devraient être mieux éclairées : on économise trop le gaz. Le télégraphe électrique fonctionne mal, irrégulièrement. Et quelle gêne d’avoir à enfermer sa pensée en un laconisme inintelligible de vingt mots ! Il faudrait un télégraphe à chaque maison. 332

The telegraph had become part of the décor of everyday life, just twenty years after it was opened to use by private citizens. As the telegraph’s operation came to be taken for granted, even its physical presence—wires strung across thousands and thousands of miles, regularly

330 Flichy, Communication moderne, 67-72.
331 Beltran and Carré, La fée et la servante, 33.
332 “Il y a cinquante ans,” Le Magasin pittoresque 38, no. 1 (January 1870), 4. Alfred Éténaud’s history suggests that the total number of telegrams sent in France doubled between 1866 and 1870, from 2,842,554 to 5,663,852. See Éténaud, La Télégraphie électrique en France et en Algérie, depuis son origine jusqu’au 1er janvier 1872, précédée d’une notice sur la télégraphie aérienne, vol. 1 (Montpellier: Ricteau, Hamelin & Co., 1872), 68, 248-249.
punctuated by the support poles’ vertical silhouette—was at once totally novel and largely unremarkable.\textsuperscript{333}

Yet anyone literate with a passing interest in learning exactly what all those wires did would have had ample recourse to publications seeking to explain the ins and outs of electric telegraphy.\textsuperscript{334} The development of telegraph technology coincided with the development of the scientific press in France. While Gauss, Wheatstone, and others first conducted experiments using electricity to transmit signals in the 1830s, the \textit{Comptes-rendus hebdomadaires des séances de l’Académie des sciences} began publication under the auspices of Arago. These formal reports were soon followed by a flurry of \textit{feuilletons scientifiques}, periodicals, and monographs, in which a stable of writers explained ongoing work on refining a telegraphic device to a popular audience.\textsuperscript{335} Like many epochal inventions, the electric telegraph was not the sole invention of an individual, but instead resulted from many different efforts, and continued to evolve over the course of decades.\textsuperscript{336} As Louis Figuier describes the machine in the 1868 volume of his best-selling \textit{Merveilles de la science} series, the electric telegraph’s basic principle remained unchanged from the 1830s. Two transmitters connected by a conducting wire form a circuit that, once closed, sends electricity flowing between them in a matter of seconds. Because electricity

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\item \textsuperscript{333} Carey cautions that telegraph lines followed extant infrastructural patterns based on natural geography: “It is not an infrequent experience to be driving along an interstate highway and to become aware that the highway is paralleled by a river, a canal, a railroad track, or telegraph and telephone wires. […] The telegraph twisted and altered but did not displace patterns of connection formed by natural geography: by the river and primitive foot and horse paths and later by the wooden turnpike and canal.” James W. Carey, “Technology and Ideology: The Case of the Telegraph,” \textit{Prospects} no. 8 (October 1983): 304, doi: 10.1017/S0361233300003793.
\item \textsuperscript{334} Public lectures also presented the technology, like the series offered by Moigno in the winter of 1873: “Histoire, théorie et pratique de la télégraphie électrique, par M. l’abbé Moigno, avec le concours de M. Francisque Michel: tableaux, appareils, expériences.” \textit{Les Mondes} 30, no. 1 (Jan. 2, 1873): 5.
\item \textsuperscript{335} For an overview of early scientific press, see Béguet, “Vulgarisation scientifique,” 6-10, and above, chapter 1. For a survey of \textit{Les Mondes}’ coverage of the telegraph between 1866 and 1876, see Appendix B.
\item \textsuperscript{336} Beauchamp offers a full list of telegraph apparatuses created between 1750 and 1850, in \textit{History of Telegraphy}, 26.
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stops its flow as soon as the circuit is interrupted, opening and closing the circuit creates a
discrete unit of energy that constitutes the signal. This signal travels equally fast across a few
inches or a few hundred miles. Reaching the opposite receiver, the energy coils through wire
wrapped around a piece of iron to produce an electromagnetic field. The magnetized iron then
moves to trip the transmission mechanism. For Morse machines, which will be considered
here due to their status as the international standard, this mechanism involved a stylus that would
contact paper for the length of the signal in order to record the message.

By the 1860s and 1870s, the electric telegraph was principally used to circulate
information in the service of economic interests. These were both broadly capitalist and
specifically colonial: financial speculation increased alongside the improved communications
among European nations and the United States, while links with colonized territories facilitated
Western appropriation and exploitation of those resources. But electric telegraphy was from
the start inextricably bound up in the processes of industrialization. Its originators intended for
the technology to provide a means of rapid contact among railroad workers, who could thus warn
each other of delays and problems up and down the line. British, German, and American
governments began to install electric telegraph lines next to rail lines in the 1830s, taking
advantage of this brand-new technology to erect it as a kind of symbiote to the railroads. That the
French government did not move to implement its own electric telegraph network until 1845 has
traditionally been attributed to the country’s comparatively slow pace of industrialization.
Investment in the French railway system accelerated after 1842; the liberal-economic regime of

337 Figuier, MS, 103-104.
338 Ibid., 111-114.
339 Wenzlhuemer provides a review of the literature concerning telegraph networks and colonialism,
focusing mainly on British colonialism. His own monograph examines the British telegraphic network in
India during the nineteenth century. See Telegraph and Globalization, 77-84; 211-242.
340 Wenzlhuemer, 31.
Louis-Napoléon’s Second Empire continued to encourage infrastructural, industrial, and colonial expansion throughout the 1850s and 1860s. In this sense, the new capacity to transmit messages rapidly across great distances was tied to the similar capacity to transport people and things.\(^{341}\)

However, the vagaries of mid-nineteenth century industrialization should not overshadow the simple fact that France already had a telegraph network, established in the late eighteenth century and based on the relay of visual signals.\(^{342}\) This system, which by the 1840s consisted of more than 500 stations spread over 2,500 miles, was itself a sophisticated variation on the age-old use of flags or flame to broadcast a message.\(^{343}\) The word télégraphe was first coined to name Claude Chappe’s optical system. Drawn from ancient Greek, the neologism served to establish a lineage stretching from the signaling practices of Antiquity to sophisticated modern technologies. Nineteenth-century vulgarisateurs made this lineage a requisite element in discussing telegraphy, beginning with Abbé Moigno’s 1852 *Traité de Télégraphie électrique*. Moigno highlights the central semantic problem confronted by telegraphy: finding an efficient way to represent the vast resources of language, either by increasing the total quantity of signs available to transmit or increasing the total quantity of signs transmitted.\(^{344}\) He thus distinguishes three types of telegraphic signal systems. The oldest and simplest mode, a “hieroglyphic” system assigns a complete, pre-arranged meaning to the signal. The “alphabetic” mode becomes feasible thanks to modern electrical technology, able to send a signal almost instantaneously. The optical

\(^{341}\) Carey underlines the telegraph’s dematerialization of communication: “The most important fact about the telegraph is at once the most obvious and innocent: It permitted for the first time the effective separation of communication from transportation. […] The telegraph not only allowed messages to be separated from the physical movement of objects; it also allowed communication to control physical processes actively.” Carey, “Technology and Ideology,” 305.


\(^{343}\) Ibid., 37.

telegraph used a “numeric” code; its signaling device would be configured into a pair of numbers corresponding to a given word’s page and entry number in the special *vocabulaire des mots*.\(^{345}\) It could express 8,464 ideas, faster than the firelight of a beacon and more simply than the volts of the electric telegraph. But unlike the optical telegraph, which quickly fell out of use in the nineteenth century, hieroglyphic and alphabetic technologies could express everything.\(^{346}\)

An incredible current of linguistic utopianism grounded the evolution of telegraphic technology.\(^{347}\) Patrice Flichy has suggested that the Enlightenment interest in a universal language played an important role in the development of Chappe’s optical telegraph; the work of Leibniz and the Ideologues helped to shape the intellectual atmosphere in which the instrument and its lexicon were conceived. If telegraphic code is *not* universal in the sense of representing pure logic, as Leibniz intended his universal language to be, it is universal in two other critically important senses.\(^{348}\) First, according to Flichy, innovative use of a universal code places Chappe’s telegraph at the origin of modern telecommunications: every post in the system communicates with the same set of signals, which includes a metalanguage of signals concerning the code itself.\(^{349}\) Second, the alphabetic code of the electric telegraph allowed the communication of, as Moigno puts it, “toutes les lettres qui serviront à former des mots, et, par conséquent, à communiquer toutes les idées possibles.”\(^{350}\) Added to the fact that, by the mid-century, the electric telegraph was already reaching across the globe, its language seemed truly

\(^{345}\) Ibid., 29-30.

\(^{346}\) It took fifteen minutes for a message to travel from Paris to Valenciennes, prompting the name change from *tachygraph* to *telegraph*. Flichy, *Communication moderne*, 45.

\(^{347}\) Studying this telegraphic utopianism in the American cultural and religious context, Carey dubs it the “rhetoric of the electrical sublime.” Carey, “Technology and Ideology,” 307.


universal in a way destined to bring people together in harmony and understanding. Moigno, for example, calls electric telegraphy “un bienfait vraiment providentiel et humanitaire d’une portée tellement incommensurable, que ce ne sera pas trop de quelques années encore pour le faire apprécier à sa juste valeur.”

Yet for more than a few years, the marvel of electric telegraphy was all but absent from poetry, which continued to favor the hieroglyphic figure of the beacon through the middle years of the nineteenth century. The simplest telegraphic forms imaginable, writes Moigno, consist of a single sign. In the case of electric telegraphy’s alphabetic Morse code, widely adopted beginning in the 1840s and declared the international standard in 1865, the entire universe of communication unfolds from the single sign represented by the length of electric current.352 combinations of the short (dot) length and the long (dash) length are assigned to every letter, then combined into every word to refer to every thing. Conversely, the single sign of the beacon is a hieroglyphic code, limited to signifying only one idea. As Moigno explains, “si cette méthode est tout à fait impuissante pour annoncer les faits et les pensées imprévus, elle a l’avantage d’exprimer par un seul signe une idée complète et de l’exprimer avec la plus grande vitesse possible.”353 The nineteenth century saw significant advance toward Louis Figuier’s prediction that “bientôt tout notre globe ne sera, pour ainsi dire, qu’une immense bobine électrique, composée de milliers de fils traversés par un courant incessant de fluide électriques.”354 The lamp nevertheless maintained a special appeal, and not only for the Romantic imagination, as M.H. Abrams argued in his classic study The Mirror and the Lamp.355 The lamp

351 Moigno, 544.
352 Fichy, Communication moderne, 58; Wenzlhuemer, Telegraph and Globalization, 73-74.
353 Moigno, Télégraphie électrique, 28.
354 Figuier, MS, 133.
also played a key part in the specific literary-theological imagination of Victor Hugo, who considered the poet to be a beacon of hope for the whole universe.

For Hugo, the poet shines with the light of a truth that all can see. While Abrams describes a Romantic lamp that draws primarily on the authenticity of the individual’s lyric subjectivity, Hugo’s lamp draws explicitly on the lamp’s utility as an instrument of illumination and communication. “Fonction du poète,” the opening poem in Hugo’s 1840 collection *Les rayons et les ombres*, contains a decisive illustration of the image, and of the power Hugo assigns to the poet as beacon. Throughout 300 lines, Hugo associates the vocabulary of light and flame with truth—both God’s truth and the poet’s. The reader learns that God has left “Quelques rayons sur une cime, / Quelques vérités sur un front” (l. 219-220), and, next, that the poet “[l]ui seul a le front éclairé” (l. 280). Light and divine enlightenment consecrate the poet’s brow, then moves inside and shines out from the poet’s person:

Il rayonne ! il jette sa flamme  
Sur l’éternelle vérité !  
Il la fait resplendir pour l’âme  
D’une merveilleuse clarté !  
Il inonde de sa lumière  
Ville et déserts, Louvre et chaumière,  
Et les plaines et les hauteurs ;  
À tous d’en haut il la dévoile ;  
Car la poésie est l’étoile  
Qui mène à Dieu rois et pasteurs !

In the final stanza, the poet is revealed to be a *source* of light, radiating triumphant light over the whole planet. The poet’s brilliance naturalizes a perfect continuity between message and messenger, between the subject and his function. He is a light; he burns a bright message for all to see.

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Hugo’s image of the poet as a blazing beacon implies an ideal of universality defined by unity. Referring to “sa lumière” and “l’éternelle vérité” that it unveils, Hugo’s poet makes clear that his address to humanity has a singular significance. In fact, the redemptive, sacred, prophetic communication that he delivers can be summed up in one word: “Courage!” (l. 221, 225, 255, 256, 269). The baroque discursive frameworks that structure the text create the peculiar effect of staging and re-staging the poet’s prise de parole, emphasizing the imperative to speak to the world at large over specific detail of what to say. The poem’s first section addresses the poet; the initial question, “Pourquoi t’exiler, ô poète, / Dans la foule où nous te voyons ?” (l. 1-2) begets the advice to seek the solace and solitude of nature: “Va t’épanouir, fleur sacrée, / Sous les larges cieux du désert !” (l. 23-24). The poet’s response in the poem’s second section quickly becomes a third-person discourse on the “fonction du poète” in the abstract, culminating in an address to the masses of humanity itself. The various voices of the poet muddle together, so that the closing equation of poet, light, and truth emerges clearly to represent a unified, universal function, a role that transcends time and space. While the poem’s opening section sets up a division between city and wilderness, which in turn maps onto the division between society and nature, the concluding image explicitly invalidates those divisions. The poet signifying hope to guide humanity shines from a position visible to all, far above the world. “À tous d’en haut il la dévoile” (l. 304), writes Hugo, as the poet’s light evenly illuminates “[v]ille et déserts, Louvre et chaumière, / Et les plaines et les hauteurs” (l. 302-303).

Hugo returns to the equation between poet and beacon in Les Contemplations, fleshing out social aspects of the image within the context of the 1856 collection’s complex spiritual

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359 Ibid., 1:1023.
The keystones of Les Contemplations, and especially the long poems “Melancholia,” “Magnitudo parvi,” “Les mages,” and “Ce que dit la bouche d’ombre,” expose the cosmic landscape of Hugo’s philosophical vision. These poems concern the personal scale of Hugo grappling with his daughter Leopoldine’s death, and long arc of human history. In “Les mages,” Hugo shows the elite that occupies a fixed position in the unfolding of human progress. The bright poet of “Fonction du poète” becomes a bright class of inspired men who form a priesthood in eternity. If the poet is a beacon, “Les mages” adds that prophets, philosophers, musicians and scholars are also poets, and this conceptual expansion widens the figure’s universal scope. Naming Jean-Jacques Rousseau and Benjamin Franklin to the position of mage, the poem places them in the skies, alongside “Tous ceux en qui Dieu se concentre ; / Tous les yeux où la lumière entre, / Tous les fronts d’où le rayon sort” (l. 18-20). Every mage has made a major contribution to human civilization, and the work of every mage lasts in perpetuity, for the benefit of everyone. But by having Franklin and Rousseau shine together as mages, Hugo evacuates the distinctiveness of their achievements. The fact of their genius is more important to “Les mages” than the substance of any individual accomplishments. The meaning transmitted

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361 “Avec les Contemplations, qui sont mises en vente le mercredi 23 avril 1856, Victor Hugo, en effet, avait bâti sa grande Pyramide. […] Cette aventure—histoire d’un père, histoire d’un homme, histoire de l’humanité—c’est, pour tout résumer et assumer, l’aventure d’un poète et de la poésie. Le livre renferme toute cette histoire et cette humanité, ou plus exactement, il est lui-même cette histoire et l’humanité : il est le livre-monde.” Ibid., lvii.
362 Ibid., lxxv.
363 Victor Hugo, OP, 2:780.
365 “Viens, Franklin ! voici le Tonnerre. / Le Flot gronde ; parais, Fulton ! / Rousseau ! prends corps à corps la Haine” (l. 603-605). Hugo, OP, 2:796.
by the poet-beacon in Hugo’s universe is distilled into the message of humanist hope, whose very universalism tends to erase differences among politics, poetics, and sciences.366

Scientific discourse provides leverage to a range of poetic projects that take aim at cracking open Romantic tropes and, in particular, reconceiving this Hugolian notion of universalism during the Parnassian moment. Instead of integrating seamlessly into the fabric of human endeavor, as in Hugo’s Contemplations, scientific discourse can take on a critical role in nineteenth-century poetics, as Lautréamont’s Les chants de Maldoror demonstrates. This text operates a sly reversal on the Romantic lamp, in which the spiritual beacon’s stable, eternal nature transforms into the disturbing message of a unique electric light anchored to its own specific time and place. Printed in 1869, Les chants de Maldoror did not become available or widely circulated until well after the death of its author, Isidore Ducasse. For decades little was known about the work or the pseudonymous “comte de Lautréamont,” and Maldoror’s singular mixture of horror and humor, beauty and repulsiveness, became mythical to its admirers.367 Hugo himself was not among them, if his lack of response to a letter from Ducasse in 1868 is any indication. Signing his real name to this letter, Ducasse explains his publication difficulties at some length and lists several errata for the chant premier, which he seems to have sent previously to Hugo in Guernsey. “Et maintenant, parvenu à la fin de ma lettre,” writes Ducasse, “je regarde mon audace avec plus de sang-froid, et je frémis de vous avoir écrit, moi qui ne suis encore rien dans ce siècle, tandis que vous, vous y êtes le Tout.”368

Like Ducasse’s letter to Hugo, Les chants de Maldoror demonstrates both real respect and wild audacity toward Romanticism in its attempt to explore an alternative poetics. Six books,

366 Bénichou, Mages romantiques, 501-502.
368 Lautréamont, OC, 303.
each divided into stanzas (*strophes*), recount the adventures of the protean, perverse *rêvolté* Maldoror. Due to this explicit affirmation of formal poetic structure, as well as the text’s highly stylized language and narrative opacity, critics usually consider *Maldoror* a hypertrophied prose poem. The outrageousness of his exploits—famous setpieces show Maldoror copulating with a female shark, and dashing the body of a corrupted innocent against the Panthéon’s dome—parody the grandiose self-pity of the outcast, the Satanic hero common to Romanticism.\(^\text{369}\)

However, Maldoror is not merely misunderstood. His genius is truly evil, and his mutiny against *le Tout-Puissant* is both comic and serious. This ambiguity comes to the fore in the eleventh stanza of the second canto, in which Maldoror faces an oil lamp burning at a church altar.\(^\text{370}\) In a passage studded with lyrical apostrophe, Maldoror addresses the light as “ô lampe poétique.” This label self-consciously gives the figure clear metapoetic weight, and Maldoror then observes that the poetic lamp’s light has a double function. It shows “aux repentis le chemin qui mène à l’autel,” and also exposes Maldoror himself, thereby warning humanity of his presence. The “prince du mal” tries to tempt the lamp away from its duty: “est-ce que tu as besoin de rendre de pareils services à ceux auxquels tu ne dois rien ?”, asks Maldoror. Threatening to throw the unnatural light in the Seine, he denounces the “nuances blanches de la lumière électrique” that the oil lamp seems to produce in order to reveal him.\(^\text{371}\)

Once he fights and defeats the angel who proves to inhabit the lamp, Maldoror does exactly as promised, and in the Seine, the lamp’s unnatural light takes on a different, cryptic

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\(^{370}\) The stanza’s opening, “Ô lampe au bec d’argent,” leaves little doubt as to its direct reference: Lamartine’s “La lampe du temple,” from the 1830 collection *Harmonies poétiques et religieuses*. In his reading of this passage, Roland-François Lack suggests that it represents the allegory of a death match between Musset (identified with Maldoror) and Lamartine (identified with the angel). For my purposes here, the details of Lautréamont’s Romantic affinities are less important than the equally pressing Hugolian imaginary of the poet as lamp. Roland-François Lack, *Poetics of the Pretext: Reading Lautréamont* (Exeter: University of Exeter Press, 1998), 163-166.

\(^{371}\) Lautréamont, *OC*, 105-106.
meaning. The lamp, “[s]es lueurs, blanches comme la lumière électrique,” charts a nightly course on the waters between a pair of bridges.\footnote{Ibid., 109. Emphasis in the original.} But it no longer serves its purpose as beacon, to combat the shadows of evil and guide souls toward redemption. Instead, the sacred light rejects humanity. Sailors fear it; the lamp hides itself from those who are troubled:

> Quand il passe sur les ponts un être humain qui a quelque chose sur la conscience, elle éteint subitement ses reflets, et le passant, épouvanté, fouille en vain, d’un regard désespéré, la surface et le limon du fleuve. Il sait ce que cela signifie. Il voudrait croire qu’il a vu la céleste lueur ; mais, il se dit que la lumière venait du devant des bateaux ou de la réflexion des becs de gaz ; et il a raison… Il sait que, cette disparition, c’est lui qui en est la cause ; et, plongé dans de tristes réflexions, il hâte le pas pour gagner sa demeure. Alors, la lampe au bec d’argent reparaît à la surface, et poursuit sa marche, à travers des arabesques élégantes et capricieuses.\footnote{Ibid., 110.}

Thanks to Maldoror’s machinations, the function of the poetic lamp has clearly been twisted so that it arouses guilt and dread, not hope and redemption, when an ordinary person in the crowd perceives it. The message of the light has changed to communicate accusation or reproach in its very disappearance (the passerby knows what it means, “signifie”). What has not changed is the light’s strange quality. Its apparently technological artificiality had already disturbed Maldoror, who railed against “l’augmentation de tes lueurs phosphorescentes” in the church: “je n’aime pas ce phénomène d’optique, qui n’est mentionné, du reste, dans aucun livre de physique […].”\footnote{Ibid., 107.}

Yet, dancing upon the muddy waves of the Seine, the unaccountable nature of the light becomes equally unsettling to its Parisian audience. Neither oil nor gas, the electrical allure ascribed to the poetic lamp is crucial to Ducasse’s reinscription of the figure, in which its power is preserved but its sense is profoundly altered.

> Maldoror’s electrification of the Romantic beacon is just one instance of the encounters between poetic and scientific discourses that occur all throughout the text. These encounters also
take important forms involving biological, zoological, physical and mathematical elements; the flora and fauna of *Maldoror* are rooted in extensive plagiarisms of popular-science texts, which have received the lion’s share of interest from critics studying Ducasse’s intertextual practice. Pierson’s views these outcroppings of technical language as resulting from a strategy of confrontation, while Perez sees them as belonging to a strategy of outright negation.\(^{375}\) If Jean-Luc Steinmetz best describes *Maldoror*’s experiments in terms of synthesis, the “hybridité fondamentale” that defines the text’s aesthetics nonetheless has little in common with Romantic notions of unity.\(^{376}\) *Maldoror* does not cheerfully subsume science under the banner of universal progress, as does Hugo’s extension of the beacon model from poet to inventor. Instead, that “hybridité fondamentale” reaches from the work’s geometrical structure to the technological references of its poetic vocabulary, making scientific discourse a crucial component of *Maldoror*’s poetics.\(^{377}\)

Critiquing the transcendental universality manifest in the function of Hugo’s poet, Ducasse calls upon the technical element of the *lampe poétique* in order to locate it in time and space. The lamp leaves the eternal, sacred enclosure of the church and *descends* into history and geography: not just 1860s Paris, but even more specifically, the four-hour journey between the pont Napoléon and the pont de l’Alma. Simultaneously, its function is resituated, making the

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\(^{377}\) Steinmetz, “Isidore Ducasse,” 161-164. After discussing the appearance of zoology and anatomy, physics and mathematics, Steinmetz distinguishes three modes in which Ducasse’s poetics mobilize the vocabulary of science: structurally, thematically, and stylistically. The Muse of Geometry inspires the work; modern knowledge helps build *Maldoror*’s world; the codes and decoding of scientific language offer their beauty to poetic comparison.
poetic beacon into a volatile presence. The lampe poétique takes up its floating place in the contemporary landscape, where those who see it can no longer be sure of its message or its orientation. By highlighting the technological character of this poetic figure, Maldoror parodies Romantic values and opens the telegraphic function up to new meaning.

“Toute parole étant idée”: Rhythm, horizon, Rimbaud’s universal language

In the middle of the nineteenth century, the electric telegraph was an instrument that enabled both the entrenchment of colonial capitalism and the dream of global peace. As discussed above, the extension of telegraphy to thousands upon thousands of locations throughout the world made it possible for anyone to send any message almost anywhere in seconds through the rhythm of the electric signal. The system’s practical application predominately concerned market information, but an idealistic current within European culture continued to view the telegraph’s universal communications as a vehicle to eliminate misunderstanding. From the promise of peace through greater interconnectedness to that of encompassing or even superseding all existing languages, the telegraph betokened a certain utopianism in the period’s imagination. However, French citizens received a brutal reminder of another crucial telegraphic function in 1870 and 1871: the telegraph’s poles, wires, batteries, transmitters, and operators formed an instrument of war.\footnote{French military telegraphy was proved not up to the task in 1870: “Après une guerre aussi désastreuse, où nous avons appris à nos dépens combien une organisation solide nous fait défaut, et dans un moment où l’on s’occupe de remanier sérieusement et de développer nos institutions, il nous paraît utile d’étudier le rôle qu’est appelé à jouer la télégraphie au point de vue militaire, de signaler les services qu’elle a rendus et ceux qu’elle pourrait rendre encore, une fois vigoureusement constituée.” Ponsinet, Télégraphie militaire, 5.}

Parisians in particular would be cut off from telegraphic communications for nearly nine months, first under the Prussian siege and occupation, then under the revolutionary regime of the
Commune. Telegraph wires were closed to public usage soon after the fall of Louis-Napoléon’s Empire in September 1870. The Government of National Defense struggled to maintain control of telegraphic lines throughout the country as it lost ground against Bismarck’s armies. Since a main cable hidden in the Seine was quickly discovered and sabotaged in the days following the government’s abandonment of Paris, unusual measures, such as the use of carrier pigeons, were undertaken to establish communications with the provinces. In the context of the Franco-Prussian war, the telegraph appears primarily as a tool in the desperate attempt to maintain the existing state. Yet the disruption of its function for ordinary citizens, and for Parisians in particular, throws the technology’s integrative value into sharp relief. To have no access to the telegraph meant to have no dependable connection to current information—brutally reversing the ability to communicate anything, anywhere into an inability defined by isolation.

The capital’s months of isolation during the Commune offer a sharp contrast in significance for the telegraph’s military function. Although the city was once again largely disconnected from the rest of the country, due to the maneuvering of Thiers’s government in Versailles as well as wartime damages to the network, the Commune demonstrated its

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379 Approximately 11 tons of “official dispatches” left from Paris during the Prussian blockade. Out of the 65 manned balloons that carried them, 20 went astray and 5 landed in Prussian territory. Efforts to send messages into Paris were less successful; out of 302 carrier pigeons dispatched to Paris, Horne writes that only 59 made it to the city. Alistair Horne, The Fall of Paris: The Siege and the Commune 1870-1 (London: Macmillan, 1965), 130-131, 128-129.
380 See the memoirs of the service’s Directeur général during the Franco-Prussian war for a fascinating account not only of the exact measures taken, but also a heroic portrait of Gambetta, Ferry, and others. François-Frédéric Steenackers, Les Télégraphes et les postes pendant la guerre de 1870-1871. Fragments de mémoires historiques (Paris: G. Charpentier, 1883).
381 “The lack of news from the outside was without a doubt the chief contributory cause of this incipient boredom. Many who underwent the Siege considered in retrospect that this was a worse privation even than the subsequent food shortage, and it soon revealed itself as a most pernicious psychological factor, operating on a multiplicity of levels.” Horne, Fall of Paris, 87.
commitment to preserving telegraphic capacity within the city almost immediately.\textsuperscript{382} The vicissitudes of the service’s administrative direction are punctuated by announcements in the Commune’s \textit{Journal officiel} concerning hiring and training of operators and the re-opening of offices around Paris.\textsuperscript{383} The careful history of Benoît Laurent suggests that, despite the Commune’s best efforts to re-establish private telegraphy, at most a handful of Parisians sent messages in the spring of 1871. The telegraph was, however, put to use for the administration and defense of the revolutionary city, a usage that would seem to oppose the smooth operations of global capital, and instead supports the expression of a radical anomaly, a previously unknown phenomenon.\textsuperscript{384} The electric capital searched for a different world on its own territory. The bursts of energy racing around Paris on copper wires carried words intended to help build the Commune, in an atmosphere of utopic ideas; they participated in its defense against the onslaught of Thiers’ forces in late May.\textsuperscript{385} If the electric telegraph is a marvel of science during the Parnassian period due to its geographic and semantic universality, then the technology’s utility during the Paris Commune suggests how open telegraphy was to the imagination.

It is with this openness in mind that I wish to approach the subject of Rimbaud’s telegraphic imagination as it appears in 1871 and 1872. I argue that the telegraph informs Rimbaud’s project to redefine the \textit{function} of the poet. Turning to the May 15, 1871 letter that Rimbaud sent to Paul Demeny, I will focus on the telegraphic presence that structures the text’s


\textsuperscript{384} Laurent, \textit{Commune}, 216.

\textsuperscript{385} Ibid., 199-210.
middle third.\textsuperscript{386} This presence takes both a conceptual form, which relates to the theory of language that Rimbaud offers here, and a materialist form, which relates to the concrete, physical operation of telegraphic communication. The telegraphic function of the \textit{voyant} has less to do with the problems of lyric subjectivity—Rimbaud famously declares in the letter’s first third that “Je est un autre” (\textit{ROC}, 343)—than with the poet’s social role, which Rimbaud clearly seeks to establish with reference to the lexicon and values of Hugo’s vision.\textsuperscript{387} The young poet’s attitude toward the elder statesman of French letters shifted radically as the events of the Commune unfolded, Yves Reboul has shown. Freshly returned to France after the fall of Louis-Napoléon and even more recently resigned from the Assemblée nationale, Hugo was abroad in the spring of 1871 when revolution broke out in Paris and remained so until the end of the year, while he prepared to publish his ambivalent account of events, \textit{L’Année terrible}.\textsuperscript{388} Rimbaud considered Hugo’s lack of support for the Commune a betrayal and, according to Reboul, began to question “la validité de la démarche du poète et le rôle qu’il prétendait tenir dans la cité des hommes” that the master espoused.\textsuperscript{389} Although this questioning culminates in “L’homme juste,” the bitter portrait of the artist as delusional fraud that Rimbaud composed sometime over the summer, it already shapes Rimbaud’s \textit{voyance} in May.\textsuperscript{390} Taking that evolution in his poetics into account, Rimbaud’s adoption of a telegraphic function for the poet points to his own understanding of

\begin{quote}
\textsuperscript{386} It has long been noted that the letter to Demeny takes the form of a lesson in three parts. The first concerns the literary past, the second concerns the literary future, and the third judges the literary present. The degree of irony that should be ascribed to any individual part of the letter is perpetually up for debate; for example, concerning the second section, see Murphy’s 2004 commentary, which highlights “la conscience ironique, distanciée, de l’aspect quasi messianique de ce discours;” and his 2010 commentary, which emphasizes the passage’s context and “invention transgressive.” Murphy, \textit{Stratégies de Rimbaud}, 15; \textit{Rimbaud et la Commune}, 202.


\textsuperscript{388} Yves Reboul, \textit{Rimbaud dans son temps} (Paris: Classiques Garnier, 2009), 159-160.

\textsuperscript{389} Reboul, 153.

\textsuperscript{390} Reboul, 162.
\end{quote}
universality, pointedly and self-consciously different from the type incarnated by Hugo’s poet-beacon.

First, Rimbaud invokes the advent of a *universal language* whose conceptual framework displays remarkable consonance with the principles of electric telegraphy’s universal language. The beginning of the letter’s second section represents a key passage:

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Donc le poète est vraiment voleur de feu.
Il s’est chargé de l’humanité, des *animaux* même ; il devra faire sentir, palper, écouter ses inventions ; si ce qu’il rapport *de là-bas* a forme, il donne forme : si c’est informe, il donne de l’informe. Trouver une langue ;
— Du reste, toute parole étant idée, le temps d’un langage universel viendra ! […] (ROC, 346)
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Olivier Bivort has clarified that the “langage universel” Rimbaud speaks of here does not derive from the search for an original language, either in the sense of Rousseau’s Second Discourse or in a more frankly mystical vein. Rather, the reader must look to the precepts of the *grammaire générale*, a philosophy of language developed by the scholars of Port-Royal in the seventeenth-century and handed down through generations to the schoolboy’s Bescherelle. Bivort explains that the fundamental principle of this philosophy is a rigorous coincidence between word and idea. According to this principle, every idea has a corresponding word to express it, so a speaker can be assured that she can express all that is known, as well as knowing all that is expressed. Rimbaud reformulates this central equation with the clause “toute parole étant idée,” which, despite its off-the-cuff tone, actually asserts the key concept of the coincidence between knowledge and communication. In turn, this coincidence connects the poet’s work—“Trouver une langue,” the matter of finding a language—to the arrival of a language that is *universal* in the sense of completitude. Through his work, the poet “définirait la quantité d’inconnu s’éveillant en

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392 Ibid., 208-209.
son temps dans l’âme universelle”: in making known what he discovers by means of his language, “il donnerait plus—que la formule de sa pensée, que la notation de sa marche au Progrès !” (ROC, 346). The poet seeks a language with an inexhaustible communicative capacity, in order to fill in the gaps of collective experience. The social function of this work is constantly renewed, as the poet “chargé de l’humanité” takes and retakes the measure of the unknown.

The passage makes an important distinction between language, generally, and the language that it is the poet’s task to find. Rimbaud uses indefinite articles to discuss the poet’s function: “Trouver une langue,” “le temps d’un langage universel viendra.” This language under consideration thus differs from pre-existing French, and Rimbaud underlines that difference with his robust critique of the dictionary. “Il faut être académicien, — plus mort qu’un fossile, — pour parfaire un dictionnaire, de quelque langue que ce soit,” he writes. “Des faibles se mettraient à penser sur la première lettre de l’alphabet, qui pourraient vite ruer dans la folie !” (ROC, 346).

Bivort points out that Rimbaud’s scorn for the dictionary of Académie française, then in preparation for its seventh edition, arises from the institution’s double pretension to compleitude and authority. Rimbaud, explains Bivort, “écarte l’idée du dictionnaire à la fois comme état abouti des langues et comme explication et objectivation du monde.” While the dictionary is only a static selection of words supposed to define and delimit a language, the language that is the focus of the poet’s work is universal because it expands to include the unknown, and can expand infinitely. The langue à trouver closely resembles Morse’s telegraphic language in this respect: alphabetic Morse code embraces the totality of its user’s language, but it also has the advantage of being extensible beyond the known limits of a single language. By virtue of the

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393 Ibid., 212.
394 Ibid., 214.
code’s very simplicity, in which all possible meaning is reduced to a rhythmic combination of the “dot” of electric current, this telegraphic language can write every word that does exist and will exist in every language—as well as words that might be formed from languages or alphabets that are yet unknown. The telegraph thus offers a mechanism for conceptualizing the linguistic universality that Rimbaud places at the heart of the poet’s function.

Complementing these conceptual mechanics, certain concrete physical details also indicate the telegraphic presence that animates the passage. The apparently facetious aside of Rimbaud in his utopic mode, edging parody, also deserves to be taken seriously: “Cet avenir sera matérieliste, vous le voyez,” Rimbaud writes. Indeed, his preceding description of the poet’s function in the society of the future is studded with references to a material reality. The poet who “devra faire sentir, palper, écouter ses inventions” will have to work like the telegraph operator. The message sent by the telegraphist first arrives at the ear and the fingertips of the operator on the receiving end; famously, skilled operators of the Morse apparatus could understand incoming messages from just the tapping of the machine, as the stylus scored paper ribbons with the rhythms of dots and dashes. A later passage indicates that the poet could become part of the telegraphic machinery: “Énormité devenant norme, absorbée par tous, il serait vraiment un multiplicateur de progrès !” (ROC, 346). The term multiplicateur was then a synonym for the

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395 Moigno, Télégraphie électrique, 3-4: “[…] un seul trait, un seul point suffisent pleinement à la reproduction plus rapide de l’écriture, et que ce seul point par conséquent, remplacerait surabondamment les deux traits dont se compose l’alphabet latin. Or ce qu’un point est par rapport à l’écriture, un son l’est par rapport à la parole ; les répétitions et les combinaisons seul d’un son suffiraient donc aussi pour la formation d’une langue complète, intelligible par l’oreille.” Morse code could easily be used to communicate in languages of any alphabet. As early as 1855, Jules Leseurre proposed an adaptation to Arabic in the Annales télégraphiques, and an 1872 pamphlet by S. A. Viguier published in Shanghai presents an adaptation to Chinese. See Leseurre, “Héliographe. Mémoire sur l’emploi des rayons solaires pour la transmission des signaux à des distances quelconques,” part 1, Annales télégraphiques 1, no. 4 (October 1855): 124; Viguier, Code général de télégraphie servant à la transcription des dépêches écrites en chinois (Shanghai: [n.p.], 1872).

396 “Les employés ont une telle habitude de cet alphabet, que presque toujours il comprennent la dépêche au seul bruit fait par l’armature du récepteur.” Figuier, MS, 138-139.
galvanometer, a basic instrument for the exploitation of electromagnetic force and an indicator of an electric current’s direction, used to display transmissions on the Cooke and Wheatstone telegraph apparatus.\textsuperscript{397} The precise, material references that Rimbaud incorporates here confirm the importance of the telegraph to this entire passage, as well as the coherence of the vision that the poet’s telegraphic function represents for the work of \textit{voyance} and its role in society.\textsuperscript{398}

That the model of communication embodied by the telegraph depends on a network matters greatly to Rimbaud’s vision, and starkly differentiates it from the function of Hugo’s poet. Because the conjunction between universal language and a conquest of distance defines the telegraph’s operation, the figure inevitably brings together issues of communication and space. However, the telegraph inverts the unified universalism represented by the beacon, in order to highlight comprehensiveness and difference. The poet travels alongside telegraph lines that spread across the world to venture toward parts unknown, finding a language in which to bring his discoveries back. The telegraphic function within Rimbaud’s \textit{voyance} entails complex relationships among language, code, and reference. Kristin Ross has astutely described Rimbaud’s “resistance to metaphor” in terms of his preoccupation with reference: Rimbaud is less interested in the play of language as a closed system of signifiers and signifieds, she argues, than in language’s ability to refer to things in the world.\textsuperscript{399} The language of the telegraph is, of

\textsuperscript{397} Ibid., 99, 110, 118.

\textsuperscript{398} Overlooking such telegraphic resonances has led to some vague critical assessments of this passage. The notion that the poet “devra faire sentir, palper, écouter ses inventions” has been widely understood as a reference to Baudelaire’s “Correspondances,” but one of indeterminate value—Murphy follows it to Swedenborg—whereas approximating “multiplicateur” to a generically technical agent of increase has led to disagreement about its meaning. Noland indexes it to “contemporary discourse on capitalist expansion,” alongside “quantité” and “progrès,” while Murphy argues that the \textit{multiplicateur} augurs “non pas un Progrès, mais des progrès démultipliés.” Noland, \textit{Poetry at Stake}, 26-27; Murphy, \textit{Rimbaud and the Commune}, 201, 203.

\textsuperscript{399} Ross, \textit{Emergence of Social Space}, 130, 88-89.
course, not an independent language, but a code. The poet’s telegraphic function is to bring what is outside language—the unknown—into language; his universal language is, in essence, a code that perfectly accommodates every language possible. As the poet seeks to express the sense of specific phenomena, the telegraphic model of universality that permits the communication of *everything* from *everywhere* to *everywhere* covers a field of reference that is at once semantic and geographic: the poet experiments with a code to express the unknown in spaces and rhythms. Becoming telegraphic, the poet would be an “énormité devenant norme, absorbée par tous”—the everyday miracle of a universal poetic language, written in electricity.

“*Le bateau ivre*” and “*Fêtes de la faim*” each tests a different aspect of the poet’s telegraphic function, through the ways that each approaches poetic landscape and rhythm. “*Le bateau ivre*” most obviously foregrounds the spatial and geographical concerns of landscape, while “*Fêtes de la faim*” uses the unusual line lengths of four and seven syllables. Yet in each text, rhythmic and geographic stakes are inseparable, as the poet experiments with potential forms that the telegraphic function might take. And although each text encounters limits to the capacities of its telegraphic function, neither should be slotted into a narrative of failure and disillusion that sacrifices Rimbaud’s poems to his turn away from poetry. Following the landmark work of Benoît de Cornulier, critical attention to Rimbaud’s versification has uncovered a variety of “subversification” techniques, from his earliest poetry to the unconventional forms of 1872. Cornulier has emphasized how different types of words placed

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400 Ignace Chappe, brother of the optical telegraph’s inventor, makes this point; distinguishing the telegraph’s universal language from Leibniz’s project, he writes with a slightly bemused tone, that “Le télégraphe n’écrit donc que les langues déjà formées [...] Son but n’est point de trouver une langue aisée à apprendre sans dictionnaire (expression de Leibnitz, dans sa Lettre à M. Rémond), mais de trouver le moyen d’exprimer beaucoup de choses avec peu de signes.” Ignace Chappe, *Histoire de la télégraphie* (Le Mans: Richelet, 1840), 135-136, qtd. in Flichy, *Communication moderne*, 28-29.

401 This clever portmanteau comes from Philippe Rocher, who has carefully studied a number of Rimbaud’s poems from 1870 and 1871. Rocher, “Les ‘possibilités harmoniques et architecturales’ des
at the caesura of a traditional *alexandrin* create tensions within the lines, particularly by promoting a 4/8 or an 8/4 scansion.402 By studying one 1871 poem, composed of *alexandrins*, and one 1872 poem, composed in a mixture of four- and seven-syllable lines, I do not wish to recur to the myth of abandonment that once dominated Rimbaud criticism. In my view, Rimbaud explores the telegraphic function differently in each poem, which testifies to his persistent interest in that function, rather than an irredeemable failure of the voyant’s telegraphic poetics.403 I will seek to show that “Le bateau ivre” and “Fêtes de la faim” test two distinct hypotheses about how a telegraphic poetics might work.

The first of these hypotheses is geographic. At the very beginning of “Le bateau ivre,”404 the poem sets up a complex space, which includes a highly suggestive telegraphic image. Critics have often evoked the political and economic landscape of the extraordinary voyage that the poem recounts: bookended by the New World and Europe, the poem traces the path of a mercantile exchange.405 The boat tells of escaping the constraints of that exchange, against the background of a picturesque American wilderness:

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Comme je descendais des Fleuves impassibles,
Je ne me sentis plus guidé par les haleurs :
Des Peaux-rouges criards les avaient pris pour cibles
Les ayant cloués nus aux poteaux de couleurs. (ROC, 162, l. 1-4)
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“Insoucieux de tous les équipages” (l. 5), rid of its haulers, the boat takes to the sea. The vessel, “porteur de blés flamands ou de coton anglais” (l. 6), would have originally arrived at the American coast from Europe, and indeed, the melancholy meditation on “une eau d’Europe” (ROC, 164, l. 93) that closes the text confirms that the boat was intended to return there.

Combined with the poem’s tale of liberated vision and total disintegration, the significance of this economic and geographic background has been persuasively glossed by Steve Murphy and Kristin Ross. I argue that the poem’s “allégorie plurivalente,” to borrow Murphy’s term, encourages us to add a telegraphic reading to their interpretations of “Le bateau ivre” as capitalist critique and fable of the Commune. The circuit of commercial exchange that the poem describes also corresponds to the circuit established by the transatlantic cable, installed in 1866.

But because the boat frees itself from this exchange in order to undertake another kind of experience, the poem also tests the possibility of a poetic telegraphy unconstrained by straight, set lines and the current bounds of power and knowledge. Another poem from the era, Sully Prudhomme’s “Dans l’abîme” from his 1866 collection Les Épreuves, offers an instructive treatment of the cable’s successful placement. The final tercet contains a striking metaphor: “Car la foudre qu’hier l’homme aux cieux alla prendre, / Il la fait maintenant au fond des mers

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406 Murphy, Rimbaud et la Commune, 519; Ross, Emergence of Social Space, 119-120.
407 After a number of unsuccessful attempts, the transatlantic cable was laid between Ireland and Newfoundland in July 1865, and in 1866, Figuier reports that messages arrived from New York at a clip of six words per minute. Interestingly, a galvanometer, or multiplicateur, comprised the receiver mechanism, rather than a electromagnet; the galvanometer’s indicator move to the left or right corresponded to the dots or dashes of Morse code. Wenzluemer summarizes the details of technical improvements to underwater cables made between 1858, when the first (briefly) working cable was installed, and the 1866 cable, in Telegraph and Globalization, 74-75. For a full account of the installation and operation of the transatlantic cable, see Louis Figuier, L’Année scientifique et industrielle, vol. 11, 1866 (Paris: Hachette, 1867), 175-188.
descendre, / Messagère asservie à son verbe sacré” (l. 12-14). Sully Prudhomme celebrates the servitude of electricity forced to act as the vehicle of human expression, sacred words and man’s Promethean will. Rimbaud certainly read “Dans l’abîme,” but his “Bateau ivre” celebrates the liberation of a vehicle once forced to carry the stuff of human exchange. Once the vessel is freed of the haulers who keep him in line, as well as the cares of crew and cargo, he races over the ocean in an autonomous voyage that recalls and corrects the way in which the electric messenger is channeled through the wires of the machine. As fantastical as it seems, such a transmission was alleged to have taken place in 1868. La science pour tous reported that an American, Mr. Mower, had cabled from Toronto to Osswego, New York, without using a cable: “M. Mower a placé les deux parties de son appareil sur les deux rives opposées du lac Ontario, […] et il a transmis d’un point à l’autre, à travers les eaux du lac, un message télégraphique sans le secours d’aucune câble ni d’aucune conducteur immergé.” Although keeping his “système de transmission électrique” secret, Mower planned to compete with the transatlantic cable by setting up stations at Porto and Montauk, and electrifying the Atlantic.

In line with Mower’s oceans and lakes, the hallucinatory and disquieting landscapes of “Le bateau ivre” prove to be overwhelmingly electric. Decades of scholarship aimed at identifying the poem’s sources have located language corroborating many of Rimbaud’s fantastic images in articles published in Le Magasin pittoresque and Figuier’s Année scientifique et industrielle, among other candidates. But although certain details have been traced, rightly or not, through reams of text to natural history phenomena described during the era, the impact of

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408 Sully Prudhomme, Œuvres, 1:362.
409 According to his correspondence with Izambard, Rimbaud knew and seems not to have thought highly of Les Épreuves: “J’ai lu tous les livres, tous ; il y a trois jours, je suis descendu aux Épreuves, puis aux Glaneuses, — oui, j’ai relu ce volume ! — puis ce fut tout !... Plus rien ; votre bibliothèque, ma dernière planche de salut, était épuisée!...” Rimbaud, OC, 331.
410 “Une nouvelle télégraphe,” La Science pour tous, December 5, 1868, 7.
technology has largely been dismissed. Emilie Noulet’s conclusion is typical: “Il suffit,” she writes, “de jeter un coup d’œil aux autre volumes des *Merveilles de la Science* pour s’apercevoir que Rimbaud n’a rien pu puiser dans l’histoire de la locomotive, de la galvanoplastie, du stéréoscopage et de l’éclairage.” Yet electricity marks the poem’s horizons, and its contemporary use in transatlantic telegraphy is especially relevant. It is no accident that the first stanza erects *poteaux*, and it matters equally that the haulers are nailed to those colorful stakes. This clearly telegraphic figure establishes parameters of the boat’s journey, linking its freedom to danger. “La tempête” (*ROC*, 162, l. 13) blesses the first half of the boat’s wanderings, followed by lightning, “les cieux crevant en éclairs” (*ROC*, 163, l. 29); strange lights in the water; “la circulation des sèves inouïes, / Et l’éveil jaune et bleu des phosphores chanteurs!” (*ROC*, 163, l. 39-40) that accompany the list of his marvelous visions. Once “l’ouragan” launches the boat, “taché de lunules électriques” (*ROC*, 164, l. 77) into the clouds like a reversed charge of lightning, an end to the journey becomes impossible. The boat knows that it will be lost forever in the skies, a prisoner of its own fantastic voyage. Regret for “l’Europe aux anciens parapets”—paired with the dream of a new energy, a “future Vigueur” that would perhaps return it to an “eau d’Europe”—finish the poem (*ROC*, 164, l. 84, 88, 93).

Indeed, the conclusion of “Le bateau ivre” demonstrates that the text’s radically liberated poetic telegraphy does not inaugurate a new communicative regime. Since the vessel alight in an electric horizon cannot *arrive* at any final destination, its endless journey forecloses

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Emilie Noulet, *Le premier visage de Rimbaud. Huit poèmes de jeunesse*, 2nd ed. (Brussels: Palais des Académies, 1973), 217. Because she gives an overview of previous scholarship on Rimbaud’s sources for “Le bateau ivre,” Noulet’s study provides a rich window into the peculiarities of this subfield, some of which have continued to shape the way Rimbaud is understood today. Noulet’s statement about technology is revealing in this regard. She cites Figuier’s *Année scientifique et industrielle* approvingly as a source for the poem’s fantastic images; suggesting that Rimbaud read the 1865 volume, Noulet completely fails to justify why the young poet she claims was inspired by Figuier’s explanation of “La grenouille carillonneuse” could not be inspired by the “Pose du câble transatlantique” and its description of the cable’s galvanometers the next year.
communication. That the exchange between two points cannot take place is highlighted in the text’s final stanza; the boat states that it can no longer float behind “[…] porteurs de coton, / Ni traverser l’orgueil des drapeaux et des flammes, / Ni nager sous les yeux horribles des pontons” (ROC, 164, l. 98-100). While rejecting exchange, the boat is nevertheless able to represent those visions that it cannot express. Across the descriptive litany punctuated by the refrain “J’ai vu” (ROC, 163-164, l. 32, 33, 49, 85), the boat represents the unknown of telegraphic poetics, instead of “finding a language” in which to communicate the sense of unknown things. With its experiment, “Le bateau ivre” unveils spectacular landscapes that, despite their wonders, do not constitute an operative ideal of communication. The “Péninsules démarrées” may be emblems of liberty, evoked by the boat as he begins his journey, and yet they also point toward a kind of isolation deprived of sense. Detached from the ground, a peninsula is no longer a peninsula but becomes an island.

Rimbaud’s second telegraphic hypothesis is rhythmic. “Fêtes de la faim” situates the poet in a calm, earthy landscape that offers a stark contrast to the electric alexandrins of “Le bateau ivre.” This strange poem, dated August 1872, numbers just five stanzas, capped on both ends by the same couplet: “Ma faim, Anne, Anne, / Fuis sur ton âne” (ROC, 224-225, l. 1-2, 23-24). The poet seems to wander through an impoverished countryside, addressing his hungers to the stones and scrub around him. The four- and seven-syllable lines that make up “Fêtes de la faim” are visually striking, presenting an immediate and obvious difference from verse in

412 Murphy, *Rimbaud et la Commune*, 551-552.
413 Cornulier has shown that the metrical infraction (“Et je courus ! — Des Pén / insules démarrées”) reinforces the feeling of rupture, liberating and isolating, that this line evokes. Cornulier, *De la métrique à l’interprétation*, 351-352.
414 Rimbaud, *Poésies*, 793-800.
415 Maria Luisa Premuda Perosa discusses this hunger in thematic context, arguing that the text’s reprise in *Une saison en enfer*, under the title “Faim,” reduces the depiction of personal experience. Premuda Perosa, “De Fêtes de la faim à Faim: traces d’un parcours rimbaldien,” in *Parade sauvage, Colloque no. 5*, 389-402.
octosyllables and *alexandrins*. Although Rimbaud’s poems in *vers simples* have tended to receive shorter shrift from critics, left out of metrical theory and often considered a transitional step toward prose poetry, “Fêtes de la faim” displays considerable formal complexity. Its use of rhyme and rhythm allow Rimbaud to pursue a different angle on the same issue of expression that “Ce qu’on dit au Poète à propos de fleurs” articulated and “Le bateau ivre” tested: the imperative to *speak* unknown phenomena, instead of *showing* them. Having found a limit of the telegraphic experiment in the figural language of “Le bateau ivre,” Rimbaud moves to the telegraphic hypothesis that plays out in “Fêtes de la faim.” He investigates whether the use of a highly complex scheme of rhyme and syllabation can distill a minimal unit to enrich the meaning of its language, or whether such a minimal unit might ultimately impoverish language.

The poem’s simplicity, which skirts childish banality, seems to match its unorthodox form. Commenting on Rimbaud’s use of *vers simples*, Michel Murat highlights the song-like character created by “l’interpénétration du couplet et du refrain” in “Fêtes de la faim.” The weaving together of metrical and thematic concerns takes place across seven stanzas. The “refrain” that Murat refers to is a 4/4 couplet placed at the beginning and end of the poem. In between, three heptosyllabic quatrains alternate with two 7/4/7/4 stanzas. Counts of seven and four knit together to provide the text an obvious structure. But rhyme also provides a hugely important, if somewhat less obvious, structure. Until the fourth stanza, at the poem’s center, the

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416 The “law of eight syllables” is a cornerstone of Cornulier’s metrical theory and holds that only lines of nine syllables or more are metered. Bobillot has sought to designate “une classe particulière de quasi-mètres que nous qualifierions, faute de mieux, de *vers quasi-métriques à nombre déterminé de syllabes* ‘courts,’ soit pour aller vite: de quasi-mètres courts.” His notion of “élasticité numérico-prosodique,” concerning hesitations about counting the *e muets* of shorter lines, is especially interesting, although not immediately relevant to “Fêtes de la faim.” See Cornulier, *Théorie du vers*, 31-37, 87-88; Bobillot, *Meurtre d’Orphée*, 87, 103-113.


rhyme follows established schemes: AA / B BBB / CDCD. Although couplets and alternating rhyme are not generally combined in that particular way, the next two stanzas break openly with conventional rhyme schemes: EEFE / GHIH. None of the conventional categories of *rimes plates, croisées, or embrassées* applies here. A stanza with alternating rhyme, JKJK, and final repetition of the refrain couplet, AA, gesture toward re-affirming the normal order of rhyme at the poem’s end. However, closer scrutiny reveals that a tissue of assonances supplement the end-rhymes and make up the poem. These assonances are spread across homonyms, redoubled rhymes, annexed rhymes, inversed rhymes, and “*rimes batelées.*” Rimbaud delights in circumventing the *règle de la liaison supposée,* which requires that end-rhyme words agree in gender and number; he goes much farther by circumventing the requirement that end words rhyme at all. His infractions and innovations redistribute assonances all over the text.

Because “Fêtes de la faim” comprises almost exclusively words of either one or two syllables, the rhyme effects that Rimbaud creates here produce surprising rhythms. Based on the return of an accentuated sound—i.e., the rhyme—the poem generates a staccato that can be described as telegraphic. Each of the first three stanzas is relatively conservative in terms of rhyme, but each contains a repeated word whose repetition brings forward the relationship between sound and sense that the text investigates:

Ma faim, Anne, Anne,  
Fuis sur ton âne.

Si j’ai du goût, ce n’est guères  
Que pour la terre et les pierres.  
Dinn ! dinn ! dinn ! dinn ! je pais l’air,  
Le roc, les Terres, le fer.

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419 This last term usually applies to end-rhymes that also appear before the caesura. Since “Fêtes de la faim” uses heptasyllables, which have no caesura, I will borrow the word to refer to an end-rhyme that reappears at the fourth syllable of a following line.

420 O’Gorman has independently investigated how primarily English Victorian poets attend to the advent of electric telegraphy, in terms of “the capacity of sound to carry sense”; he explores echoes and figures of haunting, and in several instances connects them to assonances. O’Gorman, “Poetry,” 48-49.
Tournez, les faims ! paisez, faims,  
Le pré des sons !  
Puis l’humble et vibrant venin  
Des liserons ;

The two “faims” in line seven have an obvious link to the “faim” of the title, but this doubling plays on the more audacious repetitions that occur in the preceding stanzas. It is easy to see that “terre(s)” turns up in the center of both lines four and six, where the word takes the approximate position of a *rime batelée*. Since the stanza relies on a single rhyme, “guères / pierres / air / fer,” its re-usage for the *rime batelée* contributes to the phonic preponderance of –er. If the couplet presents a similar pattern, the phonic impact is even more dramatic, thanks to the homonymic rhyme “Anne / âne” compounded by the repeated name. In the very beginning of the poem, then, the sound “an” represents three out of eight syllables, and this type of repetition bordering on nonsense returns explicitly in the following stanza: “Dinn ! dinn ! dinn ! dinn !” is *only* sound, one sound, without meaning. Yet for all that, the sound is perhaps not entirely without expression. “Dinn” is the sound produced when the poet fills his mouth with stones, an act that literalizes the poetic attempt to *say* things. What prevents him from speaking does not prevent him from expressing the sound of the stone.

The three repeated words—“faims,” “terre(s),” and “Anne”—all reappear at some point in the poem’s second half, punctuating the backdrop of rhymes that emerge. The rhymes are indicated schematically below:

| Les cailloux qu’un pauvre brise, | E* 7 |
| Les vieilles pierres d’églises, | E* 7 |
| Les [galets] fils des [déluges], | F 7 |
| **Pains** couchés aux vallées grises ! | E 7 |
| Mais **faims**, c’est les bouts d’air noir ; | G 7 |
| L’azur sonnecur ; | H 4 |

421 Multiple critics have suggested that “dinn” is a pun on “dîne.” Premuda Perosa, “*Fêtes de la faim*,” 399; Brunel, “*Fêtes de la faim*,” 15.
— C’est l’estomac qui me tire,
   C’est le malheur.

Sur terre ont paru les feuilles :
Je vais aux chairs de fruit blettes.
Au sein du sillon je cueille
La doucette et la violette.

Ma faim, Anne, Anne,
   Fuis sur ton âne.

Unexpected rhyming elements abound in stanzas four, five, and six. Asterisks mark those end rhymes, already irregular, where the règle de la liaison supposée is broken; italics indicate simple assonance, which redoubles on “galets” for a near-inverse rhyme with “déluges.” Bolded words are the three repeated from previous stanzas, as well as their interior rhymes, and finally, the rime baletée and annexed rhyme in the sixth stanza are underlined. A majority of the poem’s rhymes are sufficient, excepting two instances of poor rhyme and a single instance of rich rhyme. Rimbaud rejects the rule of alternating masculine and feminine rhymes entirely.

If rhyme organizes the rhythm of French verse, the unpredictable assonances of “Fêtes de la faim” create a new kind of rhythm. Each of these assonances recalls the paradigmatic repetition of “Dinn ! dinn ! dinn ! dinn !”: the monosyllable of pure sound, whose rhythmic expressions might be able to satisfy the need felt by the poet. The poet calls this need his “hunger,” but it could instead be called his desire to communicate.422 When he sends his hungers to graze “le pré des sons,” the poet figures this will to expression that takes place through the assonances—the sounds—scattered across the poem, “pains couchés aux vallées grises.” The landscape in which the poet attempts to assuage his hungers offers up only rocks and flowers, in alternating stanzas, either too hard or too overripe to provide him nourishment. “Fêtes de la faim” performs its experiment in a liminal zone. The text balances between an impoverished

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422 Berger offers a Lacanian reading of Rimbaud’s “goût de parler,” in Banquet de Rimbaud, 165.
expression of deprivation and famine on one side, and on the other, an enriched expression of that very hunger, of its celebration, resulting from the telegraphic rhythm of its poetic language.

“Sur un poète moderne”: Parnassian parody and telegraphic poetics

In Tristan Corbière’s 1873 collection Les Amours jaunes, a larky little poem titled “I Sonnet, avec la manière de s’en servir” takes on the problem of telegraphic poetics directly and playfully. The tone is established by a line of instructions that preface the beginning of the poem:

“Régrons notre papier et formons bien nos lettres”:

Vers filés à la main et d’un pied uniforme,
Emboîtant bien le pas, par quatre en peloton ;
Qu’en marquant la césure, un des quatre s’endorme…
Ça peut dormir debout comme soldats de plomb.

Sur le railway de Pinde est la ligne, la forme ;
Aux fils de télégraphe : — on en suit quatre, au long ;
A chaque pieu, la rime — exemple : chloroforme.
— Chaque vers est un fil, et la rime un jalon.423 (l. 1-8)

Comic, and strikingly casual in diction, the text nevertheless has an intricate structure that packs each line with a dense yet coherent set of images. Robert Mitchell has argued that the “linked expressions” introduced in the quatrains—namely the military, sleep, classical allusions, and mathematics—all relate to the poem’s “main thematic thread,” which follows the transformation of “vers filés” into the “fils du télégraphe.”424 The central metaphor of “I Sonnet” thus equates the forms of poem and telegraph. Corbière emphasizes the regularity and predictability of the lines in a sonnet; like telegraph lines stretched between the punctuation of telegraph poles, the sonnet’s lines stretch between the identical thud of end rhymes.

The regularity of the quatrains’ alexandrins and alternating rhymes give way to an altogether more chaotic form in the tercets, however, when the poem itself becomes a “télégramme.” Punctuation, particularly the dashes that began to appear in the second stanza, proliferates wildly, and numbers are no longer spelled out in words, as was “quatre” on lines 1, 2, and 6:

— Télégramme sacré. — 20 mots. — Vite à mon aide…
(Sonnet — c’est un sonnet —) ô Muse d’Archimède !
— La preuve d’un sonnet est par l’addition :

Je pose 4 et 4 = 8 ! Alors je procède,
En posant 3 et 3 ! — Tenons Pégase raide :
“O lyre ! O délire ! O…” — Sonnet ! — Attention ! (CCOC, 718, 9-14)

While the sonnet itself was a figure of the telegraph apparatus in the quatrains, here, the signs within its hallowed lines become a telegraph message. Near total breakdown within the form follows. Since the “preuve d’un sonnet” merely requires the poet to count out syllables and stick a rhyme-post at the end, numbers and even an equal sign replace words. Words, then, recede from the syntax that connects them into relations of meaning, just as punctuation, including nine dashes and six exclamation points, fills in the line. Mitchell writes that this finale constitutes a “literal use” of telegraphic verse, in which Corbière gives “a brilliant demonstration on his own terms, with the end result a contemptuous ‘désarticulation de la phrase’.” The poet’s punctuation, he argues, “has destroyed the sonnet’s rhythmic integrity,” such that the text closes “in a paroxysm of rhythmic and semantic chaos.”425

The telegraph plays an ambiguous role in Corbière’s “I Sonnet.” On one hand, the poem clearly parodies the rigid, nap-inducing versification identified with Parnassianism. The introductory instructions, “Réglons notre papier et formons bien nos lettres,” frame the poem as a pedagogical exercise of the sort undertaken by young readers of Théodore de Banville’s then ________________

425 Ibid., 44.
recently published *Petit traité de poésie française*. The poem then undermines the value of its form. By rhyming “forme” with “chloroforme” in the second stanza, Corbière both creates a rich rhyme and points out how arbitrary it is. Moreover, the choice of “chloroforme” as Corbière’s “exemple” of a rhyme-post harkens back to the argument between Du Camp and Leconte de Lisle about the anesthetic’s possible lyric qualities. Corbière meets the criteria for a formally irreproachable sonnet, while making use of an ostentatiously anti-Parnassian word, as if to prove that even chloroform can serve as a rhyme to hold up the perfect line. Yet on the other hand, Corbière’s telegraphic critique of Parnassian formalism balances parody and experimentation, in a manner similar to Rimbaud’s “Ce qu’on dit au Poète à propos de fleurs.” Robert Mitchell argues that “[b]ecause it has been traditionally perceived merely as a parody of the stiff Parnassian style (which it is, ostensibly), its importance as a capital text in which Corbière demonstrates his own poetic method has been consistently overlooked.” Mitchell examines two key techniques that the telegraph figure enables: Corbière’s densely interwoven networks of “verbal associations,” primarily hooked around the end-rhymes, and syntactic dislocation of the *alexandrin’s* 6/6 meter throughout the line. Indeed, “I Sonnet” offered a poetic model to the Decadents, according to Jean de Palacio, and constituted a primary source for the “style télégraphique” that flourished at the end of the nineteenth century. A parody of formalism, “I

426 See chapters 1 and 2.
427 "The process of ‘multiple linkage’ alone suggests that Corbière is doing more than merely poking fun at a group of poets; to do this, he need not have gone to such elaborate lengths in the construction of the sonnet. He might well have, more simply, made direct use of Parnassian techniques or mentioned the *poètes visés* or made any number of extra-textual allusions (all of which Rimbaud does, for instance, in his attack on the same group of poets, ‘Ce qu’on dit au poète à propos de fleurs’).” Mitchell, “Muted Fiddle,” 39.
428 Ibid., 36.
429 Ibid., 42. “Furthermore, is it by pure chance that, with the exception of vv. 9 and 12, every end-rhyme in the sonnet represents a ‘key’ word—often (vv. 1, 2, 4, 6, 13) with multiple connotations—in regard to these different networks of expressions?”
Sonnet” ultimately produces a fascinating vision of telegraphic poetics that is based on reconceiving the notions of line and rhyme.

According to the letter of the law that Théodore de Banville laid down in his Petit traité de poésie française, “I Sonnet” is an irregular example of the form even before the extent of its telegraphic breakdown in the tercets becomes clear. In this handbook of French verse forms, ostensibly intended for the young readers of the Écho de la Sorbonne, moniteur de l’enseignement secondaire des jeunes filles in which it first appeared, Banville displays a surprisingly categorical spirit.431 “Le Sonnet peut être régulier ou irrégulier,” writes Banville. “Les formes du Sonnet irrégulier sont innombrables et comportent toutes les combinaisons possibles. Mais, en réalité, il n’y a qu’une seule forme de Sonnet régulier : c’est celle dont je donne les deux exemples suivants.”432 The standard that Banville prescribes has enclosed rhymes in the quatrains and tercets composed of a couplet followed by alternating rhymes (ABBA / ABBA / CCD / EDE). Corbière’s sonnet is thus, in fact, doubly irregular, not only because its tercets are Marotic but also use only two rhymes (CCD / CCD). Banville allows that an irregular sonnet is by no means necessarily a bad sonnet: “Il faut toujours préférer le Sonnet régulier au Sonnet irrégulier, à moins qu’on ne veuille à produire un effet spécial ; mais encore dans ce cas, la Règle est une chaîne salutaire qu’il faut bénir !” (PT, 174). Assuming Corbière’s deviations from the regular form were indeed intended to produce a “special effect,” reducing the number of different end-rhymes from five to four condenses an already compact form further, increasing the difficulty of its composition and calling even more attention to the sonnet’s “pieux.” The tercets’


431 For details of publication, see Bienvenu, “Ce qu’on dit,” 248-249.
sufficient C-rhymes and rich D-rhymes, which mirror the rich A-rhyme that included an extra *consonne d’appui* for “forme” and “chloroforme” in the quatrains, underscore the technical sophistication of Corbière’s irregularities. Having set himself a greater challenge in terms of end-rhyme, the poet rises to meet it, but does so in part by introducing chaos elsewhere along the line.

If Corbière clearly plays with the codes in place surrounding the sonnet, it seems likely that Banville’s *Petit traité* also plays with such poetic codes, even while dictating them. In his new study of Banville, David Evans argues that the little handbook’s dogmatic proclamations have often been taken far too seriously; he writes, “so omnipresent is the humor in the *Petit traité* that it almost invites us to read it as a parody of what was a well-established genre.”

In Evans’ view, Banville defines the sonnet so narrowly as to mock the practice of narrowly defining verse through its mechanics. A growing appreciation of the humor animating much of Banville’s poetry, as well as renewed interest in his interest in versification, have contributed to a continuing critical re-evaluation of Banville over the past decade. Steve Murphy, for instance, has sought to rectify the traditional overemphasis on Leconte de Lisle’s putative impassivity within Parnassianism by underlining the Banville’s countervailing influence. “Simplement, puisqu’on a retenu avant tout l’idée d’un Parnasse impassible, pour ne pas dire pisse-vinaigre,” writes Murphy, “il paraissait sans doute inconvenant de montrer le poète impassible sur la corde raide des funambules.” But the latter image, drawn from the opening poem of Banville’s 1857 collection of comic and satirical verse *Odes funambulesques*, was a powerful one during the

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434 Evans, 32. “While the fixed forms of verse poetry may lend themselves to a quasi-scientific process of analysis and classification, Banville plays with these tropes while ensuring that he locates the indefinable essence of poetry elsewhere.” Evans’s study of Banville’s poetry and poetics contains innumerable rich and sensitive readings of the poet’s work. These readings are illuminating even if the overarching framework of Evans’s argument, which pits poetry against a somewhat vaguely defined notion of science, is perhaps less convincing.
nineteenth century: “A l’époque, on ne cessait cependant de réactiver la métaphore funambulesque ou de faire de la versification parnassienne une sorte de cancan métrique.”

Like the poet as formalist pedant, the poet as tightrope walker balances on a fine line between gravity and parody. The conclusion of Banville’s “La Corde roide” explicitly affirms the ambiguity of its hero:

Et d’une lieue on l’aperçoit
En souliers rouges ! Mais qu’il soit
Un héros sublime ou grotesque ;
O Muse ! qu’il chasse aux vautours,
Ou qu’il daigne faire des tours
Sur la corde funambulesque,

Tribun, prophète ou baladin,
Toujours fuyant avec dédain
Ces pavés que le passant foule,
Il marche sur les fiers sommets
OU sur la corde ignoble, mais
Au-dessus des fronts de la foule.  

The poet is either a sublime hero or a grotesque parody of one; he is either a prophet or a street performer. He is above the crowd, like Hugo’s poet-beacon, but pointedly comes nowhere near reaching those lofty, starry heights. Instead, Banville’s red-shoed hero is poised on a high wire, strung between two poles. Without pushing the resemblance too far—Banville is on record as disapproving of the telegraph’s implications for writing broadly and poetry in particular—I nonetheless suggest that Corbière may have been sensitive to the tightrope’s telegraphic resonance within the mid-nineteenth-century landscape when composing his own “practice” verse, “I Sonnet.” (“O Muse d’Archimède!” could ironically refer to the “O Muse!” of Banville’s “Corde roide,” itself a lyrical effusion already teetering toward parody.)

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435 Murphy, “Versifications,” 73. Murphy discusses his generally improved appreciation for Banville’s poetic influence in Rimbaud et la Commune, 502-509.
437 Evans, Banville, 15.
With the poet dancing on the edge between the ridiculous and the transcendent, “La Corde roide” offers sturdy rhyme-posts. Two pairs of rich rhymes (“grotesque,” “funambulesque”; “vautours,” “tours”) and one sufficient rhyme (“aperçoit,” “soit”) make up the first stanza cited, mirroring the two sufficient rhymes (“baladin,” “dédain”; “sommets,” “mais”) and one rich homonym (“foule,” “foule”) of the final stanza. Rhymes throughout the rest of the Odes funambulesques build on this foundation of rich and sufficient rhymes in extravagant ways, using two main procedures. First, as David Evans points out, Banville employs a host of words that refer to the people, places, and things of Paris life at the start of the Second Empire. These proper names and hyper-specific references allow Banville to make new and unexpected rhymes, like “Duveyrier” and “hanneton-verrier,” since less comic poetry had little reason to name-check advertising agent Charles Duveyrier. Second, as the preceding example suggests, this influx of fresh words allowed Banville to pursue the staging of more and more elaborate rhymes. In the Odes funambulesques, he constructed showy, leonine pairings of four or five rhymed sounds; by the time Banville published Nouvelles Odes funambulesques, his 1869 follow-up to the Odes, the rhymes occasionally stretch across four or five entire syllables. The very richness of Banville’s rhymes, combined with his preference for highly referential language in his light poetry, have often been considered proof that his work is trivial. Yves Vadé dubs Banville a “peintre de la vie moderne,” but not a Baudelairean “poète de la modernité”: his essentially satirical work never transcends the preoccupations of its moment to engage with signifying an eternal beauty, in

438 Ibid., 176-177.
439 Banville, OPC, 3:51, qtd. in Evans, Banville, 178.
Vadé’s view, and indeed, a great many of the references that locate Banville’s *funambulesque* rhymes in the landscape of a particular time and place are totally opaque to today’s reader.\(^{441}\)

In other words, the referential orientation and over-the-top character of Banville’s rhyme treads a very fine line between inventiveness and absurdity.\(^{442}\) For David Evans, Banville uses rhyme to demonstrate that mastering the obvious mechanics of versification does not produce true poetry. In the *Odes funambulesques*, Evans argues, the most ridiculously overcooked rhymes belong to the poet-clown persona introduced by “La Corde roide,” and make up a subtle parody of the versifier performing for the crowd.\(^{443}\) Similarly, Evans reads Banville’s famous pronouncements on rhyme in the *Petit traité de poésie française* as luxuriant hyperbole, not to be taken at face value.\(^{444}\) Near the beginning of his first chapter on “La Rime,” Banville explains that rhyme is the bedrock of poetry:

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\text{La Rime est l’unique harmonie des vers et elle est tout le vers. Dans le vers, pour peindre, pour évoquer des sons, pour susciter et fixer une impression, pour dérouler à nos yeux des spectacles grandioses, pour donner à une figure des contours plus purs et plus inflexibles que ceux du marbre ou de l’airain, la RIME est seule et elle suffit. […] Ceci va vous paraître étrange et n’est pourtant que strictement vrai : on n’entend dans un vers que le mot qui est à la rime, et ce mot est le seul qui travaille à produire l’effet voulu par le poète. (PT, 40-42; Banville’s emphasis)}
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In no uncertain terms, Banville declares that the end-rhyme is the only word that counts in a line, and that the end-rhymes are the only words that matter in the poem—a theory that closely corresponds to the image of end-rhymes as telegraph poles holding up the line in Corbière’s “I Sonnet.” It also raises the same question that Corbière’s poem tested, namely: why bother with the rest of the line, if the rhyme is the only part that counts? Banville anticipates this question, and addresses it by contrasting poetry with *bouts-rimés*. A traditional parlor game, *bouts-rimés*

\(^{442}\) Evans, *Banville*, 180.
\(^{443}\) Ibid., 179.
\(^{444}\) Ibid., 41.
require players to fill in the lines of a poem whose end-rhymes have already been chosen, generally with an eye to maximum incongruousness. “Ce n’est pas la poésie qui a été faite à l’image des bouts-rimés,” writes Banville; “ce sont les bouts-rimés qui ont été imaginés comme une imitation et comme une parodie de la poésie, par un rimeur qui, en sa dédaigneuse ironie, a très-bien compris qu’en révélant à peu près le secret de son art, il ne serait cru par personne” (PT, 77). Bouts-rimés are random, incoherent, “assemblées au hasard,” whereas the rhymes of poetry are selected, meaningful, “dictées à la pensée du poète par l’objet même qu’il veut peindre” (PT, 78). As Evans remarks, the understanding of poetry itself that Banville outlined in the Petit traité encodes an unsettling closeness to parody, and made rhyme a privileged location for challenging and defining poetic value.445

The emergence of a new, parodic poetic form made up entirely of end-rhymes during the Parnassian moment thus suggests the opening of a new poetic line of inquiry into the telegraphic function. By stacking fourteen words vertically on the page, the monosyllabic sonnet experimented with the formal codes of the poem’s landscape. By doing away with everything but the rhymes, the monosyllabic sonnet experimented with the limits of poetic language’s referential capacity. Interestingly, although these sonnets all appeared in the context of clear Parnassian parody, Banville actually included the monosyllabic sonnet among the poetic forms approved in the Petit traité. “Le Sonnet peut être écrit en vers de toutes les mesures” (PT, 171), writes Banville, and to illustrate the monosyllable, the introduction provides an abbreviated example of this abbreviated form:

Vers d’une syllabe.
Fort
Belle,
Elle
Dort.

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445 Ibid., 44.
Sort
Frèle !
Quelle
Mort ! (PT, 9)

Quoted without its tercets, these lines are part of Paul de Rességuier’s 1835 sonnet, “Épitaphe.” According to Alain Chevrier, “Épitaphe” is one of the first known monosyllabic sonnets composed in French: “Contrairement aux rondeaux, le sonnet n’a pas donné lieu, à notre connaissance, à des jeux avec le vers monosyllabique entre son apparition à la Renaissance et sa redécouverte au début du romantisme.” Chevrier credits the sonnet’s renewed prestige and Hugo’s use of “mètres courts ‘gothiques’” with giving rise to the monosyllabic sonnet, which was then exploited by poets associated with Le Parnassiculet contemporain and the Cercle Zutique.

Le Parnassiculet contemporain was a booklet of ten puckish poems and a narrative prose introduction that appeared hot on the heels of the 1866 Parnasse contemporain, the collection responsible for consolidating a group of poets dubbed Parnassian in the broader culture. Published anonymously in 1866, Le Parnassiculet was from the start assumed to be the work of Alphonse Daudet, Paul Arène, and a handful of more obscure collaborators. The poems of the Parnassiculet were bitter in conception and reception; as Yann Mortelette remarks, none of the parodists had been included in the “recueil de vers nouveaux,” and several stars of the Parnasse

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447 Chevrier, Contrainte monosyllabique, 350.

448 Ibid., 586. Palacio also cites the monosyllabic sonnet, and those of “l’Album Zutique de Rimbaud” in particular, as preparing the Decadents’ “emprise du silence,” in Silence du texte, 6. The association is slightly tenuous, since the Album Zutique was not discovered and published until 1962, although the form could have been transmitted to the Decadents via Charles Cros. I return to the topic below, chapter 4.
took the parody badly. (Paul Verlaine punched Daudet at a banquet honoring Albert Mérat.

The *Parnassiculet* contains a strong quotient of poems that mock the taste for “exotic” and Antique mythology, like “Tristesses de Narapatisejou” and “Panthéisme.” While this taste was already associated with Leconte de Lisle, Louis Ménard, Catulle Mendès, and José-Marie Heredia, a specific target for “Le martyr de saint Labre” is somewhat less obvious:

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Le martyr de saint Labre
Sonnet extrêmement rhythmique
Labre,
Saint
Glabre,
Teint
Maint
Sabre,
S’cabre,
Géint !
Pince,
Fer
Clair !
Grince,
Chair
Mince !
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The subtitle, “sonnet extrêmement rhythmique,” clearly jabs at Paul Verlaine’s “Nuit de Walpurgis classique,” whose opening stanza had evoked “[u]n rhythmique sabbat, rhythmique, extrêmement / Rhythmique” (l. 2-3). But Verlaine’s poem about magic in the gardens of Versailles bears little obvious kinship with the subject of “Le martyr de Saint Labre.” Several comic possibilities suggest themselves around the figure of Saint Labre, who had been beatified just a few years earlier. By butchering the facts of the real saint’s death, the poem may parody the kind of claims to historical accuracy voiced notably and punctiliously by Leconte de Lisle.

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450 The 1866 *Parnasse contemporain* contained, for example, Leconte de Lisle’s “Tristesse du Diable,” Ménard’s “Initiation,” Mendès’s “Dialogue d’Yama et d’Yamî,” and Heredia’s “Artémis.”
451 *Parnassiculet*, 27.
Despite the venerable fashion for poetic martyrdoms, Benedict Joseph Labre died of natural causes in Rome in 1783. 453 Alternately, “Le martyr de saint Labre” may take aim at Leconte de Lisle’s well-known “animal poems,” in which the poet resists sentimental anthropomorphization in order to paint the savagery and inscrutability of jaguars, elephants, and lions. The labre, or wrasse, belongs to a class of fish, the Labridae, characterized by protruding lips and hermaphroditism. 454 Wrasse are also edible, and so the martyrdom that has metal piercing flesh could be a parody of dinner: nature neither savage nor inscrutable but ridiculously pedestrian and civilized.

However plausible these parodic gestures might or might not be, there can be little doubt that “Le martyr de saint Labre” sets out to lampoon the sonnet form. The poem’s subtitle points to its focus: once the filler of this already notoriously compact form is stripped away, it becomes an “extremely rhythmic” thud of monosyllabic rhymes. 455 Discussing the minimalism and irreverence of the Parnassiculet, Daniel Grojnowski argues that Banville, not Leconte de Lisle, ultimately inspired its provocative parodies: “Le Parnassiculet,” writes Grojnowski, “exploite en l’exaltant une veine fantaisiste et funambulesque dont Théodore de Banville, pour satisfaire à l’esprit de sérieux, s’est dispensé dans sa contribution au Parnasse contemporain.” 456

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455 Once again, although the beginning of Verlaine’s “Nuit du Walpurgis classique” is, as Steve Murphy puts it, “un acte de provocation, du fait de la répétition rythmiquement lourde de l’adjectif rhythmique” (Verlaine, Poèmes saturniens, 481), it certainly does not exhaust the formal parody of “Le martyr de saint Labre”: “Nuit du Walpurgis classique” is a series of eleven quatrains, in which three alexandrins followed by an octosyllable, in alternating rhymes—not a sonnet.

456 Grojnowski, Muse parodique, 48.
reducing the rhythm to fourteen uniform beats, “Le martyr de saint Labre” simultaneously promotes the importance of rhyme and introduces significant referential ambiguity. The rhyme scheme of the poem alternates between rich A-rhymes (“labre,” “glabre”; “sabre,” “s’cabre”) and poor B-rhymes (“saint,” “teint”; “main,” “geint”) in the quatrains, while the tercets are all sufficient rhymes (“pince,” “grince,” “mince”; “fer,” “clair,” “chair”).

Several formal irregularities connect to the sonnet’s choice of rhymes. Like Corbière’s “I Sonnet,” “Le martyr de saint Labre” has only four rhymes, instead of the conventional five—an variation which increases the difficulty of writing a monosyllabic sonnet that makes any sense. Perhaps that difficulty is behind the sonnet’s extremely unusual rhyme scheme, which combines alternating and enclosed rhymes in the quatrains (ABAB / BAAB) and tinkers with the familiar couplet in the tercets (CDD / CDC). While syntactical constraints are almost certainly involved, the rhymes themselves highlight these deviations from the norm. The contrast between rich and poor rhymes in the quatrains brings out the contrast between the rhyme scheme in the two stanzas; the uniform sufficiency of the rhymes in the tercets brings out the greater uniformity of their rhymes, grouped in two sets of three rather than three sets of two. Cumulatively, these rhymes have a paradoxical effect: the language of “Le martyr de saint Labre” seems anchored in specific references, but its subject remains strangely indeterminate. Because the monosyllabic sonnet is not simply a series of arbitrary rhymes, the poem is almost certainly about something. It refers to an actual saint, or a real type of fish, and refers parodically to Verlaine, or Leconte de Lisle, or Banville. Nonetheless, the heightened role of referential language in the monosyllabic sonnet does not result in a clearly expressed reference for the poem. “Le martyr de saint Labre” uses the codes of poetic language to scramble form, reference and parody in new, telegraphic ways.
The monosyllabic sonnets of the Cercle Zutique continue the experiment started by the *Parnassiculet contemporain*. A more or less regular meeting of a few more or less dissolute writers, artists, and musicians at the Hôtel des Etrangers, the Cercle Zutique was active roughly between fall 1871 and spring 1872. Little is known for certain about the Cercle, and its existence would have gone entirely unknown had the *Album* its members produced not been discovered, examined by Pascal Pia, photographed and published in facsimile, before returning to obscurity in private ownership. The *Album* comprises dozens of pages of doodles and poems, which seem largely to have been written in collaboration. Since most entries are unsigned or “signed” satirically, scholars have relied on handwriting to establish authorship; recently, the *Album* has provided an opportunity for scholars to reflect on the nature of collaborative creation. A remarkable commitment to obscenity, parody, and resistance to authority in general distinguishes the Cercle’s output. Featuring salty entries by Rimbaud and Verlaine, the *Album* teems with parodies aimed at the Parnasse. Denis Saint-Amand has argued that Zutisme represents a *mutation* of Parnassianism, which grew out of the sociopolitical fissure that the Commune revealed within the group of poets. By attacking Parnassians, Saint-Amand suggests, the Zutistes sought to differentiate themselves from their original literary affiliation: according to Saint-Amand, in the post-Commune period, Parnassianism became just one more “appareil coercitif.”

Who the Zutistes parody, and how, are thus indispensable pieces of the overarching puzzle offered by the group’s existence. The *Album* was never published, nor intended for

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Indeed, many members of the Cercle Zutique continued to frequent the weekly dinners of the Vilains Bonshommes, whose membership was closely affiliated with the *Parnasse contemporain* from its foundation in 1869, even as the Zutistes brutally mocked their seatmates elsewhere. Banville, explains Saint-Amand, was spared by the Zutistes, who approved of his “œuvre funambulesque,” whereas Leconte de Lisle and Coppée, the embodiment of Parnassianism’s “composants coercitifs et idéologiquement embourgeoisés,” are constant objects of derision. Among the many parodies aimed at them, the latter two poets are the targets of a monosyllabic sonnet by Verlaine. Another such poem, this time by the musician Ernest Cabaner, mocks Albert Mérat. It is no accident that the experimental form and telegraphic function of the monosyllabic sonnet lends itself to parodying these three poets, paradigmatically Parnassian but aesthetically diverse. For Saint-Amand, Coppée played “un rôle fédérateur” within the Zutistes’ circle of friends, due to “inimités spécifiques” as well as his sociopolitical conservatism and bourgeois success. If Leconte de Lisle represented an imperious leader of Parnassianism, the introductory “Propos du Cercle” of the *Album Zutique* indicates that Mérat was a fellow Zutiste, although his appreciation of the other members and his participation were both limited. The monosyllabic sonnets that parody Mérat, Coppée, and Leconte de Lisle exploit

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460 Pia’s edition remains the edition of reference, although certain information concerning the genesis and authorship of the text has since been completed or revised by other scholars. Unless otherwise noted, I have relied on Pia’s explanatory notes that accompany each text in his edition.
462 Ibid., 38. Politically, all three poets were republicans, and none of them supported the Commune. Banville distanced himself from Louis-Napoléon’s regime throughout the later 1860s, and his 1869 collection, *Nouvelles odes funambulesques*, delivered some particularly stinging critiques of the Second Empire’s government. See Banville, *OPC*, 5:266.
463 See chapters 1 and 2.
465 Ibid., 29.
the telegraphic function in order to test the referential capacities of their insistently striking rhymes. 466

From the start, the monosyllabic sonnet that Verlaine contributed to the *Album* boasts a surplus of reference. According to Saint-Amand, “Sur un poète moderne” may be targeted at either Leconte de Lisle or François Coppée. The text points to Leconte de Lisle right away:

> Sur un poète moderne.
> Quête
> Croix ;
> Tette
> Rois ;
> — Tête ?
> Bois ! —
> — Bête ?
> Vois ! —
> — Rime ?
> Lime ! —
> — En
> Outre
> Jean-
> -Foutre. 467

After the fall of the Empire, it became clear that Leconte de Lisle had received a government pension for some years, and moreover, had been nominated in 1870 to the Legion of Honor. Verlaine, a Communard, acidly mocks the poet’s hunt for favors in high places by having him eagerly admit to being an idiot, ready to make rhymes to order. Yet Coppée authored a collection called *Poèmes modernes*, an obvious counterpart to Leconte de Lisle’s *Poèmes antiques* and an equally obvious reference for “Sur un poète moderne.” Beneath the text of the poem in the *Album*, Verlaine draws a portrait of Coppée in a medallion. That “un poète moderne” could in

466 Chevrier makes the connection between monosyllables and telegraphs in reference to Rimbaud’s contribution, “I. Cochœur ivre”: “Le style marotique chez Rimbaud est à la limite du style télégraphique ou petit nègre.” However, “style télégraphique” seems here to allude to an anticipation of the processes of linguistic reduction that Palacio assigns to Decadent poetics. Chevrier, “Sonnets,” 43.

467 *Album Zutique*, 123.
fact refer to both poets reflects the unexpected presence of two voices within a single, fourteen-word poem.\(^{468}\)

Once again, the formal features of Verlaine’s monosyllabic sonnet reinforce its parodic orientations, which here include communication in addition to the referential properties of poetic language. The rhymes are preponderantly sufficient, with alternating poor (“\textit{en},” “\textit{Jean}”) and rich (“\textit{outre},” “\textit{outre}”) rhymes at the end of the tercets. Unlike the \textit{Parnassiculet}’s “Le martyr de saint Labre,” the tercets of “Sur un poète moderne” follow the regular disposition that would be endorsed by Banville in his \textit{Petit traité} (CCD / EDE). The tercets’ alternating rhymes mirror the alternating rhymes in the quatrains (ABAB / ABAB), nominally supposed to be enclosed rhymes in a regular sonnet. However, the near-constant back-and-forth of the poem’s alternating rhymes match the back-and-forth of the questions and answers that it sets up for the “poète moderne” in the second and third stanzas. The sudden outcropping of dashes in this middle section appears to indicate a dialogue, in which two dashes denote a switch between two voices as the glory-hungry poet is interviewed about his qualifications. Since these include a wooden head and self-evident stupidity, it is unclear whether the poem’s final assessment presented in the tercets should be considered disparaging or the ultimate endorsement: “\textit{En / Outre / Jean- / -Foutre}.” Perhaps the poet’s utter cravenness is exactly the kind of thing that deserves a Legion of Honor.

The two voices of the sonnet thus communicate a desire to debase poetry by subordinating it to the pursuit of social and political capital, although “\textit{Sur un poète moderne}” plays on the incompleteness of the exchange. On one hand, Verlaine hints toward the sculptural poetics associated with Leconte de Lisle’s “\textit{bonheur impassible}” for his modern poet jonesing for medals and willing to “\textit{Tette / Rois}.” The title recalls statuary inscription; the sketch of Coppée mimics the style of an Antique medallion; and an enthusiastic cry of “\textit{File!}” (“\textit{Lime !}”) responds

\(^{468}\) Saint-Amand, \textit{Littérature à l’ombre}, 100-104.
to the metapoetic query “Rhyme?” (“Rime?”). On the other, once filtered through the formal and referential compression of the telegraphic function, the codes of impassibility become a parody of sexual exchange.\textsuperscript{469} “Limer” is listed not just in the dictionary of the Académie, where it means to file, sand, or polish, but also appears in Delvau’s \textit{Dictionnaire érotique moderne}, where it means “rêter longtemps sur une femme sans arriver à l’éjaculation.”\textsuperscript{470} Thus the modern poet who smooths the edges of his rhymes to perfection, as Pygmalion would his statue, cheerfully proclaims his own (poetic) impotence. All of the exchanges evoked by the poem, in fact, remain incomplete at the end. Besides echoing the obscene connotations of “limer,” the final judgment of the poet as “jean-foutre” no longer even seems to address him directly. In consequence, it is safe to assume that the modern poet does not receive his cross, and is left to fiddle away at his rhymes indefinitely.\textsuperscript{471}

The final example of the monosyllabic sonnet that I will study here is also staked on the rich intersection of rhyme, reference, and the landscape of Parnassian poetics. One of the pianist Ernest Cabaner’s few poetic contributions to the Album, “Mérat à sa muse” actually contains fifteen words:

\begin{verbatim}
  Mérat à sa Muse.
  Ah !
  Chère,
  La
  Guerre

  Va
  Faire
  Taire
  Ta
\end{verbatim}

\textsuperscript{469} This parodic orientation is confirmed by the phallic drawings and Latin inscriptions found in close proximity; see Teyssèdre, \textit{Foutoir Zutique}, 330-331.

\textsuperscript{470} Alfred Delvau and Jules Choux, \textit{Dictionnaire érotique moderne}, 3rd ed. rev. (Freetown [Brussels]: Imprimerie de la Bibliomaniac company [J. Gay], 1875), 133.

\textsuperscript{471} The poem’s pun allows the title itself to take on ambiguity, thanks to the preposition “Sur”; these monosyllables, too, may represent an ineffective fiddling with rhymes.
Douce Voix.
Vois,

Tout se Fait Laid.\(^472\)

Assuming that line 12 should be pronounced “tou’se,” in order to maintain the sonnet’s overall monosyllabism and to rhyme with “douce” on line 9, Cabaner’s sonnet displays a number of other formal irregularities.\(^473\) The quatrains offer a highly irregular combination of alternating and enclosed rhymes (ABAB / ABBA) that closely resembles the pattern “Le martyr de saint Labre” used in 1866; the tercets depart from canonical models altogether by inverting the couplet and enclosed rhyme (CDD / CEE).

In this case, the formal chaos of “Mérat à sa muse” matches the unsettled landscape that the poem describes. The title’s reference to Mérat’s paean to the female form, L’Idole, situates the poem around 1869, when the collection was published, and thus shows the poet anticipating the effects of the Franco-Prussian War. These references set the parameters of the poem’s language, establishing that the speaker is Mérat, his “chère” is the figure behind L’Idole, and the subject is the coming war. Within these parameters, however, the meaning of Cabaner’s parody is less definite. Since Cabaner’s Mérat seems mainly concerned that war will make everything ugly, the poem ridicules the social and political disengagement of l’art pour l’art. The poet’s address to his muse is equally suggestive, however. Protesting concern that the war will silence her “Douce / Voix,” the poet somewhat disingenuously fails to consider that the idol of his verse

\(^{472}\) *Album Zutique*, 87. In Chevrier’s view, this monosyllabic sonnet is “un des plus réussis car de style très fluide.” It was published in *La Nouvelle Lune* in 1882. Chevrier, “Sonnets,” 43.

\(^{473}\) Chevrier observes that monosyllabic words with a silent “e,” such as “le” and “je,” could be treated as forming a single syllable with a preceding monosyllabic word: “Ces licences osées à l’époque sont induites par la difficulté de la contrainte.” Chevrier, “Sonnets,” 40.
never speaks. Indeed, in his poetic imagination, she is a statue, and thus his muse’s qualities would appear to be strictly visual.

Cabaner’s sonnet raises thorny questions about the origins of the lyric voice. That voice either emanates from a silent muse, or the poet troubled by the ugliness of war projects it onto her while other, less “sweet” voices make themselves heard. “Mérat à sa muse” parodies this poetic impoverishment with its own noticeably limited language. Except for the sufficient B-rhyme (“chère,” “guerre”; “faire,” “taire”), all of the rhymes are poor, and the A-rhyme consists principally of words that are barely words: “Ah!” is an interjection with no concrete semantic meaning, “ta” and “la” are clitic pronouns dependent on subsequent nouns, and “va” appears as an auxiliary verb in the futur proche construction “Va / Faire / Taire.” Through the use of its telegraphic function, the poem contrasts this empty language with the referential freight carried by its undernourished rhymes elsewhere in the poem. “Mérat à sa muse” proposes a subtle critique of a Parnassian lyric voice, and gestures toward the expressive potential of the monosyllabic sonnet.

From Hugo’s beacon to Verlaine’s frustrated “poète moderne,” the range of telegraphic poetics that I have studied in this chapter test two key ideas. First, and most obviously, the telegraphic function can be used to parody the voice of poetry, whether to indict the artistic sterility of capitalist culture or the artistic sterility of Parnassian formalism. Second, as I have sought to demonstrate, the telegraphic function can be used to experiment with new poetic language, rhythms, and territory. These experiments include the landscapes of Lautréamont’s electric lampe poétique and Rimbaud’s “Bateau ivre”; they include the rhymes of “Fêtes de la

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474 The sweetness and proximity to silence of the muse’s voice recalls Verlaine’s “Mon rêve familier,” from his 1866 Poèmes saturniens: “Son regard est pareil au regard des statues, / Et pour sa voix, lointaine, et calme, et grave, elle a / L’inflexion des voix chères qui se sont tues.” Verlaine, Poèmes saturniens, 94, l. 12-14.
faim” and the monosyllabic sonnets. All of these poems draw on the telegraphic function in order to try out new means of expression and to discover new poetic codes. In this sense, the telegraphic experiments of the Parnassian moment are distinct from the later telegraphic verse developed within Decadent poetics. Jean de Palacio describes this telegraphic style in terms of the movement’s broader “volonté de raréfaction de la parole,” itself implicated in the search for “une stylistique du silence.”475 But, as I have shown, the poets who explored with the telegraphic function in the early 1870s were preoccupied not with any “principe de condensation, de brièveté, de réduction de l’écriture” as such.476 Instead, they experimented with how poetry communicates meaning, investigating universal languages and probing the poetic limits of reference. Like Corbière’s “I Sonnet,” where the poet follows rhyme-posts along the telegraph wires, Rimbaud’s “Ce qu’on dit au Poète à propos de fleurs” provides a powerful image of telegraphic poetics; but the poet transformed into an iron lyre, with telegraph poles soldered to his shoulder plates, also points the way toward understanding the urgent and provocative role played by the telegraphic function in poetry of the Parnassian moment.

475 Palacio, Silence du texte, 8-9.
476 Ibid., 130.
CHAPTER FOUR
New worlds, “beauté extra-terrestre”: Charles Cros and Parnassianism

In April 1874, the fledgling *Revue du monde nouveau* published a blistering attack on Parnassianism, by way of applauding an emerging—and imaginary—group called the Totalistes. Placed unobtrusively among theater reviews and concert notices in the journal’s second issue, the essay foretells the end of the “École parnassienne”: whereas this school promoted “la nécessité artistique du vers correct, des rimes soignées, de la couleur exacte,” the Totalistes promise to do them one better (*CCOC*, 382). “Parnassiens,” they proclaim, “vous n’êtes ni nouveaux, ni précis, ni corrects. Votre versification est banale ; votre esthétique lâchée” (*CCOC*, 383). The essay gives two examples of this new poetry practiced by the “Église des Totalistes,” intended to correct the Parnassians’ sloppy form. “Rimes totales” are verses whose rhyme takes up the whole line; they are completely homophonous, yet semantically distinct. Conversely, the “sonnets monosyllabiques” credited here to the Totalistes are made up entirely of end-rhymes. “Pauvres parnassiens rigoureux,” concludes the essay, “que faire devant de pareilles armes ?” (*CCOC*, 384-385).

Although unsigned and untitled, this provocative piece has been dubbed “L’Église des Totalistes” and widely attributed to Charles Cros, poet and editor of the *Revue du monde nouveau* (*CCOC*, 1197n1). Yet the comically exaggerated “rigor” of the Totalistes’ innovative “rimes totales” and monosyllabic sonnets inscribe the essay in a tradition of Parnassian parody. To begin with, neither form was actually new in 1874. Inspired by the language games of the Grands Rhétoriqueurs, holorimes have been credited to Victor Hugo; while the monosyllabic sonnet was already included in Banville’s *Petit Traité de versification française* in 1872, which
cited Paul de Rességuier’s 1835 poem, “Épitaphe.” The latter form had already been used to mock Parnassian versification in the 1867 *Parnassiculet contemporain*, edited by Alphonse Daudet, while two of the three monosyllabic sonnets offered in “L’Église des Totalistes” were first written in the Album Zutique. Reactivating the telegraphic parody of these experimental poems in a public forum, Cros also reactivates the critical bite of the parodic tradition reflected in the issue’s list of collaborators: the *Revue du monde nouveau’s* April offering contains work by Daudet, as well as Germain Nouveau and Léon Valade, Zutistes who contributed extensively to the Album. According to Louis Forestier, Cros’s biographer and most prominent scholar, the publication of “L’Église des Totalistes” not only described an fictional schism, but also inaugurated a real and lasting split between Cros himself and the “École parnassienne.”

To locate a precise moment of rupture in “L’Église des Totalistes,” however, is inevitably to constitute a “before” and an “after” on either side of April 1874 that proves an uneasy fit for the understanding of the Parnassian moment proposed by this dissertation. It is true, for example, that two of Cros’s poems figured in the second *Parnasse contemporain*, published from 1869 to 1871, but that he disappeared from the third *Parnasse contemporain* in 1876, and that same year, co-authored a volume of Parnassian parodies called *Dixains réalistes*. So oversimplified, the narrative of rupture might suggest that Cros was a Parnassian prior to 1874 and subsequently not a Parnassian, and indeed, some of his early poems have been held up to

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477 The holorimes generally associated with Hugo are difficult to source and date, but, assuming that he did in fact write them, the lines would seem likely to have originated from the first 52 years of his poetic career, rather than the last eight. For discussion of this parodic tradition and, in particular, its telegraphic experimental poems, see chapter 3.


480 Ibid., 145. “Un fossé se creuse, qu’approfondissent d’autres textes : ‘L’Église des Totalistes,’ par exemple ; lente, mais sûre rupture avec le Parnasse et ses héritiers s'accomplit […].”

exemplify the Impassible stereotype of Parnassianism. Forestier holds that although the break was definitive, the relationship itself between Cros and Parnassianism had never been strong, and argues that the poet’s early work was, at most, Parnassian only at first glance. But the main lesson of Cros’s early literary career, including “L’Église des Totalistes,” concerns the closeness and porousness of poetic movements during the Parnassian moment.

Throughout the decade following his arrival in Paris, in 1866, Cros’s literary connections exemplified the heterogeneousness of the period’s poetic landscape. Cros frequented the salons of his brother Dr. Antoine Cros, astronomer Camille Flammarion, and socialite Nina de Villard. He published poems in magazines, like André Gill’s La Parodie, and in the Parnasse contemporain. Cros attended the dinners of the Vilains Bonshommes, which brought together Paul Verlaine and François Coppée, as well as the meetings of the Cercle Zutique, which brought together Rimbaud and Valade. While helping to fill the anarchic pages of the Album Zutique in 1871-1872, Cros began to publish regularly in the La Renaissance littéraire et artistique, a weekly review with criticism and original literature. He debuted his first full collection of verse, Le coffret de santal, in the spring of 1873, and followed up in 1874 by launching the Revue du monde nouveau, which featured Cros as the editor for the first two of its three total issues. The jury of the third Parnasse contemporain rejected his submission in 1875—perhaps

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482 For example, Whidden, Leaving Parnassus, 34-41.
483 Forestier, Charles Cros, 68. Whidden and Forestier both refer to “La Dame en pierre,” one of Cros’s poems featured in Le Parnasse contemporain; the poem serves Whidden as an example of Parnassianism, while Forestier cites it as a text whose surface-level Parnassianism conceals Cros’s originality. See also Forestier, Charles Cros, 358.
484 Ibid., 48-49; on Nina’s salon, see also 61-62.
485 Ibid., 68-69.
486 Ibid., 102-108. It should be observed that these dinners continued, with Cros and Verlaine present, after the Commune.
487 The publication of Le coffret de santal will be discussed below. For further detail on the appearance and disappearance of the Revue du monde nouveau, see Forestier, “Élaboration du Revue du monde nouveau,” in Agencer un monde nouveau, ed. Louis Forestier (Paris: Lettres modernes, 1976), 125-127.
due in part to the jealousy of jury member Anatole France, an avid admirer of Cros’s longtime lover Nina de Villard—and the Dixains réalistes appeared in 1876, signed by Cros, alongside Nina, Nouveau, Jean Richepin, and Maurice Rollinat. Except for a revised and somewhat augmented edition of Le coffret de santal in 1879, Cros returned to publishing in magazines for the rest of his life, as he became a fixture at the cafés and cabarets of the fumistes.

During the decade of the Parnassian moment, however, Cros rubbed shoulders with Rimbaud and Sully Prudhomme alike. Aesthetically and in literary-sociological terms, Cros remained close to the l’art pour l’art philosophy of the Parnassian moment, even as he moved farther away from the conservative politics of some Parnassians. The journal he founded, the Revue du monde nouveau, published Leconte de Lisle and Germain Nouveau, Heredia and Richepin. It has been argued by Louis Forestier that, as the only two journals designed to express “les aspirations des jeunes écrivains” between 1870 and 1875, La Renaissance and the Revue were companions and competitors. Forestier adds that La Renaissance was fundamentally aligned with Parnassianism, while the Revue was “délébérément ouverte à toutes les questions d’esthétique moderne.” According to Forestier, such Parnassian luminaries as Leconte de Lisle, Banville, and Sully Prudhomme contributed to the first issue of the Revue not due to any real connections with Cros’s work, but above all because there were so few periodicals in which

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488 Forestier, Charles Cros, 143-144. I return to the Dixains réalistes below, in the conclusion.
491 Ibid., 121.
to publish poetry. The relationship that Forestier outlines between the two journals, in a sense, offers an analogy with the relationship between the Vilains Bonshommes and the Cercle Zutique. Just as the Vilains Bonshommes are supposed to represent a fustier, more Parnassian and less avant-garde version of the Cercle Zutique, Forestier supposes *La Renaissance littéraire et artistique* to represent a fustier, more Parnassian and less avant-garde version of the *Revue du monde nouveau*.

And yet Cros continued to attend the dinners of the Vilains Bonshommes, and the poetic diversity of the Parnassian moment is on display in *La Renaissance*, published weekly from February 1872 to May 1874. Like *La Revue du Monde Nouveau*, its pages boasted work by writers closely identified with the *Parnasse* label as well as a healthy chunk of the Cercle Zutique, including a dozen pieces by Cros and many more by Valade, plus works by Gill, Pelletan, Richepin, Nouveau, Verlaine, and even Rimbaud. Reflective of the Parnassian moment’s eclecticism, *La Renaissance* also displays the moment’s broad interest in scientific poetry and the figure of Venus in particular. Several poets continue to explore the dual aesthetic and scientific significance of the Parnassian moment’s Venus in *La Renaissance*. The journal’s second issue juxtaposes Émile Blémont’s “Ad Alta,” directed toward “Vénus, la beauté suprême” (l. 2), with Jean Aicard’s “L’astre,” a paean to discovering the unknown. “L’Étoile du matin” by Louis-Xavier de Ricard, for example, shows Venus—Beauty and the morning star—offering hope to a poet despairing of the night and “l’implacable inconnu qui m’obsède et

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492 Ibid., 117.
494 For discussion of the figure of Venus during the Parnassian moment, see above, chapter 2.
me poursuit” (l. 5). Blémont returns to the ambivalent figure in “Portraits sans modèles,” which invokes both goddess and star: “J’ai vu passer Vénus, dans un ciel, loin de nous; / Mes yeux étaient fermés et ce n’était qu’un rêve: / Apollon, dieu du jour, chantait à ses genoux” (l. 65-67).

The whimsical “Gazette rimée” that appeared in the March 29, 1874 issue of *La Renaissance* offers a particularly interesting investigation of the intersection between scientific discourse and *l’art pour l’art*. A recurring feature signed by Silvius, a pseudonym used by Léon Valade, the “Gazette rimée” offered a light take, in light verse, on topics in the news. The March 29 poem, subtitled “La tache noire,” examines the hostile reception of Jean-Baptiste Carpeaux’s statuary, and his female nudes in particular. “La tache noire” begins with a reference to the literal black mark that vandals made on “La Danse,” a controversial piece by Carpeaux located at the Opéra Garnier. Unveiled in July 1869 as the Opéra was under construction and roundly condemned for the erotic character of its *bacchantes*, “La Danse” was splattered with black ink later that summer, during the night of August 26, 1869. The statue was chemically scrubbed clean the following week, and remained in place despite this protest of its obscenity.

Valade writes,

> Et le scandale aussi sortit de la mémoire …
> Mais, ô nos édiles, veillez :
> Plus menaçante, ailleurs qu’aux marbres nettoyés,
> La revoici, la tache noire !

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498 Silvius [Léon Valade], “Gazette Rimée. La tache noire,” *La Renaissance littéraire et artistique*, March 29, 1874.
499 Alain Chevrier has recently called attention to Valade’s series of “Gazettes rimées” in *La Renaissance*, by suggesting that “Réclames gratuites” (Sept. 1872) may have inspired Rimbaud’s “Paris” in the *Album Zutique*. Chevrier, “Le ‘Paris’ Zutique de Rimbaud est-il la parodie d’un poème de Valade?,” *Parade Sauvage* no. 26 (2015), 119-120.
Ce n’est plus un crachat d’encre bourbeuse sur
La blanche nudité d’un groupe,
Mais une ombre d’un noir profond, qui se découpe
Comme un long crêpe sur l’azur. (l. 9-16)

The black mark’s return alludes to the recent furor over Carpeaux’s “Fontaine de l’Observatoire.” This statue, in which personifications of Europe, Asia, Africa, and America hold up the globe, was also roundly condemned for the erotic and chaotic character of its female forms. Valade inveighs against the creeping, hysterical censoriousness stifling “la belle floraison des marbres” (l. 20). Although the “princesses de France et leurs robes en cône” (l. 31) can remain in the Luxembourg gardens under such a puritanical regime, Valade imagines Naiads, bacchantes, and indeed Eve herself leaving their pedestals to flee the “ombre prude” (l. 21).

At first glance, “La tache noire” seems to center purely on aesthetic issues, making a l’art pour l’art argument for keeping morality and politics out of artistic creation and judgment. And yet, without abandoning its l’art pour l’art convictions, the poem draws on a rich scientific context to add another dimension to its theme. The specific context is, of course, the Transit of Venus: now less than a year away, the Transit was filling column inches and lecture halls in the spring of 1874. Curiously for a poem about statuary, “La tache noire” does not name drop Venus, the goddess of beauty and popular subject of statuary and poetry. However, its title and main motif—the black mark—is semantically very close to “la goutte noire,” the famous black

501 Claretie, J.-B. Carpeaux, 43-44. “J’aime moins les Quatre Parties du monde soutenant la sphère, groupe qui orne une fontaine du Luxembourg. C’est encore la danse, et une danse forcenée, qu’exécutent, à l’ombre de la sphère qu’elles soutiennent de leurs bras maigres, les quatr es femmes de Carpeaux, placées ainsi sous les signes du Zodiaque et représentant les quatre parties du monde. Il semble que ce soient là les mêmes femmes que celles du groupe de l’Opéra, mais vieillies par une débauche nouvelle, et qui continuent leur quadrille échevelé. […] Ces maigres malsaines, ces flancs épuisés, ces mines allongées et creusées se tortillent dans une ronde bizarre et cependant entraînante.” See also Laure de Margerie, “Fountain of the Observatory,” in Carpeaux, 166.

502 See chapter 1 and appendix A.
drop that appeared during Transit observations and rendered the results uncertain. According to the poem, the “tache noire” that appears on the statues’ marble bodies has a parallel effect, marring their beauty for the viewer. The invocation of the Fontaine de l’Observatoire and the Luxembourg gardens then has a deeper resonance, due to the artificial Transit machine that was tested between the Observatoire and the Senate, at the eastern end of the gardens. A rare foray into experimental astronomy, this machine was intended to investigate the mechanics of the black drop effect, and to provide scientists an opportunity to practice the observation of an otherwise extremely rare event. The tests facilitated by the machine were also intended to help clarify astronomers’ debate over whether to use photography to observe the Transit, or to rely on the human eye alone.

Valade’s “Gazette rimée : La tache noire” thus makes use of language and a location that layer scientific concerns over its discussion of artistic censorship, adding to the complexity of this apparently slight poem. In fact, “La tache noire” explores the impact that different media have on representation: statuary’s vulnerability to defacement and censorship, to be sure, but also the promise of photography to eliminate human interference in the production of images, and the ambivalence of the written word, which can spill “l’encre de la petite vertu” (l. 8) just as easily as it can create beauty. Valade’s “La tache noire” recalls the final two poems of his good friend Albert Mérat’s L’Idole, where the poet laments the infringement of a morality that prevents him from portraying his statue’s buttocks and sex in verse. Although neither statuary, photography, nor poetry offers a perfect solution to the problem of external intervention, the co-presence of all three media in the Luxembourg gardens offers Valade the means to measure the distance between hypocritical viewers and the aesthetic ideal. In the poem’s concluding stanzas, a
“Tartuffe” walking in the garden no longer sees “la noble forme humaine” (l. 39); “l’art libre” (l. 41) has retreated outside the purview of the black mark, which is now revealed to be the shadow of the moralizer’s hat, “noire et projetée aux deux bouts du pays” (l. 43). Underneath this shadow, the viewer finds herself farther removed than ever from the artistic ideal of beauty.\footnote{Teyssèdre has discussed the polemics over “La Danse,” and particularly the role of Mgr. Dupanloup, in the context of the Album Zutique. Valade was a key member of the Cercle Zutique; Carjat and Pelletan were engaged in favor of Carpeaux in 1870 and 1871. See Teyssèdre, Foutoir Zutique, 509-511.}


La Renaissance had already published another, more unusual text that experimented with similar issues: Charles Cros’s “Un drame interastral.” Published in the August 24, 1872 issue, “Un drame interastral” is a short prose text whose dateline sets the story in “La Esperanza, 24 août 2872.” The first sentence confirms the fantaisie: “L’ordonnance CXVIIe du 32e Grand-Maître de l’Astronomie terrestre a soulevé les criailleries de toute le parti goguenard” (CCOC, 370). Although Cros liberally salts the text with amusing details about this future, “Un drame interastral” tells a simple tale of boy meets girl. In this case, the boy, Glaux, is the son of an astronomer charged with maintaining the scholarly interchange of plant life between the Earth and Venus. The two planets have established communication by means of enormously powerful telescopes, and send each other images to be photographed and archived as well as messages in the “langage interastral” (CCOC, 375). Although the astronomers are supposed to treat their solemn duty with the utmost gravity, Glaux stumbles into an accidental exchange with a Venusian woman who happens by the communication post. Thanks to “sa beauté extra-terrestre” (CCOC, 374) which the narrator deliberately declines to describe, Glaux immediately falls in love. The two begin a clandestine correspondence that lasts three years, and spurs Glaux to develop technological improvements for interplanetary communication. He devises a method of sending sound, transcribed in waves and “reproduit dans l’appareil électrique à diapasons,” so
that he and his Venusian girlfriend can hear each other’s voices. Glaux also comes up with something like cinema:

*Ils crurent vaincre la distance qui les séparait en échangeant les traces les plus complètes de leurs personnes. Ils s’envoyèrent leurs photographies, par séries suffisantes à la reproduction du relief et des mouvements.*

*Glaux, aux heures où l’observation était close, s’enfermait en une salle et reproduisait dans des fumées ou des poussières l’image mouvante de sa bien-aimée, image impalpable faite de la lumière seule. Il en réalisa aussi la forme immobile en substances plastiques. (CCOC, 375)*

Tragically, the lovers come to despair of the distance separating them, and commit simultaneous suicide on their home planets (CCOC, 376). The fallout jeopardizes interplanetary diplomatic and scientific relations, until the ruling mentioned at the story’s start is adopted: all astronomers must be celibate (CCOC, 371).

Cros’s odd little story has retained the attention of critics in the twenty-first century for two main reasons, both related to its future setting. First, and most obviously, Glaux’s method for “conquering the distance” between Earth and Venus predicts cinema. As Christophe Wall-Romana writes in his 2013 study *Cinepoetry*, Cros describes the key technicities of cinema—serial analysis and serial synthesis of images, as well as the use of smoke or dust as a medium for their projection—well in advance of experiments by Muybridge, Marey, and Edison. “Cinema may well be the paradigmatic imaginary media of the twentieth century,” argues Wall-Romana, “yet even before its technological threshold of execution, nineteenth-century French poets—Cros and Villiers—imagined it.”

Second, “Un drame interastral” constitutes an unusual example of early science fiction. Calling Cros “a lost pioneer” of scientific romance, Brian Stableford has underlined the precariousness of contributing to a genre still taking shape; Stableford files Cros’s

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story under the “false starts and wasted exemplars” of science fiction’s history. Stableford has some harsh words for the story, characterizing it as “primitive by modern standards and none-too-sophisticated by the standards of 1872,” but he also identifies the use of a technique that, he argues, partly defines the genre: the “margin of uncertainty, always leaving something deliberately unspecified or underspecified.”

Yet the fact that it is Venusian beauty that “Un drame interastral” leaves “unspecified or underspecified” indicates a crucial framework for understanding the experimental poem in Cros’s work of the Parnassian moment. “Un drame interastral” is narrated by a distinctive voice, and from the beginning, this narrator emphasizes his sympathy for obliging astronomers to remain celibate. Indeed, he tells Glaux’s story only to rebut the goguenards, whose objections to the rule remind him of the “libre-penseurs, si en faveur il y a quelques siècles” (CCOC, 370). The narrator thus aligns himself with an official morality that explicitly opposes the pure love at the heart of the story. Conversely, Glaux is a poet:

Le jeune homme, doué d’une imagination vive, presque indisciplinée, n’avait aucun goût pour les études astronomiques et ne voulait faire que de la peinture et des vers. Il a du reste laissé des poésies estimées des gens spéciaux, quoi qu’elles aient un caractère d’étrangeté peu admissible pour ceux qui, comme moi, n’admettent que les chefs-d’œuvre normaux et incontestables du XXVe siècle. (CCOC, 372)

However unexpectedly, “Un drame interastral” stages a direct engagement with the logic of l’art pour l’art. Both a poet and an inventor, the hero, Glaux, observes and communicates with an alien Beauty so perfect that the reactionary narrator cannot describe it. Once the Venusian woman enters the story, he demurs, “Ici ma tâche de narrateur devient difficile. Elle serait impossible si précisément l’ordonnance CXVIIe n’avait pas exactement défini les délits de

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509 Ibid., 11.
presse. Je me tiendrai donc strictement dans la loi et je serai très-sobre de détails.” The narrator lets slip only that “nos fleurs les plus somptueuses ne donneraient qu’une idée terne et monotone” of the lady’s finery. He recovers and reminds the reader that high-ranking astronomers “peuvent seuls être exactement renseignés sur ces choses, et cela par d’autres moyens qu’une description faite de mots,” which presumably refer to Glaux’s images and recordings (CCOC, 374).

In “Un drame interastral,” then, the poet’s technical imagination allows him to experiment with new media for connecting to Beauty, and the interference of moral and political discourse represented by the narrator suppresses his innovative work and perverts his ideals. L’art pour l’art and scientific discourse thus intersect in overt and provocative ways. I contend that this framework matters greatly within the broader context of Cros’s work, despite its appearance in a self-consciously silly fantaisie. For one thing, it does not take a huge interpretive leap to see Glaux as an avatar of Cros, himself a poet and inventor. For another, Glaux’s inventions follow closely along the lines of Cros’s own interests; the poet developed photographic processes, a telegraphic device, and an original version of the phonograph. But, as I will discuss below in further detail, Cros also displayed a lifelong commitment to the idea of establishing contact with alien life forms, and specifically Venus. This idea, and Cros’s technical imagination, plays an essential role in many of the poet’s texts—including his lyric poetry.

The rest of this chapter will examine how Cros’s project to signal extraterrestrial life and his poetic project intersect. Critics have long noted the thematic similarity between “Un drame interastral” and a sonnet, “Correspondance interastrale,” that Cros had published in La Renaissance just six weeks earlier and reprinted the next year in Le coffret de santal.510 The

510 Charles Cros, “Correspondance interastrale,” La Renaissance littéraire et artistique, July 6, 1872; CCOC, 1117n2.
poem’s first twelve lines show the poet and his lover, out walking on a hot summer evening. They stop and shiver, under the light of Venus, and the poem concludes: “Sans doute, à cet instant, deux amants, dans Vénus, / Arrêtés en des bois aux parfums inconnus, / Ont, entre deux baisers, regardé notre terre” (CCOC, 124, l. 12-14). By titling the poem “Correspondance interastrale,” Cros plays on the word’s double meaning of both exchange and likeness. The lovers on Earth match the lovers on Venus, but the planet’s light also seems to convey some kind of emotion or impression to them, as evidenced by the “long tressaillement / Sous la sérénité du rayon planétaire” (l. 10-11) that the poet and woman share. Like the scientific fantasy of “Un drame interastral,” the connection between Earth and Venus in “Correspondance interastrale” concerns representation and communication. But unlike “Un drame interastral,” the sonnet provides no explanation of how that connection comes about.

I will argue that the experimental poems in Charles Cros’s Le coffret de santal test the poetic potential of the interplanetary signaling system proposed by Cros in an 1869 pamphlet, “Étude sur les moyens de communication avec les planètes.” The heliographic principles that defined this system animated Cros’s technical imagination in the “Étude” and in Le coffret de santal. The heliograph is a simple set of plane mirrors designed to concentrate reflected light into a powerful signal. This instrument was used both with telegraphic codes to communicate, and with surveying methods to observe subjects’ positions. Because representation and communication play important roles, my discussion will refer to the photographic and telegraphic poetics studied in chapters two and three. But the central challenge of the heliograph relates to distance. The poems that I will analyze from Le coffret de santal experiment with different configurations of light, mirrors, and rhythms in order to sound the space separating between the poet and the woman he loves; at the same time, Cros tests the poetic medium’s
heliographic capacity to represent the woman and an express a message intended for her. Ambitious and complex, Cros’s heliographic poetry explores the possibilities of interplanetary signaling technology to bridge the distance between the poet and his Venus.

“Ma réponse aux mondes lointains”: Cros’s heliography

Before turning to look at poems from *Le coffret de santal*, I would like to take a step back and take a broader view of Charles Cros’s extraordinary career. This career was not noteworthy for its success. On the contrary, failures and bad luck littered Cros’s life; he was just forty-five years old, destitute, and ravaged by alcoholism when he died in 1888. But what Cros may have lacked in success, he made up for in the sheer scope of his activity. As the “Étude” indicates, Cros pursued scientific work in addition to poetry for more than two decades. One of the era’s few figures to practice in both fields, he notched impressive achievements in each. In addition to the highlights of his literary career discussed above, Cros conducted original scientific research on topics ranging from cerebral mechanics to artificial jewels. Cros is best remembered as the inventor of the phonograph, which he called the paleophone and described several months earlier than Thomas Edison did. Cros never received credit for the invention, however, and his most enduring literary legacy proved to be the nonsense poem “Le Hareng Saur.”

The combination of this apparently bifurcated career and Cros’s lack of widespread recognition have often led the critics who remember him to conclude that Cros stretched himself too thin. In 1925, Gustave Kahn wrote of his friend, “Charles Cros était complexe ; il possédait mille aptitudes, il avait lyriquement et scientifiquement des idées de poète. C’est par complexité

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qu’il manquait d’esprit de suite.” The essentially poetic nature of his work, according to Kahn, was bound up in his failures. “Car si Charles Cros savant fut dirigé par des idées de poète,” argued Kahn, “l’habitude des sciences nuisit en lui à l’expansion de sa poésie.” Where Kahn saw the infringement of scientific reasoning and restraint on Cros’s verse, nearly a century later Brian Stableford hailed the extraordinary ruin of the last Renaissance man, “the only man of his era who spanned the two cultures of practical science and literature so comprehensively and cleverly.” On the one hand, Stableford suggests, Cros was not a success, and “dismally” so. On the other, the breadth of his ambitions deserves appreciation.

Charles Cros himself helped to shape the notion of the dreamy, impractical poet-scientist, doomed to languish due to the very grandeur of his ideas. Perhaps Cros’s most frequently cited text, the poem “Inscription” lays out a poetic self-evaluation that stresses his scientific accomplishments. “Inscription” thus provides a clear and convenient example of Cros’s poetic and scientific work converging; Friedrich Kittler has called it “a belated monument to honor his inventions.” This poem, which was published in *Le Chat noir* in 1885 and again in 1891, after the poet’s death, eventually became a *de facto* preface when it was set at the head of the posthumous collection *Le collier des griffes*, in 1908. The first of its six stanzas presents the poet as a romantic daydreamer, battered by a harsh world but rich in spirit: “Mon âme est comme

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513 Ibid., 59.
516 For publication history, see *CCOC*, 1143.
un ciel sans bornes” (*CCOC*, 167, l. 1), writes Cros. “Aussi, malgré le mal, ma vie / De tant de diamants ravie / Se mire au ruisseau de mes vers” (l. 4-6). The diamonds sparkling in the verses of “Inscription” are Cros’s inventions, and in a stanza devoted to the phonograph, the poet details his wish to preserve “les voix aimées” and repeat the joy of music. “Le temps veut fuir, je le soumets” (*CCOC*, 168, l. 30), he declares.

The interest of such an assertion notwithstanding, the most intriguing stanza of “Inscription” concerns Cros’s proposal for a system of interplanetary communication. While the phonograph verse arrives triumphantly at the end of the poem, as Cros imagines how his genius will someday be fully appreciated, the heliographic verse is placed at the beginning, where it evokes a metapoetic role.

> Je dirai donc en ces paroles  
> Mes visions qu’on croyait folles,  
> Ma réponse aux mondes lointains  
> Qui nous adressaient leurs messages,  
> Eclairs incompris de nos sages  
> Et qui, lassés, se sont éteints. (l. 7-12)

“These words”: the poem that follows will “speak” the poet’s “visions,” or inventions, but it will also be a “response” to messages sent from far away and apparently never received. If the significance of Cros’s “visions” is relatively transparent throughout the rest of “Inscription,” the significance of his “response” constitutes a direct and remarkable reference to the proposal laid out in the “Étude sur les moyens de communications avec les planètes,” a short pamphlet that Cros had published more than 15 years earlier.

Cros’s study presents a plan to establish contact with Mars and Venus through the use of a powerful light signal. Cros sent a copy of the text to the Académie des sciences in July 1869, and it was published the next month in *Cosmos*, a weekly journal of scientific vulgarization edited by Victor Meunier. *Cosmos*’s publisher, Gauthier-Villars, printed the article as a
standalone booklet in the fall of that year and sold it for 1F apiece.\footnote{517} At fifteen pages, this slim study nonetheless provides a complete overview of the project, divided into three parts.\footnote{518} The first section introduces the idea and explains the central scientific principle in basic terms: since the intensity of light diminishes as the distance it travels increases, a sufficiently strong and concentrated light could be visible over the millions of kilometers separating Earth from its neighboring planets. Furthermore, since humans can neither be sure that the planets are uninhabited nor that the attempt at signaling would be unreciprocated, there is every interest in attempting to construct this light signal. Cros suggests placing an electric light source at the focal point of a large parabolic mirror, which reflects the light into a single, powerful beam. In order to aim a brighter light toward the planet, Cros writes, many mirrors can be combined, along with their light sources, on a parallactic mount. From alien lands, alien eyes might then observe Earth’s signal (CCOC, 510-515). The second section describes how the signal could form the basis of a code, made up of “éclairs,” or flashes (CCOC, 517). The final section sketches some of Cros’s ambitions for interplanetary communication, and mentions that strange “points brillants” have already observed on Mercury, Mars, and Venus. “Il y a eu peut-être des signaux adressés, et les hommes ne les ont pas vus,” writes Cros; “peut-être même nous en envoie-t-on aujourd’hui sans qu’on y fasse attention” (CCOC, 523).


\footnote{518} It received one enthusiastic review in the daily press; see Edmond Perrier, “Les habitants des étoiles,” Le National, Feb. 15, 1870, http://gallica.bnf.fr/ark:/12148/bpt6k6825725g. Villefranche was less convinced: “Pour rechercher cet avenir, nous n’irons pas jusqu’à la lune et aux planètes, avec lesquels certains savants comptent bien nous mettre un jour en correspondance réglée. M. Charles Cros, entr’autres, suppose que certains points brillants observés par les astronomes sur Vénus, Mars et Jupiter, pourraient bien être des appels au monde terrestre. Il propose, en conséquence, de leur envoyer à notre tour des faisceaux de rayons lumineux, par le moyen de miroirs paraboliques, et il ne doute point qu’on arrive à s’entendre, en espaçant convenablement les signaux, si tant est que les habitants de Mars et de Vénus soient aussi intelligents que les parisiens logés aux frais de l’État à l’Observatoire … et qu’il y ait des habitants dans Mars et dans Vénus.” Villefranche, Télégraphie française, 196-197.
With this study in mind, it becomes easy to see that this verse of “Inscription” identifies the poet’s words with interplanetary communication. The “points brillants” that Cros alludes to in the “Étude” are the “éclairs incompris de nos sages” (l. 11) that, according to the poet of “Inscription,” have ceased to appear, “se sont éteints” (l. 12). These “éclairs” represented the messages addressed to “us” from “mondes lointains”—the same “mondes lointains” that Cros’s “Étude” argues humanity should contact, namely Mars and Venus (CCOC, 1144n2). In “Inscription,” the poet seems to have given up hope that the rest of humanity will grasp the significance of interplanetary communication, but crucially, the poem itself is offered up as his “réponse” to the extraterrestrial call. Because the heliographic system set out in the “Étude” is modeled on the “points brillants” seen on the planets, it is reasonable to conclude that Cros’s poetic response will be similarly modeled on the “éclairs” the inhabitants of those faraway worlds have directed at Earth. While the subsequent stanzas all stress the contents of the poet’s “visions qu’on croyait folles,” the second verse makes a startling claim that his words and thus his poetry are themselves heliographic. This claim adds another layer of meaning to the poem’s title. A funerary monument, the “inscription” boasts of Cros’s technological inventions; the text may record his photographic and phonographic achievements, but the poet designs the text to be a interplanetary message, a heliographic inscription.

However silly contacting Mars by means of mirrors and light might seem, the project was undoubtedly important to Cros. In May 1869, several months before publishing the “Étude sur les moyens de communication avec les planètes,” Cros gave a public lecture on the idea at the Salle des Capucines, with the encouragement of his friend Camille Flammarion.519 (Flammarion liked Cros’s proposal so much that he reprinted it several times in his own publications between

519 Camille Flammarion, Mémoires, 480.
He sent a second note to the Académie des sciences on the subject in September 1873, attempting to persuade the institution’s scientists to look carefully for “points lumineux” on Venus’s surface during the upcoming Transit observations; he lectured on the subject again at the Salle des Capucines in December 1874, when interest in the Transit was at its height. Cros referred to observation of the 1874 Transit of Venus and of the surface of Mars in the last notes he addressed to the Académie, dated 1887 and 1888. If issues of interplanetary distance and communication were again on Cros’s mind at the end of his life, when he published “Inscription,” the heliographic project to make contact with alien life was clearly also a major scientific—and, I will argue, poetic—preoccupation for Cros throughout the late 1860s and early 1870s.

Although Cros failed to generate investment in his interplanetary light, the project described by “Étude sur les moyens de communication avec les planètes” represents a plausible development of the period’s existing heliographic technology. The first such device was fashioned in 1821 by German mathematician Carl Friedrich Gauss, who called it a heliotrope; he was engaged in a large-scale geodesic survey of the Kingdom of Hanover, and wanted a way of measuring greater distances by sight than was otherwise possible. Gauss’s heliotrope positioned a set of two mirrors to reflect sunlight into a beam, which could be seen from dozens of miles.

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522 Forestier, Charles Cros, 232.
523 Bühler, Gauss, 95-96.
of miles away.\textsuperscript{524} The heliographic signal would be carefully oriented along the sight line of an observer, who would then measure the angle formed between different points that indicated by the signal. These points formed a network of triangles covering the territory to be measured. Determining the size of the angles and length of the edges for each triangle was painstaking work, but heliographic signaling and careful observation allowed for more accurate evaluation of Hanover’s breadth and thus the production of more accurate maps.\textsuperscript{525}

Along with its use in geodesic observations like Gauss’s Hanover survey, the heliograph was soon drafted into service as a military signaling apparatus. In this application, the heliograph was often called the optical telegraph, and indeed, the analogy with the electric telegraph is straightforward.\textsuperscript{526} While the latter conquered distance by sending messages between Paris and Marseille in the blink of an eye, it also required extensive infrastructure—transmitters, receivers, thousands of miles of telegraph wire held up by thousands of telegraph poles, and a functioning electric current. Gauss’s heliotrope, on the other hand, required little more than a mirror and sunlight to produce a signal visible for many miles. This simplicity, recognized Jules Leseurre, made the heliograph an attractive choice for French army communications in Algeria.\textsuperscript{527}

Leseurre published his proposal in the fall of 1855, authoring a two-part article in \textit{Annales télégraphiques}. Leseurre compares northern Algeria, where installation of an electric telegraph

\textsuperscript{524} \textit{Catalogue et prix des instruments d’optique}, 103. “Dans la mesure des degrés, en Hanovre, on s’est servi de l’héliotrope à 39 kilomètres de distance. Dans d’autres opérations, les héliotropes étaient à une distance de 100 km.”

\textsuperscript{525} Bühler, Gauss, 95-96.

\textsuperscript{526} \textit{Catalogue et prix d’instruments}, 104. “On perdrait une partie des avantages de cette méthode si les observateurs ne conservaient pas le moyen de communiquer entre eux, à l’aide de leurs héliotropes. C’est ce qu’il est facile d’obtenir en convenant qu’un certain nombre d’éclairs envoyés indique telle demande ou telle réponse.” The catalogue makes a distinction between Gauss’s heliotrope and Stierlin’s “héliotrope auxiliaire”: the latter “sert à établir une communication entre un observateur et un héliotrope.” The heliograph is not to be confused with the semaphore towers of Chappe’s optical telegraph, sometimes called the aerial telegraph; see chapter 3.

\textsuperscript{527} Leseurre, “Héliographe,” 118.
network was underway, to southern Algeria, where no infrastructure was in place and the French army struggled to maintain control. As ill-suited as the machinery of electric telegraphy was to the southern deserts, Leseurre argues, the heliograph offered a perfect fit: “Le soleil, dont la continuelle présence a créé dans le sud de l’Algérie un sol exceptionnel, inaccessible à nos procédés télégraphiques ordinaires, nous offre aussi une source de signaux exceptionnelle plus puissante que les moyens aériens qu’ils nous interdit,” writes Leseurre. “Des miroirs empruntant au soleil sa lumière lanceront des éclairs, qui, convenablement dirigés, formeront et même peut-être écriront des signaux.”

Leseurre’s heliograph combines two mirrors—one movable, to capture the sunlight, and the other fixed, to reflect the beam outward—and a shutter, for signaling; mounted on a tripod, outfitted with a compass and level for precise positioning, and weighing about 17 pounds, the device could be carried in a convenient wooden box. Leseurre suggests using Morse code for communications and envisions messages in Arabic, assigning combinations of short and long “éclairs” to characters of “l’alphabet d’Afrique.”

Leseurre’s concept of military heliographic signaling failed to get off the ground in the 1850s, but found new life in the 1870s thanks to the efforts of Colonel Aimé Laussedat. With a finger in every scientific pie during the second half of the nineteenth century, Laussedat participated in everything from ballooning to astronomical photography. His successful photographic images of solar eclipses in 1860 and 1867, made in Algeria, made him a shoo-in for a role in the Transit of Venus observations, before a disputed claim of priority for inventing the siderostat pushed him out of contention. Laussedat was in any case accustomed to work in faraway places and challenging conditions, thanks to his experience as a surveyor in the Army’s

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528 Ibid., 114.
529 See description by Louis Figuier, MS, 18n1.
531 Canales, “Photogenic Venus,” 597n27. As of December 7, 1872, Laussedat was still part of the expedition. Recueil, vol. 1, part 1, 96.
geodesic service. Starting in the 1850s, he divided his time between fieldwork and the classroom, teaching at the École Polytechnique and the Conservatoire national des arts et métiers. As a professor and a practitioner of geodesic surveying, Laussedat was familiar with Gauss’s heliotrope—angling a mirror to follow the sun set the example for his own photographic siderostat. Laussedat also would have been aware that the Minister of War authorized a new geodesic mission in 1869, charged with completing triangulations for the survey of Algeria and revising the French meridian. When the Franco-Prussian war came to Paris in the fall of 1870, Laussedat headed a governmental commission of scientists summoned to study the workability of optical telegraphy. Blockaded by the Prussian siege, the capital famously improvised emergency communication services via balloons and carrier pigeons, and Laussedat supported introducing the use of heliographs. His commission tested heliography from September through November 1870, placing apparatuses in various forts and succeeding in transmitting messages across a dozen miles. Laussedat openly acknowledged his debt to Gauss’s geodesical invention, and, later, Leseurre’s design; the commission modified the latter device to include an independent light source, for use in night signaling and cloudy conditions. Ultimately little used during the Franco-Prussian war, a military heliographic service was ceaselessly promoted by Laussedat and instituted under his supervision in 1874.

A few key themes emerge from this brief overview of nineteenth-century heliographic technology. First, the heliograph, more so than even the electric telegraph, can go truly anywhere. If the telegraph linked cities, then towns, then villages across the world, the

533 Perrier, Géodésie française, 13-14.
534 Bruel, “Le Colonel Aimé Laussedat,” 117-118. See also appendix C.
heliograph was at home in literally uncharted territory—the deep German woods, the desolate Sahara desert. Associated with romantic notions of exploration and discovery, the heliograph was also primarily exploited by colonial and military institutions. Both its applications to observation and communication benefited the maintenance and expansion of European military hegemony, as well as the capitalist system. The heliograph offered the possibility of contact with impenetrable places; however, it did so in order to measure and map them, or establish communication that assimilates new areas to a familiar, and mercenary, world.

Cros’s heliographic project rejects this militaristic function, and instead finds its inspiration in the device’s romantic, even fantastical quality. As envisioned in “Un drame interastral” and “Correspondance interastral,” interplanetary communication between the Earth and Venus is essentially about love: the love of a human Romeo for his alien Juliet, or love that an alien couple reflects toward a human pair. Although the symbolic equivalence of Venus and love obviously has considerable literary significance, Cros’s “Étude sur les moyens de communication avec les planètes” shows that his heliographic project has extraordinary scientific stakes as well. Once the Earth makes successful contact with the planets, Cros explains, the next task will be to transmit “la totalité du savoir humain” across the vast expanse of space. The idea is unmistakably audacious: Cros asks the reader, “Un monde peut-il apparaître à cette lueur presque imperceptible?” (CCOC, 519). In the “Étude,” that single gleam of light becomes the basis for a system of communicating the whole of human knowledge to extraterrestrial life. As Haun Saussy remarks, the fact that Cros’s heliographic project was never realized does not detract from the momentousness of his innovation; although nearly invisible against the march of successful, consciousness-defining technologies, Saussy argues, “Cros’s proposal does perform,
even if only rhetorically, the major task of a new media invention.” Through the heliograph and its interplanetary code, humanity speaks to unknown worlds across the Solar system.

The code that Cros presents in the “Étude” demonstrates his striking technical imagination and provides a map to his poetry’s heliographic experiments. To borrow Saussy’s phrase, the “new communication” that Cros invents puts the Earth in contact with “some very Other Others,” which shapes his interplanetary heliographic code in critical ways.

Conventional heliography, as well as electric telegraphy, made use of Morse code for signaling; Morse could be adapted to any language and expanded to include every word. Like Morse, the interplanetary code is founded on interrupting the signal to produce discrete units that are then combined to produce a range of significations: the short “dot” and long “dash” of current in electric telegraphy, or heliography’s “flash” of light. Unlike Morse, the interplanetary code cannot rely on a shared linguistic reference between the two parties in communication. Cros must first transform the signal into a code, and next, produce the shared reference of and in the code itself. The heliographic language that Cros designs for this specific medium is thus a truly new language.

The building blocks of Cros’s heliographic language are rhythm and images. The first stages of establishing the code rely on rhythm; as Cros points out, both maintaining the signal light constantly and turning it off randomly risk creating the appearance of an astronomical phenomenon simply not already observed, such as volcanic activity on Earth’s surface or a new star. The signal must, Cros writes, be modified so that “son origine voulue et son but ne restent pas douteux” (CCOC, 516; emphasis Cros’s). In order to display this intentionality, Cros

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538 Ibid., 446.
539 For further discussion of Morse code, see chapter 3.
suggests that the signal transmit the concept of numeration using only three basic signs: the single, double, and triple flash. After this elementary sequence, the signs are combined to indicate higher numbers: a single flash followed by a single flash signifies four, a single flash followed by a double flash signifies five, and so on. With the aim of absolute clarity in these initial stages, Cros recommends that each coded number itself be followed by its equivalent in single flashes, so that the relationship between two single flashes and the number they signify, four, be explicit (CCOC, 517). Split in this way between signifiers and signifieds, Saussy explains that “with this, the relationship between expression and content, or between form and meaning, comes to inhabit the nascent code, making it possible to present to a wholly other observer as ‘meaning’ something. The referent of one series of flashes is another series of flashes.”

Once the heliographic numeration system is in place, Cros describes how it can be used to transmit images between Earth and our alien interlocutors. Rather than the cinematic technique that Cros envisioned in “Un drame interastral,” the method proposed in the “Étude” breaks the image down into individual units and codes each quantity as either “figure” or “background.” In other words, the image is divided into rows of a set length, and each row translated into a sequence of quantities understood to alternate between black units (the figure) and white units (the background). When the transmission of numbers is received, correctly interpreted, and its rows are lined up, the original image is reconstituted in two dimensions. Because the interplanetary code represents numbers through the combination of its three “basic flashes,” the rhythm of the flashes is information-bearing, including not only the rhythm of flashes representing each quantity in the sequence but also the rhythm that indicates the space between quantities. Cros’s system imagines how heliographic technology can support the

conversion of an image into a rhythm and vice versa, creating an equivalence between the two.

“L’étude des rythmes prendra place au même rang que celle des figures,” writes Cros (CCOC, 520). Figures, arranged from the simplest to the most complex, will represent human knowledge, while rhythms will communicate them. Eventually, concepts represented on the figures—such as the colors designated on the figure of a prism decomposing light—can be denoted by a numerical shorthand; Cros gives the example of “17-2” denoting “orange,” pairing the number assigned to the prism figure, 17, with a number assigned the specific element orange, 2 (CCOC, 522).

Although Cros foresees eventual enhancements to his system, perhaps including colored lights, polarized lights, and gaseous projections, images and rhythms form the main components of this “langage interplanétaire” (CCOC, 521). To rely on images and rhythms, after all, makes perfect sense for a medium composed of mirrors and light: the heliograph operates by means of reflection and code. Cros’s interplanetary heliograph exists within a network of images and observations, from the figures representing knowledge to the extraterrestrial observation of Earth’s signal, from the mirror pointed toward the planet to the photographic process of writing an image in light. The device equally exists within a network of rhythms and communication, from its Morse-inspired signaling unit to its creation of a “living” code independent of existent languages, from its Jacquard-inspired system of “numerical notation” patterns to its adoption of light as the surest visible signal (CCOC, 516). But what defines the specifically heliographic nature of Cros’s invention is its engagement of both photographic and telegraphic technicities in a project fundamentally about distance. Heliographic communication with the planets seeks to overcome the distance that separates humanity from other life in the universe; heliographic observation of the planets allows humanity to measure just how far away we are, signaling our position within an immense universal triangulation and hoping to read the signs of another kind
of intelligence. The medium imagined by Cros is heliographic because that medium is always at once a message and an image, intended to at once sound a great distance and to overcome it.

In the next section of this chapter, I will turn to *Le coffret de santal*, the only verse collection that Cros published during his lifetime, to trace Cros’s poetic experiments with the heliographic medium that he invented. By connecting the interplanetary heliograph Cros proposed in the “Étude sur les moyens de communication avec les planètes” with poetry he produced during the Parnassian moment, I wish to show that Cros’s poetic work intersects with an important area of his scientific work. Haun Saussy has discussed understanding the “Étude” in terms of the history of media, and I contend that Cros’s thinking on the heliographic medium informs and enriches his approach to the poetic medium. In this sense, I firmly oppose the stance taken by Gustave Kahn, who held that Cros’s scientific inclinations limited his poetic imagination, just as I firmly oppose Gabriele-Aldo Bertozzi’s provocative contention that the “Étude,” and in fact all of Cros’s scientific output, is not science but actually poetry. Instead, I argue that Cros tested his technical imagination in poetry, experimenting with heliographic verse. The poems that I read from *Le coffret de santal* examine how the text acts as a mirror and a message directed at a feminine ideal that occupies the same symbolic space as Venus: the beautiful woman, the mysterious—almost alien—object of the poet’s love and desire. These poems examine how the heliographic text produces rhythms and images that take stock of the distance between the poet and his Venus, even as his words aim to conquer it.

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**Le coffret de santal**

In the spring of 1873, Charles Cros contracted with a small editor based in Nice to publish a collection of his poetry. Generally oriented toward producing local guides and tourist materials, Gray, the editor, offered little of the power and prestige of the Parnassians’ publisher, Alphonse Lemerre, who had refused to publish the book himself. Although Lemerre agreed to handle the book’s sale in Paris, the legwork of getting the word out about *Le coffret de santal* was left up to the author. Cros drew broadly on his networks, sending out twenty-nine signed and dedicated copies of the first edition to prospective readers, who included poets, critics, and Victor Meunier, scientific vulgarisateur and editor of *Cosmos*. Despite Cros’s best efforts, *Le coffret de santal* failed to make a splash in 1873; only one review has been located, in the June 22 issue of *La Renaissance littéraire et artistique*, and the collection did not sell out its print run of 500.

Cros returned to *Le coffret de santal* several years after its initial publication and prepared a revised edition, in collaboration with a new editor, Tresse. The updated *Coffret de santal* appeared in 1879, had an upgraded print run of 1,000, and encountered no more success than the first. Cros published no other collection of poetry before his death in August 1888. His son, Guy-Charles Cros, edited and oversaw the production of *Le collier des griffes*, comprised of later and previously unpublished poems, in 1908; the same year saw a new edition of *Le coffret de santal*, which the poet Renée Viven had arranged to be reprinted in 1903. Interest in Cros’s work grew throughout the first half of the twentieth century, thanks largely to literary reminiscences by friends, such as Gustave Kahn and Ernest Raynaud, and appreciations by modern poets, like

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542 Forestier, *Charles Cros*, 278.
545 Ibid., 183.
546 See the bibliography included in *CCOC*, 1409-1413.
Vivien and, later, André Breton.\textsuperscript{547} \textit{Le coffret de santal} has now been published dozens of times, and is widely available, if perhaps still not widely read.\textsuperscript{548}

Even among readers of Cros, the 1873 edition of \textit{Le coffret de santal} is little-known. Its continued obscurity owes much to the predominance of the version revised by Cros; adopted as definitive, the latter has appeared in every edition of the collection published since 1879. The 1873 version has been excluded, usually on the grounds that all of its material is present in the 1879 \textit{Coffret de santal}.\textsuperscript{549} Indeed, the revised edition adds 40 new poems to the original 74, for a total of 114, but does not visit any substantive changes upon the older texts. The two versions differ mainly in terms of the collection’s structure (\textit{CCOC}, 44-45). The revised edition has a simpler organization; the poems are grouped into six sections divided more or less by genre. Among “Chansons perpétuelles,” “Passé,” “Drames et Fantaisies,” “Vingt sonnets,” “Grains de sel,” and “Fantaisies en prose,” only “Passé” stands out by lacking a clear formal thrust.\textsuperscript{550}

Four of the six poems that will be studied here find themselves slotted under “Passé” in 1879, while in the 1873 edition, they were distributed across three sections in the middle of the collection. The original organization of \textit{Le coffret de santal} displayed what Louis Forestier has characterized as a slightly clumsy but plainly intentional structure inspired by the “composition triangulaire” favored by Italian Renaissance painters.\textsuperscript{551} According to Forestier, the first section,

\textsuperscript{547} Forestier, \textit{Charles Cros}, 244-245.
\textsuperscript{548} Besides the Pléiade volume cited here, which he shares with Tristan Corbière, two other editions of Cros’s complete works have been published. The first appeared in 1955, and was reprinted in facsimile in 2010; the second, also edited by Forestier, appeared in 1964. \textit{Le coffret de santal} was published as a mass-market paperback, by Gallimard in 1972 and by Garnier-Flammarion in 1979. Complete information on all of these editions may be found in the bibliography.
\textsuperscript{549} None of the editions cited above contains the 1873 version of \textit{Le coffret de santal}, although all except Juin’s presentation at least provide a summary of the older version’s structure.
\textsuperscript{550} Forestier offers a different take; for him, the collection’s 1879 version “suit un plan linéaire puisqu’elle retrace, d’une façon émouvante et magistrale, l’odyssée d’une intelligence et d’une conscience en quête de l’idéal” and its disillusionment. This new \textit{framework} is “beaucoup plus réfléchi, profondément vécu, modelé sur une évolution psychologique”: see \textit{Charles Cros}, 304.
\textsuperscript{551} Ibid., 298.
“Divinations,” contains Cros’s variations on Parnassian themes, and the last, “École buissonnière,” encompasses the daring experiments that bring his work toward an innovative modernity, including prose poems and the subtle nonsense of “Le Hareng Saur.” The second and seventh sections, “Sept Portraits” and “Sept Sonnets,” echo each other, whereas the three central sections constitute a chronological and narrative arc. In Forestier’s view, “Printemps,” “Été,” and “Automne,” recount the blossoming and inexorable fade of a love affair, and at the same time, the experiences that forge the poet’s path to discovering a new poetic creation. (“Débris” is put aside, in keeping with its title.) As Cros’s biographer, Forestier sees his real-life affair with Nina de Villard in Le coffret de santal’s poems about love, tempestuous and resigned; as a prominent Rimbaud scholar, Forestier sees a similar poetic journey reflected in both Cros’s and Rimbaud’s work.

In this dissertation, I focus on Cros’s experimental poems, and in particular, the ways that his poetry takes on the idea of heliographic relations with Venus during the Parnassian moment. Thus while I make use of the 1873 edition of Le coffret de santal, the biographical and, in large part, the narrative issues raised by Forestier are of limited pertinence to the present study. Where Forestier finds a poetic evolution in Cros’s work away from an impoverished Parnassianism and towards an eminently modern Symbolism, I will examine the experimental qualities of individual poems in relation to the poetic diversity and cultural concerns of their time. Rimbaud, Cros’s Zutiste co-conspirator, one-time roommate and fellow author of experimental poems, is surely present. But Sully Prudhomme, the terminally unfashionable author of Les Épreuves, may

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552 Ibid., 293, 297.
553 These five poems are nonetheless deemed “un véritable cycle d’amitié,” in virtue of their dedications. Ibid., 297.
554 Ibid., 294-296; 400.
555 Forestier concludes Charles Cros by dubbing Cros “l’écrivain d’une transition” between Parnassianism and the Symbolists (ibid., 510).
in one respect be an even more intriguing interlocutor. Cros addressed him a letter in 1874, ostensibly asking him about a prospective review of *Le coffret de santal*. If Sully Prudhomme wrote such a review, scholars have not yet uncovered it. Indeed, only a fragment of the letter has been published, in Jacques Debauve’s 1992 survey of Cros’s dedications and inscriptions. Yet, that fragment suggests the critical importance of Cros’s heliographic project to his poetry:

> Je compte absolument sur votre article spirite et géométral. Il sera bon que vous, poète de la vraie poésie, vous montriez que l’art suprême ne se conquiert qu’en sachant tout. *Le rythme, la rime, sont des moyens de pénétrer au loin dans l’espace et dans le temps, pour notifier aux êtres sympathiques en ces lointains les nombreuses formes de la vérité absolue…*

A decade before describing his poetry, in “Inscription,” as a response to the “aux mondes lointains / Qui nous adressaient leurs messages, / Éclairs incompris” (l. 8-10), Cros indicates a remarkable overlap between poetic form and interplanetary communication.557 His letter to Sully Prudhomme confirms that for Cros, heliography and poetry share not only an end—to traverse time and space, to communicate absolute truths and human knowledge—but also means—rhythm and rhyme.

Unfortunately, Cros’s letter does not define how, precisely, the rhythm and rhyme of poetry are heliographic. Given the value Cros ascribes to rhythm and rhyme as poetic features, Forestier’s conclusions on the matter in *Charles Cros, l’homme et l’œuvre* are puzzling. Forestier views Cros’s rhythms through the lens of free verse, arguing that Cros varies “à l’extrême” or even suppresses “les coupes classiques” entirely: “son vers, son alexandrin en particulier,” writes Forestier, “tend vers une sorte de prose rythmée à l’intérieur de laquelle la rime perd beaucoup de sa valeur traditionnelle.” According to Forestier, Cros’s rhymes are perfunctory, generally

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557 The strangeness of such a meeting may explain why Debauve splits the citation; he includes the quote up to “l’espace et le temps” in the body of his article, and buries the end of the sentence nearly ten pages later, in his notes. See Debauve, “Lecteurs et amis,” 146.
sufficient, and designed not to disrupt the “rhythmic prose” of his poetry—which, by subverting the *alexandrin*’s classic division into two 6-syllable hemistiches, is supposed to represent one step in the “liberation of verse.”

Benoît de Cornulier’s metrical theory of verse rejects accentual interpretation of poetry, of the type Forestier offers for Cros. Against the vague and subjective accounts of rhythm that accentual interpretations propose, Cornulier demonstrates the primacy of the *alexandrin* and its 6/6 caesura in French metrical verse. Metrical rhythm is fundamentally unrelated to syntax: “Contrairement à la distribution de prétendus accents syntagmatiques, le nombre syllabique est indépendant, dans son principe, de la structure syntaxique-sémantique en français ; et par là il se prête à un rôle métriquement constitutif.” The fanciful rhythms that critics have invented and attempted to justify with syntax can neither modify classical meter nor replace it, when indeed the verse is metered. In *Théorie du vers*, Cornulier contends that only lines of nine syllables and above are metrical in French poetry, and that the primary vector of meter since the Renaissance has been the twelve-syllable *alexandrin*.

Refusing to minimize the dominance of the *alexandrin*, Cornulier examines changes that nineteenth-century poets made to its meter, concentrating on the gradual establishment of the ternary *alexandrin*. Cornulier suggests that at first, lines that manifested a strong 4/4/4 rhythmic structure continued to respect the 6/6 caesura; such lines display “ambivalence rythmique,” which is “une perception complexe, mais unique, saisissant d’un coup un seul objet sous deux

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559 The prevalence of Cornulier’s theory in contemporary scholarship has been discussed above, chapter 3.
561 Ibid., 69. “Vers simples” of eight syllables and fewer are unmetered, whereas “vers complexes” of nine syllables and above are metered. See above, chapter 3.
562 Ibid., 92.
perspectives différentes.”

Radical when it was originally utilized in the early 1800s by Romantic poets, and most notably Hugo, the ternary *alexandrin* became more detached from the classic binary *alexandrin* in the second half of the century. Cornulier studies different ways that poets—most notably Mallarmé, Rimbaud, and Verlaine—weakened the 6/6 caesura, finding that they placed clitics, prepositions, silent e’s in the sixth-syllable position. Every so often, a single word spanned the caesura, rendering it void. Thanks to these infringements, the ternary *alexandrin* went from a subordinate rhythm at the dawn of the nineteenth-century to an independent meter at its close. As the readings that follow will show, Charles Cros had a sophisticated grasp of these metrical phenomena. In *Le coffret de santal*, Cros exploited rhythmic ambivalence and experimented with the caesura in ways that affirm the significance of form to his poetic rhythms.

The second key component of Cros’s heliographic rhythm is, in fact, rhyme. Far from an afterthought, tacked on to prose in order to satisfy the vestigial demands of verse, rhyme provides crucial structure to the poem; as David Scott has argued, rhyme creates not only a vertical axis within the relentlessly horizontal orientation of prose syntax, it also creates movement that extends backward along the horizontal line. According to Scott, this backward movement becomes possible due to the prevalence of rich rhyme, which reaches back to “absorb” the line from its endpoint, as well as the reliance on the syntactically thorny poetic inversions that get the reader to the end-rhyme. In other words, rhyme marks off the unit of

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563 Ibid., 104.
564 Ibid., 107.
565 Described in Cornulier, *Théorie du vers*, 137-140. Cornulier uses the now-outmoded terms of “masculine e” and “feminine e”; for simplicity, I have combined them in this survey, since neither is pertinent to the analyses that follow. I borrow Cornulier’s shorthand to refer to such lines: C6, P6, F6 and M6.
566 Ibid., 107, 271.
each line, binds the lines together, and stretches to the first syllable to shape the line’s sound and sense; it is “both a dynamizing and a framing device.” Rhyme thus spatializes the poem: Scott incisively observes that “the poetic text tends to be grasped as a spatial complex, a simultaneously perceived whole rather than a unidirectional continuum as in conventional prose.” To his analysis, especially persuasive for the four rhymes structuring the fourteen-line sonnet, I will add the effects obtained by assonances and rhymes within and between lines. Robert Mitchell has highlighted the “devices of repetition” that structure Cros’s poetry, from the unexpected “recall” of words or sounds at unusual intervals to the more regular refrains and anaphora. Read backward and forward, up and down, rhymes sprinkled around the caesura, strings of assonances and repetitions of words scattered throughout the text produce patterns of sound that are diagrams, rhythms that are figures.

In Cros’s heliographic poetry, these rhythmic and rhyming techniques experiment with the text’s capacity to measure distances, and its potential to bridge them. The problem of measurement comes to the fore in “Sonnet astronomique,” as Cros retitled “Correspondance interastrale” for its appearance in the 1873 Le coffret de santal (CCOC, 1117). The sonnet’s main theme, noted above, revolves around the idea of mirroring. While strolling outside with his beloved on a summer evening, the poet imagines a pair of lovers on the planet Venus looking out at the Earth and sharing a kiss:

Alors que finissait la journée estivale,
Nous marchions, toi pendue à mon bras, moi rêvant
Aux mondes inconnus dont je parle souvent.
Aussi regardais-tu chaque étoile en rivale.

Au retour, à l’endroit où la côte dévale,
Tes genoux ont fléchi sous le charme énervant

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568 Ibid., 75.
De la soirée et des / senteurs qu’avait le vent.
Vénus, dans l’ouest doré, se baignait triomphale.

Puis, las d’amour, levant les yeux languissamment,
Nous avons eu tous deux un long tressaillement
Sous la sérénité du rayon planétaire.

Sans doute, à cet instant deux amants, dans Vénus,
Arrêtés en des bois aux parfums inconnus,
Ont, entre deux baisers, regardé notre terre. (CCOC, 124)

A set of formal features in “Sonnet astronomique” reinforce the poem’s mirroring conceit, and test the distance between the couple on Earth and the couple on Venus. Rhythmically, “Sonnet astronomique” scans into fourteen perfect alexandrins, each with a caesura at the sixth syllable. Yet this metrical regularity is troubled somewhat by line 7, where the caesura separates “des” from “senteurs.” In Cornulier’s terminology, this line is thus C6, because a proclitic occupies the sixth-syllable position. An obvious 4/4/4 alternative rhythm, however, recuperates the problematic 6/6 meter: “De la soirée / et des senteurs / qu’avait le vent.” The existence of such rhythmic ambivalence at this juncture in the poem not only echoes the woman’s unsteadiness in the previous line—the binary alexandrin sways into a ternary alexandrin in the enervating evening—but also suggests the necessity of seeing double, so to speak, in the poem. The “complex perception” that understands a single phenomenon in two ways at once helps the poet to see Venus both as a star in the darkening sky and as home to alien lovers. It will also aid the reader in seeing the poem as a heliographic experiment.

The end-rhymes of “Sonnet astronomique” produce important mirroring and spatialization effects, which interior rhymes, rhythms, and repetitions will then complicate. The sonnet’s rhyme scheme is Marotic: a pair of enclosed rhymes in the quatrains is followed by CCD / EED rhymes in the tercets.\textsuperscript{570} David Scott has shown that the sonnet’s enclosed rhymes

\textsuperscript{570} Somewhat unusually for Cros; see Forestier, \textit{Charles Cros}, 386.
weave together contrast and accord, so that each quatrain mirrors the other; the tercets offer similar reflections, as well as reflecting upon the preceding lines. “Sonnet astronomique” uses the richness of its end-rhymes in order to play on this mirror structure, drawing attention to its role in the poem. At first glance, the initial quatrain presents a feminine leonine rhyme (“estivale,” “rivale”) and a masculine sufficient rhyme (“rêvant,” “souvent”). The next quatrain forces the reader to re-evaluate the impressive leonine rhyme, however, as the A-rhyme on line 5 (“dévale”) downgrades it to a rich rhyme, and on line 8 (“triomphale”) devalues it further to merely a sufficient rhyme. The mirror character of the quatrains is thus put into question, since the rhyme is slightly asymmetrical between lines 5 and 8, and between the first and second stanzas. A similar asymmetry affects the masculine D-rhyme in the fourth stanza: although somewhat commonplace at the time, the “Vénus” / “inconnus” duo requires the reader to consider the first final’s silent, and so works only as a sight rhyme. The third stanza’s masculine CC couplet, on the other hand, offers something like one rhyme too many; the sufficient rhyme (−m/a) of “languissamment” and “tressaillement” forms a poor rhyme with the quatrains’ B-rhymes (−v/a). By extending the rhyme from the second to the third stanza, the C-rhyme seems to mirror the quatrains, while also presaging the dubious quality of the last masculine rhyme (−n/u/s, −n/u).

As a result of these procedures, “Sonnet astronomique” consolidates and destabilizes its own mirror structure. The end-rhymes are continually propelling forward and doubling back up and down the poem’s right margin, spatializing its vertical axis. At the same time, a series of rhymes and repetitions within and among lines activates new axes interior to the text, which mark the distance between the poet on Earth and his mirror image on Venus. This rime brisée

572 See above, chapter 2.
formed at the caesura on lines 2 and 3 ("pendue," "inconnus") calls attention to the pairing of binary and ternary *alexandrin* on lines 6 and 7. The most glaring instance of a backward horizontal movement throughout the poem arises in the third stanza, where the end-rhyme words on lines 9 and 10 take up four syllables each. Yet, rather than providing a rich or leonine rhyme, as one might expect with such long words, the rhyme ("languissamment," "tressaillement") is simply sufficient, encouraging the reader’s eye to travel back along the line to check the text. In going back to the beginning of the stanza, the reader might notice the final—a sound of the rhyme reappearing before the caesura in line 9—a poor rhyme that turns up yet again at the sixth syllable of line 12. The quasi-*rimed batelée* of line 9, which anticipates the pairing of the B- and C-rhymes, thus also creates *rimed brisée* with line 12, which redoubles the mirroring of the tercets. Moreover, there is another key word on the other side of line 12’s caesura: *deux*. This word regularly punctuates the tercets, occurring on lines 10, 12, and 14. Beyond its clear pertinence to the issues of pairs, mirroring, and the distance between two points investigated by “Sonnet astronomique,” the conspicuous repetition of the word “deux” alerts the reader to the significance of the other repetitions placed in the text. “Regardais” and its homophone, “regardé,” appear on lines 4 and 14; “inconnus” on lines 3 and 13, at the pre-caesura and end-rhyme positions, respectively; “Vénus” on lines 8, at the beginning of the line, before “dans,” and 14, at the end of the line, following “dans.”

The overall consequence of the back-and-forth generated by these repetitions and reflections—words and sounds jumping from line to line, stanza to stanza—is to separate the poem’s first three stanzas from its final tercet. Although each of the elements in question can be found in the last three lines, their counterparts are spread throughout the first, second, and third
stanzas. Not coincidentally, the sonnet’s major shift happens in the space dividing the end of line 11 from the beginning of line 12:

Nous avons eu tous deux un long tressaillement
Sous la sérénité du rayon planétaire.

Sans doute, à cet instant deux amants, dans Vénus,
Arrêté en des bois aux parfums inconnus,
Ont, entre deux baisers, regardé notre terre.

The scene shifts from Earth to Venus, from the poet to his double, from the real to the imagined, from reality to the mirror image. Alongside the poem’s systematic reinforcement and problematization of its mirror structure via end-rhymes, the interior rhymes and repetitions take the measure of the distance between the reality described in lines 1 through 11, and the image offered in the mirror by lines 12 through 14. The imagined double is not an exact reflection; “Sonnet astronomique” makes a subtle determination that the two are farther apart than they might appear.

Cros takes another approach to testing the heliographic potential of poetry in the sonnet titled “Sur un éventail.” In its original form, this text was indeed inscribed in black ink across the slats of a wooden fan. Accordingly, “Sur un éventail” is from the very start preoccupied with the means and modes of communication:

J’écris ici ces vers pour que, le soir, songeant
A tous les rêves bleus que font les demoiselles,
Vous laissez sur vos yeux, placides lacs d’argent,
Tournoyer ma pensée et s’y mouiller les ailes. (CCOC, 102, l. 1-4)

The self-reflexive opening hemistich falls somewhere between a narrative description and a metapoetic declaration, while the poem’s title imbues the initial deictic, “here,” with a double meaning. The medium of the text is to be both the fan, a unique object that defines the poem’s

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subject, and the page, where the poem’s words are reproduced. Cros will explore this dual medium of fan and page in relation to the combination of heliographic and poetic media, investigating how the fan-poem on the page encounters issues strikingly similar to those faced by interplanetary heliography.

Before turning to Cros’s sonnet in greater detail, however, it is important to note that he was not the only poet of the period to write fan poetry. In fact, Stéphane Mallarmé was probably the genre’s most prolific practitioner, inscribing twenty-one different fans with verse. Seventeen of these are single quatrains; one is a fragmented quatrain, broken up into seven irregular lines, and one is a decasyllabic couplet. Mallarmé also produced two full sonnets, “Éventail (de Madame Mallarmé)” and “Autre éventail (de Mademoiselle Mallarmé),” which were included in the Poésies. While the quatrains were collected and published in the posthumous collection Vers de circonstance, Bertrand Marchal has made a case for the continuity of Mallarmé’s fan poetry. In the majority of these poems, according to Marchal, flight and wings are a recurring metaphor. This “figure privilégiée de cet autre envol qu’est la poésie,” writes Marchal, the wing represents “moins un vol qu’un simulacre de vol, moins un vol réel qu’un vol virtuel, ou une suggestion de vol, car ce vol-là est un vol captif, prisonnier de la main même qui l’anime, comme la poésie est inséparable de la main qui l’écrit.”

For Mallarmé, then, poem and fan share the character of an illusion: the transcendence of their beauty obscures their fundamental contingency.

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574 A number of fan poems, including Cros’s “Sur un éventail,” are reproduced in the Mallarmé Museum’s lovely catalogue of its exhibit on fans in Mallarmé’s work, cited above.
576 Bertrand Marchal, “Éventails, ‘éventails’,” in Rien qu’un battement, 32.
Although wings are present as a figure of poetry in the first stanza of Cros’s “Sur un éventail,” the specific context indicates the idiosyncratic character of Cros’s conception of the medium. The first stanza stages the poet’s imagination of how the woman he writes to might react to the message he inscribes on her fan, and as such, sets up the central dynamic between the poet and the female object of his desire. There are hints of the objectification that critics like Gretchen Schultz identify primarily with Parnassian poetics; the poet ascribes a generalized passivity to the lady in line 3, where she “lets” her “placid” eyes be invaded by his thoughts.577 Behind the beauty’s mirror eyes, the poet imagines a personality somewhat less threatening than the figure in Baudelaire’s famous sonnet, “La Beauté” 578: “Car j’ai, pour fasciner ces dociles amants, / De purs miroirs qui font toutes choses plus belles : / Mes yeux, mes larges yeux aux clartés éternelles !” (l. 12-14). In Cros’s poem, the pure reflective surface of the woman’s eyes is disturbed by the wings of his thought. Rather than the hypnotized lovers of Baudelaire’s Beauty, who wound themselves before her, the feelings of Cros’s poet are winged, wheeling and splashing in “placides lacs d’argent” (l. 3). This is a curious kind of flight for the fan-poem to represent: the poet’s message of love is like a bird taking a bath in a beautiful lady’s eyes.

In “Sur un éventail,” the key aspect of this poetic flight is its purely theoretical existence. While the “virtual” flights of Mallarmé’s fan poems muddle illusion and reality for the reader, the message of Cros’s poet never actually gets off the ground; he writes in the hope that the lady will maybe, some evening, see his poem. The conjunction between his inscription (“J’écris ici ces vers”) and its reception (“Vous laissiez sur vos yeux … / Tournoyer ma pensée et s’y mouiller les ailes”) is “pour que”: although it indicates a relationship of cause and effect, “pour que” expresses above all intentionality. The poet intends for the fan to be unfolded, for his poem

to be read and his message received, but nothing guarantees that this will be so, and indeed, the rest of “Sur un éventail” centers on anxiety concerning its own reception. The poet imagines a rival sweet-talking his beloved:

Peut-être, près de vous assis, se rengorgeant,
Quelque beau cavalier vous dit des choses telles,
Qu’à votre indifférence une fois dérogeant
Vous laisseriez faiblir vos froideurs immortelles. (CCOC, 102, l. 5-8)

The charming words that the seducer whispers in a tête-à-tête are the exact opposite of the poet’s chosen medium of communication. Where the spoken words are heard (“[il] vous dit”), imprecise (“de choses telles”), and effective (“votre indifférence une fois dérogeant”), the words inscribed first on the fan, then the page are written (“j’écris ici”), formally precise (“ces vers”: a sonnet), and radically dependent on chance. The tercets reiterate the scenario described by the quatrains:

Mais sur votre éventail, voici que par hasard
Incertain et distrait tombe votre regard ;
Et vous lisez mes vers I pâlit l’écriture.

Oh ! ne l’écoutez pas, celui qui veut ployer
Votre divinité froide aux soins du foyer
Et faire de Diane une bourgeoise obscure ! (CCOC, 102, l. 9-14)

Once again, the poet fantasizes about the lady noticing his message, which finally serves as a direct plea to ignore the words being spoken to her.

Sharply distinguished from speech and self-consciously contingent on chance, the fan-poem is nonetheless able to convey a message that the spoken word cannot. The last stanza reveals that the vague “choises telles” said by the gallant “knight” to the lady ultimately aim at making her a housewife. The poet’s love, on the other hand, does not seek to destroy her “cold divinity,” and even gestures toward worshippershiping the woman’s power as a Diana, goddess of the hunt. This conclusion implies both development of the female figure along broadly Parnassian lines—the impassive goddess, the Antique statue, the calmness inseparable from coldness—and
an important reversal—the woman must not be prey, but rather a huntress. In this sense, the poem’s form is perfectly suited to deliver its message. Composed of Marotic tercets and alternating rhymes in the quatrains, the sonnet has mostly unremarkable end-rhymes; they are all sufficient, except for the A-rhyme (rich in the first stanza, “demoiselles” and “les ailes,” and rich in the second stanza, “telles” and “immortelles”) and E-rhyme, “ployer” and “foyer.” The end-rhymes’ main effect is to highlight the difference between poetic and prosaic syntax; “Sur un éventail” is densely packed with the syntactical inversions that David Scott links to the sonnet’s rhyme scheme, with two notable and interesting exceptions. The first is the opening hemistich, “J’écris ici ces vers,” which, as discussed above, combines an overtly oratorical mode and self-reflexive poetic affirmation. The second is again a hemistich, on line 12: “Oh ! ne l’écoutez pas …” Following this request, a simple imperative garnished with a colloquial, exclamatory “Oh !,” the stanza’s syntax becomes knotted by a set of inversions that sweep the reader to the final, dramatic image of Diana as a middle-class nobody.

The push-and-pull between the directness of speech and the alternative capabilities offered by the text of the fan-poem provide structure to “Sur un éventail.” Problematized by its inscription, the syntax of the spoken word is surrounded by poetic inversion, and a battery of formal techniques complicates Cros’s poetic language further. As in “Sonnet astronomique,” perhaps the most important of these techniques are assonance and repetition. Here, I will examine how they create rhythms that recall Cros’s idea for an interplanetary heliographic language. Just like the message intended for alien beings, the poetic medium of Cros’s heliographic message must be invented from scratch, and cannot be assured of its reception. “Sur un éventail” sets up the bases of its rhythmic system in the first stanza:

J’écris ici ces vers / pour que, le soir, songeant
A tous les rêves bleus / que font les demoiselles,
Vous laissiez sur vos yeux, / placides lacs d’argent,
Tournoyer ma pensée / et s’y mouiller les ailes. (CCOC, 102, l. 1-4)

If the most obvious rhythmic effect is the rhythmic ambivalence introduced by the ternary alexandrin on line 1, I wish to draw attention to Cros’s use of assonances in the subsequent lines. There is once again a rime brisée (“bleus,” “yeux”) on lines 2 and 3, which here embeds an enclosed rhyme (\(XY\)) within the stanza’s alternating rhyme scheme (\(AbAXb\)). In the very next hemistich, Cros switches focus from this vertical assonance to insert a horizontal one, the “placides lacs d’argent” (l. 3). Visually, the entire word “lacs” echoes “placides,” while the sounds “l/a” are repeated twice across four syllables. The fourth line confirms the intentionality of these assonances by reiterating both procedures: the second hemistich, “et s’y mouiller les ailes” contains a similar distribution of sounds as the hemistich sitting one line above it. The two four-syllable assonance sequences (\(y–y\) and \(-zz\)) placed in a pair after the caesura on lines 3 and 4 forms a counterpart to the rime brisée on lines 2 and 3. Alongside the initial ternary alexandrin, these techniques bring out new rhythmic patterns within the metered line, emerging from the background beat of regular syllables.

The first stanza also includes a number of words that reappear in the other stanzas, partially reproducing the measurement tests carried out in “Sonnet astronomique.” The “vers” of line 1 repeats in line 11, again placed just before the caesura (“Et vous lisez mes vers dont pâlit l’écriture”); “Vous laissiez” on line 3 becomes “Vous laisseriez” on line 8. The latter line also provides “froideurs immortelles,” which return on line 13 as “divinité froide.” But the effects of distancing and repetition are less arresting than the play of assonances woven through the closing tercet. The final section begins on the preceding line:

Et vous lisez mes vers dont pâlit l’écriture.

Oh ! ne l’écoutez pas, celui qui veut ployer Votre divinité froide aux soins du foyer Et faire de Diane une bourgeoise obscure ! (CCOC, 102, l. 11-14)
Although the tercet remains the primary stanzaic unit, lines 11 through 14 combine to produce a compelling quatrain with an enclosed rhyme scheme. Line 11 constitutes a reprisal and response to the crucial opening hemistich of line 1 (“J’écris ici ces vers” / “Et vous lisez mes vers”), and the all-important word, “l’écriture,” is sonically prolonged from the end-rhyme position into the next line (“ne l’écoutez pas”), and so inserts itself into the reception of the spoken word.

The poem’s thirteenth and fourteenth lines contain three separate, yet intertwined sets of assonance that call back to the sequences established in its first stanza. In both cases, the assonances serve to bring out a rhythm of the chosen sounds, a technique that resembles the sequences of flashes, or “éclairs,” that Cros designed to build his heliographic language. I represent the three sound sequences here graphically:

Votre divinité / ftoïde aux soïns du foyer
Et faire dé [Diane / une] bourgeoise obscure ! (l. 13-14)

The emphasized “flash” sounds are indicated by underlining, italics, and bolded font, and I have marked the traditional 6+6 caesura in both lines with a forward slash. The i- and oi- rhythms of line 13 contrast quick succession of “flashes,” tightly gathered together at the center of the hemistich, with a set of slower flashes, punctuated by background sound. The oi- rhythm recurs in the last line of “Sur un éventail,” affirming the pair as a larger unit. More provocatively, however, line 14 presents a fascinating run of silent e. Constructed to follow convention at the caesura, where a final silent e is permitted before a word beginning with a vowel, the line nevertheless makes ostentatious use of this ambivalent sound. The dictates of versification require the silent e in “faire” and “une” to be pronounced here, and the e in “de” must of course always be pronounced; but the silent e of “Diane,” “bourgeoise” and “obscure” remain silent. The unusual preponderance of silent e in this line, in addition to the complex play between its pronunciation (colloquial and conventional) and its inscription, suggest that the letter not only
participates, but in fact has a key role in the poem’s heliographic experiment. The silent but flashing e of feminine nouns and adjectives seem meant to express some specific message to the lady, herself silent but glittering. Like the heliograph’s light signal at the origins of interplanetary language, a silent sign becomes part of a unique system of signification through the patterns of its recurrence.

The enclosed rhyme that the last word of “Sur un éventail” completes with line 11 offers a significant guide to the issue at stake in the text: “écriture” and “obscure.” In a sense, “Sur un éventail” is above all an experiment with poetry’s ability to traverse a great and uncertain distance, to communicate a singular message; it is one of Cros’s most important heliographic experiments. Once again, changes that he made to the text between its original inscription on the fan, in 1870, and its publication in Le coffret de santal, in 1873, support the heliographic hypothesis. Two crucial parts of the poem were modified (CCOC, 1108). The smaller of the two revisions altered the rhythms of assonance on line 13: the 1870 version read “Votre divinité pure aux soins du foyer,” weakening the power of the oi- sound. The adjective “froid” had, at that point, already been used in lines 3 and 4: “Vos yeux aux éclairs froids comme ceux de l’argent / Malgré vous sur mes vers arrêtant leurs prunelles.” The revisions made here brought substantial changes to “Sur un éventail,” replacing the rather uninspired description of reading with the stranger and stronger bird-bath-eyes image. The 1870 lines contain one pivotal word— “éclairs”—that is nowhere to be found in the 1873 text. Since “éclairs” is exactly the word Cros used to discuss his heliographic language, its inclusion in “Sur un éventail” points toward the poem’s heliographic experiment. Its disappearance in the revised version points less to a change of meaning than a change of form; the word “flashes” was replaced by the flashing of words, the rhythms and rhymes that the new lines introduced and set out for the rest of the poem to explore.
The word “éclair” appears in surprisingly few of the 74 poems published in the 1873 edition of *Le coffret de santal*. Apart from the original version of “Sur un éventail,” seven poems contain the word “éclair(s).” In every single example, the poet invokes “éclairs” to describe some aspect of a woman’s body; in all but two, the “éclairs” are part of a metaphor comparing her body to a precious metal or stone. Yet the revisions to “Sur un éventail” expose a conjunction between the “éclair” and the mirror that proves to be decisive for Cros’s heliographic experiment.

The woman’s eyes first flash like cold silver, then become themselves a placid silver lakes, a mirror plane, while the “éclairs” move into the text of the poem itself. Several of Cros’s other poems containing “éclairs” show that the mirror, too, moves into the text of the poem. For example, in “Madrigal sur un carnet d’ivoire,” the poet addresses a lady with whom he hopes to dance; he evokes the whirlwind of her ball gown and the “éclairs de topaze” (l. 11) of her half-lowered gaze. In the first stanza, however, the poet points out that his poetry resembles the woman:

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Mes vers, sur les lames d’ivoire
De votre carnet, font semblant
D’imiter la floraison noire
Des cheveux sur votre cou blanc. (CCOC, 87, l. 1-4)
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The ivory that the poet writes on is like the ivory of her skin, the black ink of his verses like her dark hair. Although “Madrigal sur un carnet d’ivoire” downplays this intriguing similarity, framing it as both accident and imitation, the poem’s mirroring of its female destinataire is elucidated elsewhere in the collection. “Ballade du dernier amour” states the poet’s final desire:

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579 Those poems are “Diamant enfumé,” “Sonnet (*Les saphirs*...),” “Sonnet (*Pour le surnaturel éclat*...),” “Conseil,” and the three poems that will be studied below: “Madrigal sur un carnet d’ivoire,” “Ballade du dernier amour,” and “Paroles perdues.” See *CCOC*, 99, 100, 126.

580 Given Cros’s scientific interest in creating artificial jewels, these poems could also perhaps provide a starting point for thinking through a different kind of experimental poem in *Le coffret de santal*. 
alone, jaded, remembering the “éclair” (CCOC, 105, l. 20) of his beloved’s smile, he declares,
“Je veux [...] / T’évoquer entière en un livre / Pur et vrai comme ton miroir” (ibid., l. 17, 22-23).

The idea of a poetry that is a mirror, alongside the techniques that produce “éclairs” in a poem, constitute the two main components of the heliograph, and of the heliographic poetry that Cros investigates. Both elements are at work in a poem called “Paroles perdues,” in which the woman’s mirror actually speaks. Made up of five quatrains, “Paroles perdues” employs simple alternating rhymes and eight-syllable verse throughout. The first stanza sets the scene from the perspective of an observer:

Après le bain, la chambrière
Vous coiffé. Le peignoir ruché
Tombe un peu. Vous écoutez, fière,
Les madrigaux de la psyché. (CCOC, 122, 1-4)

The reader takes in this scene as she might take in a somewhat risqué painting, viewing the lady’s toilette. From the beginning, then, “Paroles perdues” promises to represent an image of the woman. The status of communication is much more ambiguous; although the third line shows the lady listening, the title announces that somewhere in the poem, words will be futile, “lost.”

In the second stanza, the perspective of the poem shifts, and instead of describing the woman at her mirror, the text takes the position of the mirror. The poem now addresses the figure it faces directly:

Mais la psyché pourtant, Madame,
Vous dit : « Ce corps vainement beau,
Caduc abri d’un semblant d’âme
Ne peut éviter le tombeau.

« Alors cette masse charnelle
Quittera les os, et les vers
Fourmillant en chaque prunelle
Y mettront de vagues éclairs.

« Plus de blanc, mais la terre brune
The message of the mirror boils down to a fairly standard memento mori warning.\(^{581}\) Formally, the poem constructs a strong tension between its regular eight-syllable lines and its conspicuous syntaxic rhythms.\(^{582}\) The punctuation on lines 5 and 6 inserts a pause first to isolate “Madame,” then a pause before the mirror’s prise de parole, laying a 6-2, 2-6 rhythm over the simple octosyllables. The same rhythm recurs on lines 13 and 14, which introduce clearly marked syntactic pauses after the sixth syllable that reinforce the 6-2 pressure on the octosyllable. These rhythmic features, however, are less potent than the section’s prominent rhyme between “vers” and “éclairs.” Playing on the well-worn double meaning of “vers”—worms, in this case swarming inside the woman’s dead eyeball, and poetic verse—lines 10-12 make instructive links among poem, image, and “éclairs.”

In “Paroles perdues,” it is thus clear that the mirror-text itself produces the flash on the image that it reflects. Crucially, that reflection implies neither closeness nor contact; the figure at whom the mirror-text is directed may appear near but be far from the poet, and she may or may not receive its message. The heliographic poetry that I have examined so far from Le coffret de santal attempts to measure such distances and to communicate such messages. “Paroles perdues” reveals that even if the message is received, it can fail to be properly understood:

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\(^{581}\) In this respect, “Paroles perdues” recalls Baudelaire’s “Une charogne”:

—Et pourtant vous serez semblable à cette ordure,
À cette horrible infection,
Étoile de mes yeux, soleil de ma nature,
Vous, mon ange et ma passion !

Oui ! telle vous serez, ô la reine des grâces,
Après les derniers sacrements,
Quand vous irez, sous l’herbe et les floraisons grasses,
Moisir parmi les ossements. (Baudelaire, OC, 1:31-32, l. 37-44)

\(^{582}\) Because the octosyllables are unmetered, syntax can impose a greater structure on the poem’s rhythms than it might in a metered verse.
Vous écoutez sa prophétie
D’un air bestialement fier.
Car la femme ne se soucie
Pas plus de demain que d’hier. (CCOC, 123, l. 17-20)

“Fier” makes its second appearance as an end-rhyme as the poem pulls back from the mirror’s perspective to the frame of the surrounding scene. “Vous écoutez, fière” (l. 3) repeats on lines 17 (“Vous écoutez”) and line 18 (“fier”), with the adjective changing from feminine to masculine. Direct but also destabilized by the adjective’s orthographic difference, this repetition at nearly symmetrical places within the text indicates that a strange distance separates the woman and mirror-text. They are at once very close and somehow far apart, in the way “fier” almost repeats “fière,” and in the end, the entire message of the mirror-text seems barely to have broken the continuity between the first and last stanzas. The reader then understands that the “lost words” of the title are the “madrigaux de la psyché.” Despite appearing to listen to the mirror at the beginning of the poem, the woman hears but does not understand the significance of its message; she sees the flashes without comprehending their language.

Cros returns to the notion of the mirror-text in “Sur un miroir,” the final poem from Le coffret de santal that I will discuss in this chapter. This short, highly complex text explores the range of the questions and techniques associated with Cros’s heliographic poetry. As in “Paroles perdues,” the mirror of the poet’s beloved has a crucial role in “Sur un miroir,” but this is not the only reference within the text to Cros’s other verse. “Sur un miroir” also explicitly alludes to “Madrigal sur un carnet d’ivoire” and “Sur un éventail,” while incorporating a number of the bold rhythmic procedures tested throughout the poems I have studied here. Because of its compact form, which packs the play of rhythm, rhyme, text, mirror, and inscription together into just twelve lines, “Sur un miroir” constitutes an especially rich site for examining the heliographic experiment in Le coffret de santal.
Although “Sur un miroir” shares a similar structure with “Paroles perdues,” in which the first and last stanza provide a frame for a mirror-text occupying the center of the poem, the frames themselves are substantially different. “Paroles perdues” adopted a neutral-seeming perspective on the scene it showed the reader of the woman before her mirror: a speech tag and quotation marks distinguished the voice of the mirror from the rest of the verse—even if their identical form undercut the clarity of that distinction. Indeed, there is no first-person pronoun anywhere in “Paroles perdues,” an absence that gestures toward Mallarmé, to whom the poem is dedicated, and the impersonality ideal of the Parnassian Impassibles. “Sur un miroir,” on the other hand, frames the mirror-text in terms of a lyric address from the poet to his lover’s mirror:

Toutes les fois, miroir, que tu lui serviras
A se mettre du noir aux yeux, ou sur sa joue
La poudre parfumée, ou bien dans une moue
Charmante, son carmin aux lèvres, tu diras :

« Je dormais reflétant les vers que sur l’ivoire
Il écrivit… Pourquoi de vos yeux de velours,
De votre chair, de vos lèvres, par ces atours,
Rendre plus éclatante encore la victoire ? »

Alors, si tu surprends quelque regard pervers,
Si de l’amour présent elle est distraite ou lasse,
Brise-toi, mais ne lui sers pas, petite glace,
A s’orner pour un autre, en riant de mes vers. (CCOC, 91)

“Sur un miroir” thus moves from the poet apostrophizing the mirror, to a projection of the mirror’s speech, then back to the poet, who orders the mirror to break if its owner strays. The poem’s overriding concern is surveillance and paranoia; the woman’s beauty is a source of jealousy for the poet, and he suspects both the power of her cosmetics and her fidelity. He enlists his lover’s mirror as an instrument of guilt, instructing it to remind her of his devotion and to question her devotion to him.

In “Sur un miroir,” the mirror-text is inseparable from the poet’s own language. The mirror speaks in the first-person singular this time, but the poet dictates its words. The speech tag
dangling at the end of the first stanza is a command, not a narration: “tu diras.” The poem thus sets up a tricky discursive situation. The central stanza both constitutes a mirror-text, reflecting the face of the woman whom it addresses, and, at the same time, is evidently part of the poet’s speech; he assumes the voice of the mirror in order to tell it what to say. This situation requires the reader to understand the second stanza as the poet’s language and as the instrumentalization of that language in the creation of a mirror-text. The created nature of such poetic instruments is highlighted by the image that the mirror-text displays: “Je dormais reflétant les vers que sur l’ivoire / Il écrivit…” (l. 5-6). Inscribed on ivory, the verses reflected here belong to “Madrigal sur un carnet d’ivoire,” and the “charme triomphal” that poem sought to represent is reflected in the “victory” of the woman’s beauty here. In “Sur un miroir,” the poet self-consciously brings the mirror into his text, only to find his own text—“Madrigal sur un carnet d’ivoire”—reflected again in the mirror.

The mise en abîme produced by the reflection of “Madrigal sur un carnet d’ivoire” is compounded by the modes of poetic inscription that the word “sur” implies. The inscriptive character of the “Madrigal” is important enough to be directly referenced in “Sur un miroir”: “[…] les vers que sur l’ivoire / Il écrivit…” (l. 5-6). To include this inscriptive “sur” in a poem not only impressively dense, but also entitled “Sur un miroir” activates the possibility that it, too, has been inscribed on an unusual surface. Whether or not Cros ever did write “Sur on miroir” on a mirror, the medium can still inform the printed text; for example, the inscription implied in the title weakens the staging of the poem’s address to the mirror as speech, by foregrounding its written reality. If Cros intends for the reader to perceive “sur” as a common denominator among “Madrigal sur un carnet d’ivoire,” “Sur un éventail,” and “Sur un miroir,” then the

583 Compare the staging of “Paroles perdues,” which presented a scene of the woman “listening” to her mirror, to the more conventional lyric apostrophe that defines “Sur un miroir.”
recursive potential of the latter poem increases exponentially. Written on a mirror, it verses
would reflect themselves ad infinitum. “Sur un miroir” thus inscribes a mirror-text within a
different kind of mirror-text, ensuring that a dizzying set of self-reflections are generated in the
poem.

Unsurprisingly, “Sur un miroir” also makes dizzying use of the formal mirroring
techniques that Cros tested in his heliographic poetry. The poem consists of twelve alexandrins,
arranged into three enclosed-rhyme quatrains. Both square (12x12) and divided into three parts,
the enclosed rhyme structure builds symmetry into each quatra
(ABBA, CDDC, EFFE). The
outer rhyme in each stanza is a rich rhyme (“serviras,” “diras”; “ivoire,” “victoire”; “pervers,”
“vers”), and their richness serves to reinforce that symmetry and unify the quatrains. The inner
rhymes, conversely, build in richness from stanza to stanza: poor in the first (“joue,” “moue”),
sufficient in the second (“velours,” “atours”) and rich in the last stanza (“lasse,” “glace”), these
rhymes create the impression of reiterating and intensifying the enclosed structure, like the image
reproduced by these multiple mirrors.

While the end-rhymes spatialize the poem’s vertical axis, the interior rhymes and
repetitions of “Sur un miroir” produce mirroring along other dimensions of the text. Cros again
demonstrates an interest in investigating rhyme at the caesura, but here, he will devote greater
focus to experimenting with the meter of the alexandrin. “Sur un miroir” contains two pairs of

*rimes brisées:*

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Toutes les fois, miroir, / que tu lui serviras
A se mettre du noir / aux yeux, ou sur sa joue
La poudre parfumée, / ou bien dans une moue
Charmante, son carmin / aux lèvres, tu diras :

« Je dormais reflétant / les vers que sur l’ivoire
Il écrivit… Pourquoi / de vos yeux de velours,
De votre chair, de vos / lèvres, par ces atours,
Rendre plus éclatante / encore la victoire ? »
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Both pairs are notable for their richness; all of the *rimes brisées* seen previously in Cros’s work have rhymed just one sound, whereas “miroir” / “noir” rhymes three sounds and “réfletant” / “éclatante” matches two. These *rimes brisées* are equally notable for their vocabulary. “Miroir” and “réfletant” obviously represent key elements of “Sur un miroir,” in addition to “noir” and “éclatante,” which form the dark/light binary fundamental to Cros’s heliographic language. At the same time as they highlight the heliograph’s foundational features, these interior rhymes suggest new axes of symmetry within the text’s *mise en abîme* of mirrors.

At the poem’s exact center, an audacious syntactical symmetry coincides with the emergence of striking metrical experimentation. Like most of Cros’s poetry, “Sur un miroir” adheres scrupulously to the 6/6 *alexandrin*, and every line can be scanned with a caesura separating two six-syllable hemistiches. As shown above, the second stanza is no exception. However, the caesura on lines 6 and 7 immediately draw attention to themselves, because of their curious, unexpected symmetry: “de vos” follows the caesura on line 6, and “de vos” precedes the caesura on line 7. It is as though the 12-line poem locates its own point of symmetry, set along the caesura in the space between lines 6 and 7. Of course, only lines 6 and 7 display this element of vertical symmetry at the caesura—and their end-rhyme has a stubbornly horizontal symmetry—but the poem’s capacity to create a precise center within three quatrains concerned with mirroring is remarkable. By emphasizing the caesura so strongly, this symmetry also emphasizes the troubling proclitic (“vos”) placed in the sixth-syllable position on line 7. Not coincidentally, the line’s syntax calls out to be scanned in a ternary *alexandrin*: “De votre chair, | de vos / lèvres, | par ces atours” (l. 7). The second stanza’s C6 line then displays the rhythmic ambivalence that allows its meter to be understood as 6/6 and 4/4/4 simultaneously.
The presence of a second C6 line, in the third quatrain, exerts enough metrical pressure for rhythmic ambivalence to wash back over the poem. Like line 7, the penultimate line must also be scanned as a (6/6) x (4/4/4): “Brise-toi, mais | ne lui / sers pas, | petite glace” (l. 11). The proclitic in question, “lui,” echoes its appearance in the poem’s first line, which scans perfectly as a binary alexandrin but now seems susceptible to a ternary rhythm: “Toutes les fois, | miroir, / que tu | lui serviras” (l. 1). Its neighbor and companion line suddenly sounds like a good candidate, too: “A se mettre | du noir / aux yeux, | ou sur sa joue” (l. 2). Maybe even line 10, “Si de l’amour | présent, / elle est | distraite ou lasse,” or the one before it, “Alors, si tu | surprends / quelque | regard pervers” (l. 9). Some of these lines are obvious (6/6) x (4/4/4), and some of them are less conclusive, but the rhythmic ambivalence of the twin C6 creates metrical pressure on the surrounding verse and provokes metrical interrogation.

Alongside the mirroring effects of the poem’s rhyme techniques, the primary effect of the rhythmic ambivalence in “Sur un miroir” is a doubling that provides dimensionality. As Benoît de Cornulier puts it, rhythmic ambivalence requires “une perception complexe, mais unique, saisissant d’un coup un seul objet sous deux perspectives différents.”\textsuperscript{584} Alexandrins that are binary, and occasionally also ternary, compose “Sur un miroir,” giving the poem planes of depth and dimension that complement the reflections and recursions of the many mirrored rhymes. Rhyme, rhythm, inscription, and reflection: the text tests an array of poetic modes and techniques that contribute to producing a sophisticated mirror. But mirrors alone do not make the heliograph. If the sequence of rimes brisées in the first and second quatrains that I examined earlier revealed all of the necessary heliographic components—“miroir,” “reflétant,” “noir,” “éclatante”—the third stanza makes clear how the poetic experiment of “Sur un miroir” fails.

\textsuperscript{584} Cornulier, \textit{Théorie du vers}, 104.
The elaborate play of mirrors that the poem constructs begins, simply enough, with just the poet’s words and his lover’s mirror. From the start, the mirror seems to reflect the woman, putting on makeup and getting ready to go out. Yet even this first image of her powdering her cheek is imagined; the poet instructs the mirror about its duties, and describes when it should speak his words. He imagines the mirror addressing the woman, again imagining her eyes, her lips and cheek, but the mirror claims to reflect his words, inscribed on a fan. The woman’s presence at the end of the poem is still entirely hypothetical, as the poet imagines with dread her “regard pervers,” her distraction and weariness, her laughing at his verse. In other words, the lover in question is never really there at all, and the image in her mirror is of an empty room, in which a little ivory notebook inscribed with a poem has been placed somewhere that it appears in the reflection. “Sur un miroir” fails to gauge the distance between the poet and his beloved because she is irretrievably gone, just as it fails to communicate a special message to her because without her, the mirror-text reflects only another text, another mirror, trapping the inscription in its own reflection. The flash of life, the medium of truth, is absent from the poem, with no one there to see it, and “Sur un miroir” takes on the character of a dark experiment: poetic heliography as a senseless device, intended above all to make contact with other life and doomed to an endless, hermetic self-reflection.

And yet, one of the hallmarks of Cros’s proposal for interplanetary heliography is its steadfast, almost ludicrous optimism. In his “Étude sur les moyens de communication avec les planètes,” Cros first dispenses with the objection that there might not be any life on Venus or Mars with which to communicate: the only way to know for sure whether or not anyone is out there is to try his idea for contacting them (CCOC, 510). Later, he explains the need to persist in sending the signal, even in the absence of recognition or response:
Peut-être attendra-t-on longtemps la réponse ; peut-être encore se lassera-t-on de l’essai avant que cette réponse n’arrive. On n’aura pourtant pas le droit d’en conclure que le projet est irraisonnable, ni que les planètes ne sont habitées sauf qu’elles le soient par des êtres inférieurs à l’homme.

Qu’on imagine un appel fait à la Terre, dans les conditions que j’ai dites, avant Galilée ; il eût été absolument impossible que personne s’en perçut et y répondit.

Cette considération suffit à établir qu’un premier essai sans résultat ne devra pas être regardé comme motif de ne plus recommencer. Les signaux ont même été vus ; ils ont été compris ; mais réponse n’y a pas été faite à cause de l’insuffisance des moyens matériels. (CCOC, 518)

In this same fundamentally optimistic spirit, Cros’s experimentation with heliographic poetry in Le coffret de santal requires neither perfect comprehension nor a response in order to be a success. Cros finds ways to make mirrors and flashes of light in poetic language, and invents new ways for that language to signify. He discovers techniques to locate the poet, to represent the beloved, to triangulate the center of the text. Cros’s heliographic poems at once take the measure of the distance between the poet and the woman he desires—the other, his Venus—and try, again and again, to overcome it.

Cros uses rhythm and rhyme to “penetrate into the depths of space and time,” and the experimentation of these heliographic poems that I have studied here is, in large part, formal. The importance of form in Le coffret de santal has two sides. On the one hand, Cros adheres to traditional forms, whether sonnets or 8-syllable quatrains, and overwhelmingly respects the rules of traditional versification, from the rule of alternating masculine and feminine end-rhymes to the caesura’s 6/6 division of the alexandrin. His formal experimentation is less radical than Rimbaud’s during the same period, or some of the contributions to the Album Zutique. But, on the other hand, Cros’s experimentation with ternary alexandrins, repetition, and rhyme is extraordinarily subtle and sophisticated. Although his heliographic experimentation in Le coffret de santal is relatively restrained, I hope to have shown that it is no less innovative for it. Cros’s versification creates a rich space for poetic lyricism and scientific concerns to meet.
In a sense, Charles Cros is the essential experimental poet of the Parnassian moment. The spirit of l’art pour l’art animates the formal preoccupations of his poetry in Le coffret de santal, while Cros’s interest in scientific discourse animates its technical imagination. Cros’s work resists definition as Impassible, Formiste, or avant-garde; it shares obvious formal and thematic features with poetry throughout the Parnassian moment, while offering a unique investigation of specific technical questions, both rhythmic and heliographic. Cros’s work not only demonstrates the experimental value of scientific discourse to poetry during the Parnassian moment, but also proves that such intersections gave rise to new ideas and compelling poetics.
CONCLUSION

Carrières de Montmartre: Endings and beginnings

In July 1876, a collection of fifty poems called *Dixains réalistes* went on sale in Paris. Written mostly by Charles Cros, Nina de Villard, Germain Nouveau, Maurice Rollinat, and a handful of friends, the *Dixains réalistes* were an obvious parody of the dizain strongly linked with François Coppée. Indeed, Coppée’s *Promenades et Intérieurs* sequence was reprinted in the new edition of his collected verse, *Poésies: 1869-1874*, produced by Parnassian publisher Alphonse Lemerre. Almost half of the thirty-nine dizains of *Promenades et Intérieurs* had originally appeared six years earlier, in the second *Parnasse contemporain*. As Louis Forestier points out, the re-edition of Coppée’s work in 1875 spurred Cros and his comrades to take up the vein of parody, “les vieux coppées,” that they had already practiced during 1871 and 1872, in the pages of the *Album Zutique*. But, Forestier contends, renewing the “vieux coppées” took on a different import for Cros once his submission for the third *Parnasse contemporain* was rejected. A jury made up of Théodore de Banville, Anatole France, and François Coppée declined to include Cros’s poetry in the “recueil de vers nouveaux,” despite Cros’s presence in the previous volume and sustained implication in Parnassian circles. “L’indignation et l’amertume furent grands dans l’entourage de Nina,” writes Forestier. “Le premier mouvement de colère passé et l’atmosphère de la maison aidant, les ‘refusés’ prirent le parti de sourire.”

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585 See chapter 2.
587 Forestier, *Charles Cros*, 144.
self-satisfied evocation of ordinary lives in the outskirts of Paris, the *Dixains réalistes* offer faintly fatuous depictions of humble lamp-lighters and jealous post office employees.

One of these little dizains by Charles Cros, untitled in the *Dixains réalistes* but later called “Gagne-petit,” is a particularly interesting example for the purposes of this dissertation, and will provide a close to my study of the Parnassian moment and the experimental poem.  

“Gagne-petit” focuses on a peddler selling glass:

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Il a tout fait, tous les métiers. Sa simple vie
se passe loin du bruit, loin des cris de l’envie
et des ambitions vaines du boulevard.
Pour ce jour attendu, qui s’annonce blafard,
les savants ont prédit, avant l’heure où se couche
le soleil, une éclipse. Et sa maîtresse accouche,
apportant un enfant parmi tant de soucis !
Il compte, pour dîner, sur ses verres noircis.
Carrières de Montmartre, en vos antres de gypse,
abritez le marchand de verres pour éclipse ! (CCOC, 143)
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The poem’s first line is significant, because “Gagne-petit” amounts to an extended joke, and meditation, on the nature of various *métiers*. That the character has practiced every *métier*, without earning much, is an assertion borne out by the rest of the poem.

On the surface, his profession is easy to describe: the man makes and sells glass used to observe solar eclipses. It is unclear whether this is a year-round occupation, or timed to the “jour attendu,” when the eclipse is supposed to occur. There was a total solar eclipse in the spring of 1875, although it was not visible in Paris. This uncertainty, in contrast with the confident prediction of “les savants,” lends an aura of suspicion to the peddler’s trade. Maybe the small squares of sooty glass, intended to prevent eye damage from watching the moon cover the sun,

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588 Cros added this poem, along with ten other dizains from the *Album Zutique* and *Dixains réalistes* to his revised edition of *Le coffret de santal* in 1879. All of the dizains are placed together in the “Grains de sel” section; “Gagne-petit” is the first. For the purposes of simplicity in nomenclature, I refer to the poem here by the title Cros gave to it in 1879, although my discussion concerns its 1876 publication and context.

are a scam, intended to separate customers from their money so that they can stare pointlessly into the sky. Or, as Forestier notes, perhaps the peddler isn’t selling glass. “Marchand de verre pour éclipse,” he reports, was slang for a procurer, and the quarries of Montmartre located on the west side of the hill were a favorite hangout for plying the trade (CCOC, 1131n2). Thanks to its punchy last line, “Gagne-petit” pulls the rug under its miserabilist portrait of the glass salesman: “tous les détails qui s’appliquent au modeste artison, cru honnête et besogneux, prennent brusquement une autre valeur quand on s’aperçoit que l’homme en question n’est qu’un vulgaire maquereau,” writes Forestier.590

Of course, verre is never a transparent word in poetry, and Cros’s street hawker of astronomical instruments-cum-procurer is also a figure of the poet. Like the “marchand de verres pour éclipse,” the poet is a “marchand de vers”; if the peddler “compte, pour dîner, sur ses verres noircis,” then the poet counts on his vers for dinner, too. The punning allusions to the poet’s world do not stop there. “Gagne-petit” is complemented by an etching, called “Le Noircisseur de verres pour éclipse,” that Cros had placed as a frontispiece to the Dixains réalistes.591 Drawn by Cros’s brother Henri, this image shows a man seated in a dim room, lit by a single candle. The man holds a flat, square pane of glass over the candle, where smoke rising from the wick clearly leaves a dark mark. Aimée Boutin has called attention to the role of the telling rhyme “fumiste” with “triste” in “Jours d’épreuve,” another of Cros’s contributions to the Dixains réalistes, which has the impoverished poet languishing in a garret. “‘Fumiste’ refers literally to a chimney engineer (a step up from ramoneur), and figuratively to a clown, prankster, or bohemian writer who enjoys mystification and seeks to disconcert readers,” writes Boutin. “Those sad eyes are

590 Forestier, Charles Cros, 389.
591 The drawing is included in the version available from Gallica, as well as in Saint-Amand and Grojnowski’s recent paperback edition of the Dixains réalistes.
mercilessly mocked when we think of them as the masterful work of a *fumiste.*” Similarly, the smoke that darkens the poet-peddler-procurer’s glass might be a subtle reference to the dark humor of the *esprit fumiste* gathering in the capital’s cafés and bars. The “carrières de Montmartre” themselves seem to suggest such a multiple meaning. The gypsum mines that had spread down toward the boulevard de Clichy, avenue de Saint-Ouen, and rue Marcadet were mostly closed by the 1870s, and now harbored hubs of prostitution. But Montmartre also was becoming a hub for writers, artists, musicians and actors, which makes “Montmartre careers” sound like a catch-all term for the professional pursuits of the new crop of bohemians.

The element of “Gagne-petit” that ties together all of these *métiers* is the eclipse, which has particularly rich resonances with the poem’s astronomical, sexual, and poetic professions. Beyond the regular slang connotations between buttocks and the moon, “Gagne-petit” references charged materials. “Verres noircis” are a tempting analogue to wet-plate process photographic negatives, where the image develops in black and white on glass; the “antres de gypse” of Montmartre provided the raw material for plaster of Paris, used in sculpture and the manufacture of statuettes. The poem hints at the “Montmartre careers” of posing for and producing the artists’ *académies* that made up a substantial portion of the pornography market, as well as perhaps gesturing towards the issues of artistic purity that the photographic Venus raised during the Parnassian moment. (While preparing the *Dixains réalistes*, Cros was busy working on his proposal for color photography to send to the Académie des sciences.) More definitively, the eclipse of “Gagne-petit” calls back to Cros’s own persistent interest in the Transit of Venus,

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595 Ibid., 86.
596 Grojnowski, introduction to *Dixains réalistes*, 135.
which is itself a type of eclipse. The difficulty that Cros experienced in obtaining institutional recognition for his scientific work, and the Académie des sciences especially, indicate another potential target for the poem’s parodic fumisterie: astronomer Urbain Le Verrier, director of the Paris Observatory and longtime member of the Académie. By playing on the lexical field of astronomy to link eclipse and the glass-man, “le verrier,” Cros identifies a titan of French science with a peddler and procurer.597

The preeminent professional question of “Gagne-petit,” however, concerns the figure of the poet. Reduced to poverty, having done every job, is the peddler-poet sheltering in the mines finally being eclipsed by other talents? Emphasizing the resemblance between the life of refuge described in “Gagne-petit” and the escapist dreams of Cros’s less overtly comic poetry in Le coffret de santal, Forestier argues that the dizain expresses the poet’s nascent disillusionment with the “ambitions vaines du boulevard.”598 While Coppée was on a path toward the Académie française and the Legion of Honor, Cros was on a path toward drink and destitution.599 Yet another interpretation is possible, in which the poet’s “Montmartre career” is poised to take off. Daniel Grojnowski has sought to show that in the Dixains réalistes, parody of Coppée is allied with the sincere search for a new kind of poetry. The Dixains réalistes attempt to redefine the

597 As his own biographer notes, Le Verrier was a difficult personality and, despite his achievements, was not widely loved within the scientific community during his lifetime: “Le Verrier est un introverti austère, au tempérament hautain et dictatorial, aussi opiniâtre dans sa recherche que dans son comportement. Ses rapports humains difficiles l’ont fait détester de beaucoup de ses contemporains, et cela souvent terni dans le souvenir collectif ses remarquables qualités de scientifique et d’organisateur.” Le Verrier was head of the Paris Observatory between 1854 and 1870, during which time he fired Camille Flammarion—young astronomer, author of La Pluralité des mondes habités, and future friend of Charles Cros. He occupied the post again between 1873 and 1877, during which time he declined to participate in planning, supporting, or executing the 1874 Transit observations. Lequeux, Le Verrier, vii, 135, 241.
598 Forestier, Charles Cros, 454.
599 Locating the turning point of Cros’s decline at the end of 1878, Forestier displays a dramatic sense of fatalism: “Cros a trente-six ans. Par un glissement irréversible, il va se laisser entraîner au courant d’une vie manquée dans le domaine littéraire et scientifique, bientôt dans le domaine amoureux. C’est le moment où il commence à s’adonner systématiquement à la boisson. Ses espérances mortes, Cros va devenir, lui-même, pour de longues années, un homme mort.” Forestier, Charles Cros, 165.
realism of Coppée’s lame verse. “Au moment où les revues publient des ‘poèmes en prose,’ la poésie prosaïque a fait entendre une note nouvelle,” writes Grojnowski:

Il revient donc aux collaborateurs des Dixains réalistes de se démarquer des Promenades et intérieurs en montrant que la poésie de Coppée appartient, autant que celle du Parnasse, à une époque révolue. Tout en les tournant en dérision, ils engagent une aventure poétique qui, à la différence du Parnasse, sera effectivement contemporaine.\(^{600}\)

A positive reading of “Gagne-petit,” then, aligns this new “poetic adventure” with the poet’s “Montmartre career,” rather than the staid and comfortable success of the poet publishing in Le Parnasse contemporain. To be a “marchand de vers” calls for the same attitude adjustment toward the market that Carrie Noland described in Cros’s “Préface” to the 1879 edition of Le coffret de santal, in which “the degradation of production is acknowledged by the poet and reinvented as a resource.”\(^{601}\) For the fumiste, to eat thanks to selling his “vers noircis” is not a mark of shame but instead a badge of pride. He creates a career that, although not be respectable, allows for something new.\(^{602}\)

The year 1876 marks the end of the Parnassian moment as I have considered it in this study. The preparation and publication of the third and final Parnasse contemporain brought about a decisive fracture within the original group of Parnassian poets. Yann Mortelette points to more hands-on role played by the Parnassians’ editor, Alphonse Lemerre, to help explain this split. Whereas the first and second volumes of Le Parnasse contemporain had been put together collaboratively by the poets themselves, Lemerre demanded a formal selection committee for the third Parnasse, and named Banville, Coppée, and France on his own sole authority. “Lemerre

\(^{600}\) Grojnowski, introduction to Dixains réalistes, 144.
\(^{601}\) Noland, Poetry at Stake, 33.
\(^{602}\) The poem’s titling for the 1879 edition of Le coffret de santal may reinforce this meaning; Boutin writes that terms like “gagne-petit” signified “[t]he collapse of distinctions among the small-scale tradesman reflects bourgeois perceptions of street vending’s marginal status.” Boutin, City of Noise, 35.
s’arroge une autonomie éditoriale en vertu de sa puissance financière.⁶⁰³ argues Mortelette; the publisher quarreled with Leconte de Lisle, and pushed for a commercial orientation that sanctioned the exclusion of Mallarmé, Cros, and Verlaine. Mortelette reports that these exclusions were not accepted quietly by other poets affiliated with the Parnasse, some of whom mounted an ultimately unsuccessful campaign against Lemerre to defend Mallarmé. “Le troisième Parnasse prend acte de divergences esthétiques antérieures,” Mortelette writes. “L’exclusion de poètes amis et la perte de confiance des Parnassiens envers Lemerre remettent en cause l’organisation du groupe. Plusieurs poètes prennent alors du recul par rapport au mouvement.”⁶⁰⁴

As published, the third Parnasse contemporain suggested a certain poetic bankruptcy. The number of authors represented more than doubled between the volume’s first and last editions, from 36 in 1866 to 73 in 1876, and Mortelette confirms that almost half of the Parnasse’s last batch of poets had not appeared in the previous editions. A third had no previous presence in any Parnassian publication.⁶⁰⁵ In this more obviously anthological Parnasse contemporain, its established writers viewed the collection as a merchandising opportunity rather than a poetic muster. The third Parnasse, writes Mortelette, “déçoit les Parnassiens. La compagnie de poètes médiocres leur déplait. L’attitude impérieuse de Lemerre les navre. Les décisions du jury les révoltent.” In Mortelette’s opinion, the artistic failure of the final Parnasse contemporain, rather than the political turbulence of the Commune or the aesthetic heterogeneity of the poets themselves, is responsible for the dispersal of Parnassianism as a movement:

“l’entreprise collective ne survit pas à l’emprise des considérations commerciales sur l’idéal

⁶⁰³ Mortelette, Histoire du Parnasse, 341.
⁶⁰⁴ Ibid., 353.
⁶⁰⁵ Ibid., 351.
It should also be noted that by this point, several of the poets studied here in connection with the period were dead or absent, including Baudelaire, Lautréamont, Gautier, Corbière, and Rimbaud. Although I am in agreement with Seth Whidden that the influence of Parnassianism in the 1870s, 1880s, and even 1890s has been severely underestimated, the Parnassian moment that I have sought to describe here drew to a close with the disappointments of 1876.

Scientific disappointments were on the horizon, as well. Highly anticipated and expensively executed, the 1874 Transit of Venus observations were alarmingly slow to produce results. The Académie des sciences began to publish records of the French expeditions in 1876, starting with the minutes and studies of the Commission. These records would fill nine volumes between 1876 and 1890, but the data drawn from photographs made of the Transit did not appear until 1882. By then, the Transit of 1874 was, at best, old news; Venus would once again pass before the sun on December 6, 1882. Since this would be the last chance to observe the Transit before 2004, astronomers were anxious to improve their results on the second go-around. As early as 1876, ominous rumblings warned that the images captured in 1874 presented serious difficulties for analysis, to say nothing of the sheer amount of time required to measure all 800 daguerreotypes. It soon became clear that such troubles were not limited to the French efforts, and in 1881, scientists organized an international conference on Transit observations. There, according to Jimena Canales, they reckoned with the magnitude of the 1874 observations’ failure, which had essentially yielded no usable data for re-calculating the solar parallax.

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606 Ibid., 353.
“scientists from around the world acknowledged that the transit of 1874 had greatly damaged the prestige of astronomers.”

The observations organized for the 1882 Transit of Venus were very different from those of 1874. First and foremost, observation procedures were agreed upon in advance and internationally standard, thanks to the 1881 conference. Countries collaborated on expeditions and reduced their scope, and cost, considerably. The use of photography was restricted, and indeed, many astronomers had hoped to avoid using it at all. “By 1882, almost everybody agreed that nonphotographic observations were better,” writes Canales. The director of the Berlin Observatory, Wilhelm Foerster, calculated the probable error of photographically determined results to be five times greater than those found with conventional means of observation.

Meanwhile, Canales writes, the complications of the 1874 Transit results lent additional weight to Urbain Le Verrier’s controversial preference for eliminating observation entirely in favor of purely mathematical work: “Physical determinations of the solar parallax or the speed of light, he insisted, should no longer be considered inferior to astronomical ones.” With the prestige of astronomical observation weakened, the value accorded to theoretical models and abstract computations increased at the turn of the century.

Changes to technology meant changes for the photograph, telegraph, and heliograph following the Parnassian moment. The photographic revolver invented by Jules Janssen in 1873

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610 Ibid., 602. Marlot recounts the embarrassments of the 1874 results in greater detail in *Passages de Vénus*, 318-324.
611 Canales, “Photogenic Venus,” 603.
612 Ibid., 610. The Académie des sciences’ first reports on the 1882 observations nonetheless indicate that photographs were taken in four out of eight missions (those to Haiti, Mexico, Florida, and Chubut province in Argentina). See *Passage de Vénus du 6 décembre 1882. Rapports préliminaires* (Paris: Gauthier-Villars, 1883), 18-19, 36-38, 54, 81, 92. On the French observations of the 1882 Transit, see Marlot, *Passages de Vénus*, 326-333.
613 Le Verrier died in 1877; his calculation of the solar parallax actually proved to be less accurate than the value calculated by Newcombe, using data collected during the 1882 Transit observations. See Lequeux, *Le Verrier*, 242.
for observing the 1874 Transit of Venus inspired the chronophotographic experiments of Étienne-Jules Marey in the early 1880s. These experiments, along with the photographic motion studies of Muybridge in the late 1870s, predated the development of celluloid film in the late 1880s and, in the 1890s, cinema.\(^{614}\) The heliograph, on the other hand, entered a long period of neglect in France, even as it was adopted and refined by British and American military units for signaling; despite Aimé Laussedat’s enthusiasm for establishing a heliographic service within the French army, his ideas for improving military communications received little long-term support.\(^{615}\) And, as for the telegraph, its main competition was patented in 1876: Alexander Graham Bell’s telephone. Although it would take several decades for the telephone to be adopted and for networks to be implemented to rival the telegraph’s power, the telephone would eventually realize the ridiculous pipe-dream, mocked by the *Magasin pittoresque* in 1870, of a telegraph in every home.\(^{616}\)

Like these technological and scientific shifts getting underway in 1876, the end of the Parnassian moment coincided with the emergence of new poetic movements. The eclipse of Parnassianism by the *esprit fumiste*, presaged by Cros’s “Gagne-petit,” dovetailed with the broader rise of Symbolism and Decadence.\(^{617}\) In 1876, Cros met the actor Coquelin cadet, who would start soon performing Cros’s monologues in cafés and cabarets around town, and broke with Nina de Villard, propelling him toward the new spaces and circles forming in


\(^{615}\) On the British development and use of the Mance heliograph, see Russell Burns, *Communications: An International History of the Formative Years* (London: The Institution of Electrical Engineers, 2004), 192-196. Although Mance’s instrument looks somewhat different than Laussedat’s heliograph, the two devices share the same principles. Designed in 1869, the Mance heliograph was used by the British in India beginning in 1875, and widely adopted by the British military by the late 1870s and 1880s.

\(^{616}\) Flichy, *Communication moderne*, 119-123; “Il y a cinquante ans,” *Le Magasin pittoresque* 38, no. 1 (January 1870), 4. By 1935, less than 10% of private homes in France were equipped with a telephone; Flichy, *Communication moderne*, 130.

\(^{617}\) Grojnowski distinguishes *fumisme* from Decadence, but discusses the key proximity between the two. Grojnowski, *Rire moderne*, 49-53, 61-67.
Montmartre.\textsuperscript{618} Cros founded his own group of \textit{fumistes}, the Hydropathes, in 1878, and was a fixture at Le Chat noir and in the pages of its weekly journal, from the cabaret’s launch in 1881 until his death in 1888.\textsuperscript{619} Joseph Jurt has also located the origins of Symbolism in 1876. Dating the “solitude prophétique” of Mallarmé to the poet’s break with the \textit{Parnasse}, Jurt argues that this solitude drew the young followers to Mallarmé who would eventually frequent his famous Tuesday evening salon, and become the core of the Symbolist movement.\textsuperscript{620} This new generation of writers rejected Parnassianism and carried out the “réaction symboliste” that, in Bourdieu’s description of the artistic field, created the fully autonomous pole of “pure production.”\textsuperscript{621}

It is not my aim, in this conclusion, to suggest that Symbolist or Decadent poetry of the post-Parnassian period rejects all scientific discourse or technological figures, or even that such poetry firmly rejects the types of experimental poem that I have highlighted from the Parnassian moment. In fact, the \textit{fin-de-siècle} era surely fostered new and different relationships between poetry and science; recent research on topics like Mallarmé and cinema will take our understanding of this work even further.\textsuperscript{622} Instead, I hope to have shown the particularity, and the importance, of the experimental poem during the Parnassian moment. By calling attention to the ways that that technology mediates aesthetic autonomy and modern scientificity in poems by authors both traditionally considered inside (Sully Prudhomme, Mérat, Cros) and outside (Rimbaud, Corbière … Cros) of Parnassianism, I hope to have contributed to the critical reframing of this period. There are other riches yet to be discovered in the poetic diversity of the Parnassian moment, I think, beyond the experimental poem.

\textsuperscript{618} Forestier, \textit{Charles Cros}, 147, 170.
\textsuperscript{619} Forestier, \textit{Charles Cros}, 172-177, 200-209.
\textsuperscript{620} Jurt, “Mécanismes,” 21.
\textsuperscript{621} See chapter 1.
### APPENDICES

**Appendix A: The Transit of Venus in the popular press, 1866-1876.**

*Le Petit Journal.*
Daily newspaper, founded 1863.
Available on Gallica: [http://gallica.bnf.fr/ark:/12148/cb32895690j/date](http://gallica.bnf.fr/ark:/12148/cb32895690j/date)

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<td>Félix Hément</td>
<td>Overview of Transit observation preparations underway</td>
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<td>Félix Hément</td>
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<td>June 30</td>
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<td>Defending the costs of observations in the name of science</td>
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<td>Transit expedition member designated</td>
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<td>Mar. 21</td>
<td>“Assemblée nationale”</td>
<td></td>
<td>Vote approving Transit expedition financing</td>
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<td>Overview and explanation of Transit</td>
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<td>Telescopes for expedition received</td>
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1874 Nov. 12 “Dernières nouvelles” Janssen Reprint of cable, from Japan to Ministre de l’Instruction publique and the Académie des sciences

1874 Dec. 10 “Passage de Vénus” Good luck message for the success of the Transit observation; reprint of Henri de Parville article from *Le Journal des débats* about the 1761 Transit observation

1874 Dec. 12 “Dernières nouvelles” Janssen Reprint of telegram from Japan Transit observation

1874 Dec. 13 “Dernières nouvelles” Informs readers of failed Transit observations but assures that parallax will be calculated anyway

1875 Jan. 11 “Paris” Reprint of telegram from Nouméa Transit expedition to Académie des sciences

1875 Mar. 27 “Petites nouvelles” Competition for engraving a medal to commemorate the 1874 Transit

1875 Mar. 31 “Petites nouvelles” Return of a Transit expedition member

1875 April 9 “Petites nouvelles” Upcoming return of Janssen from Japan

1875 April 22 “Les obsèques des aéronautes” Thomas Grimm References Transit expeditions

1875 May 6 “Spectacles, Variétés” *Le Passage de Vénus* de Mailhac et Halévy: May 25, 1875

1875 Oct. 10 “Le bureau des Longitudes.” Thomas Grimm Transit instruments and calculators

1876 June 21 “Paris” Exhibit of materials from Transit expeditions

1876 Sept. 28 “Le passage de Vulcain sur le Soleil” Transit of Vulcain, references Transit of Venus

*La Presse.*
Daily newspaper, founded 1836.
Available on Gallica: http://gallica.bnf.fr/ark:/12148/cb34448033b/date
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*La Revue des deux mondes.*
Biweekly general-interest review, founded 1829.
Available on Gallica: [http://gallica.bnf.fr/ark:/12148/cb32858360p/date](http://gallica.bnf.fr/ark:/12148/cb32858360p/date)

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*Le Magasin pittoresque.*
Biweekly general-interest review, founded 1833.
Available on Gallica: [http://gallica.bnf.fr/ark:/12148/cb32810629m/date](http://gallica.bnf.fr/ark:/12148/cb32810629m/date)

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1871 April “Le prochain passage de Vénus sur le Soleil” Vol. 39, no. 15. 118-120.

La Science pour tous.
Popular science weekly, founded 1856.

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<td>Gédéon Bresson</td>
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Sur les applications de la photographie à l’astronomie et, en particulier, à l’observation du passage de Vénus”

Wolf, speech at the Société de photographie

Vol. 20, no. 10. 74-75.

Part 2.

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**Les Mondes.**

Popular science weekly, founded in 1863. (Continues *Cosmos*, founded by Moigno in 1852 and edited by him until 1863; the two journals merge in 1873 under the title *Cosmos / Les Mondes.*)

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1875  July 29  Nouvelles de la semaine  summary of expedition reports  Vol. 37, no. 13. 546-549.
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1876  Dec. 28  Académie des sciences  black drop  Vol. 41, no. 17. 710.

Appendix B: Telegraphy in Les Mondes, 1866-1876.

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A number of interesting patterns emerge from *Les Mondes*’ coverage of electric telegraphy over this ten-year period. The large number of individual items concerning telegraphy in 1866 can be explained by the successful laying of a new transatlantic cable in the summer and early fall. In 1867, *Les Mondes* reported on plans for a Franco-American telegraph cable. In 1868, the rubric “Faits de la télégraphie électrique” began appearing in the regular “Chronique de la semaine,” as did “Télégraphie électrique” as a recurring feature section. Articles on military telegraphy emerge beginning in 1869, and in subsequent years, discussion of atmospheric (pneumatic), optical (heliographic), and other types of new telegraphic systems and apparatuses punctuate *Les Mondes*. 1875 reports an international conference on telegraphy taking place in Paris, and 1876 brings the first mention of a telephone. Thus while telegraphy is mentioned with clearly decreasing frequency throughout the decade, the nature of its coverage shifts as telegraphic instruments are widely adopted and new apparatuses, usages, and institutions are proposed.

### features

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Appendix C: Research concerning military and geodesic applications of heliographic optical telegraphy.

Comptes rendues hebdomadaires des séances de l'Académie des Sciences
Available on Gallica: http://gallica.bnf.fr/ark:/12148/cb343481087/date?rk=128756;0

1871 Urbain Le Verrier “Établissement de signaux pour le service des places fortes et des armées en campagne.” Note submitted to the Academy. Vol. 72, no. 11 (1st trimester). 269-270.

M. Le Verrier dépose, par l'intermédiaire de M. Dumas, un travail intitulé « Établissement de signaux pour le service des places fortes et des armées en campagne ». 

Le but proposé était, d'une part, d'établir des postes de télégraphie optique à de grandes distances, 60 à 100 kilomètres ; de l'autre, d'organiser un système de signaux propres, par leur simplicité et leur puissance, à mettre en rapport les corps d'une armée opérant à une distance de 30 kilomètres l'un de l'autre.

Tous les appareils employés sont, à dessein, d'une extrême simplicité, et ils peuvent être construits par les plus modestes ouvriers. Les matières dont il est fait usage se rencontrent partout.

Les signaux consistent en des éclairs empruntés à la lumière du soleil, comme on l'a déjà proposé, M. Leseurre entre autres ; à des lampes alimentées par l'oxygène, dues aux soins de M. Crova ; à la combustion du magnésium, à la combustion de certaines poudres d'artifice. Parmi les signaux artificiels, les derniers, convenablement étudiés et disposés, ont paru les plus puissants.

Les essais et expériences ont été faits à Nîmes particulièrement, et ont duré plusieurs mois. L'efficacité des signaux était considérablement accrue au moyen d'un phare installé, en 1822, par Fresnel, à Aiguèes-Mortes, et qui avait été mis à la disposition du Comité de la défense.


Le Rapport, dans lequel sont prévus tous les détails pratiques, est ac-compagné de treize planches à l'échelle. La dernière est consacrée au plan du poste. Tout était donc amené en l'état où le fonctionnement aurait été assuré dans les quarante-huit heures, soit pour la mise en rapport de Lyon avec les Alpes, soit pour le service des états-majors, si les circonstances l'avaient exigé.


M. le SECRÉTAIRE PERPÉTUEL donne lecture de la Lettre suivante, qui lui est adressée par M. Laussedat :

« Le dernier numéro des Comptes tendus contient une Note sur un travail de M. Le Verrier, intitulé « Établissement de signaux pour les places fortes et les armées en campagne ». « J'ai l'honneur de vous prier de vouloir bien faire savoir à l'Académie que des appareils de télégraphie optique très-simples ont été construits à Paris sous la direction d'une Commission que j'avais l'honneur de présider, et qui était composée de MM. Maurat, Lissajous, Brion, Cornu, Hioux et Malot, savants distingués, dont plusieurs sont bien connus par leurs travaux de physique.

« Ces appareils jouissent de propriétés importantes, au point de vue de leur destination. Les signaux d'une portée considérable sont, au besoin, absolument invisibles pour l'ennemi ; leur transmission s'opère avec une extrême rapidité ; le matériel destiné aux armées en campagne est léger, et son installation est des plus faciles.
« Est-il nécessaire d'ajouter que nous avons employé depuis les signaux héliotropiques, bien connus de tous ceux qui ont fait usage des instruments de haute géodésie, jusqu'aux lumières artificielles les plus faciles à produire ?

« Nous avions pensé que le temps n'était pas encore venu d'entretenir le public des travaux scientifiques entrepris pour la défense du pays, et nous croyons devoir nous abstenir d'entrer dans d'autres détails, notamment en ce qui concerne la télégraphie optique. Nous ne pouvions cependant pas laisser passer la Note relative aux recherches de M. le Verrier et de ses collaborateurs sur ce sujet, sans prévenir l'Académie que des recherches analogues avaient été faites avec un plein succès à Paris, et nous ajouterons que plusieurs des instruments, construits par les soins de la Commission, ont même été transportés en province, par deux de ses membres, pendant l'investissement.

« P. S. Un des observateurs, envoyé en province et de retour à Paris depuis peu de jours, me rend compte qu'il a établi un service de télégraphie optique à l'armée du général Chanzy. Ce service a parfaitement fonctionné aux grandes et aux petites distances; l'installation des appareils mobiles s'opérait avec une extrême rapidité, et toutes les personnes qui ont été à même de recourir à l'emploi de ce système ont été [329] / tres-frappées de sa simplicité et de la sûreté avec laquelle les dépêches étaient transmises. La plus grande distance que l'on ait eue à franchir a été de 37 kilomètres. » [330]

1873 Aimé Laussedat “Sur un système de télégraphie optique, réalisé pendant le siège de Paris par une Commission nommée par le Gouverneur.”


« Pendant le siège de Paris par les armées allemandes, une Commission (i), nommée par le Gouverneur, sur la proposition de M. le général de plein succès, le problème de la télégraphie optique.

« Le principe de cette solution, entrevu vers la même époque par d'autres personnes, tant en France qu'à l'étranger, n'avait pas reçu jusqu'à présent, à notre connaissance du moins, les développements que nous étions parvenus à lui donner, en réunissant tous nos efforts dans un moment de suprême danger. Nous évitions d'ailleurs la publicité, rien ne nous obligeant à faire part aux étrangers du résultat de nos recherches; mais nous avions cru néanmoins prudent de prendre date, en déposant, le 29 avril 1872, au Secrétariat de l'Académie, un pli cacheté contenant un exposé sommaire des expériences faites et des résultats obtenus pendant la guerre.

« Un numéro du Recueil intitulé : Giornale del Genio militare, récemment paru, est venu nous prouver que nous avions eu raison de prendre cette précaution. Ce journal contient, en effet, un Mémoire étendu et intéressant sur la télégraphie optique à laquelle le Comité du Génie italien paraît s'être beaucoup intéressé depuis quelques années.

« Nous sommes persuadé que ce Mémoire a été rédigé avec une entière bonne foi, mais les méthodes d'observation et les résultats qui y sont annoncés présentent une telle analogie avec les nôtres que, en gardant plus longtemps le silence, nous nous exposerions à passer pins tard
pour des imitateurs, alors que nous avons réellement imaginé et improvisé, en quelques semaines, un système que nous continuons à perfectionner, mais qui, [34] / tel qu'il était à la fin de 1870, pouvait supporter avantageusement la comparaison avec l'appareil italien actuel.

« D'ailleurs, bien que les expériences dont il est rendu compte dans le Giornale del Genio militare, aient été ordonnées dès 1869 par le Comité du Génie italien, elles n'ont été, de l'aveu de l'auteur, terminées qu'en 1871, et le Mémoire qui vient de paraître est daté du 29 septembre 1872. Or les appareils décrits dans le Mémoire que nous avons déposé le 27 avril 1872 ont été construits à Paris en septembre, octobre et novembre 1870, et les expériences dont nous faisons connaître les résultats, commencées en septembre 1870, ont été terminées en février 1871.

« Le droit de la Commission, celui de M. le professeur Maurat surtout, qui a fait les premiers essais, sinon à une invention, du moins à la réalisation d'une idée utile et féconde, ne saurait donc être contesté, grâce à la garantie offerte par l'Académie des Sciences. J'ai l'honneur de prier l'Académie de vouloir bien ouvrir, dans la prochaine séance, le pli cacheté inscrit sous le n° 2667, et d'en faire connaître le contenu au public. »

Ce pli est ouvert en séance par M. le Secrétaire perpétuel, qui donne lecture des passages suivants :

« Depuis l'invention de l'héliotrope par le célèbre Gauss, les géodésiens ont à leur disposition un moyen de correspondance d'une grande simplicité et d'une portée qui n'est limitée que par la courbure de la Terre.

« Le mode de correspondance à l'aide des héliotropes, si simple de jour et par un ciel découvert, est malheureusement d'un emploi très-limité, puisqu'il exige la présence du Soleil.

« Pour correspondrepar les temps couverts et même pendant la nuit, il a fallu recourir à des systèmes optiques plus ou moins puissants et à des lumières artificielles d'une intensité assez grande pour rester visibles à des distances qui peuvent atteindre et dépasser 50 kilomètres. Les astronomes emploient depuis un certain nombre d'années, sous le nom de collimateurs, un dispositif de lunettes qui se prête parfaitement à la solution du problème dont il s'agit.

« Avant d'exposer le principe sur lequel repose l'emploi des collimateurs, nous devons dire immédiatement que M. le professeur Maurat, qui a réalisé les premiers essais fait à Paris pour établir une télégraphie optique, a imaginé spontanément le système que nous allons décrire.

« Principe de l'appareil. Considérons deux lunettes ab, a'b', dirigées l'une sur l'autre de telle sorte que leurs axes optiques coïncident sensiblement. Au delà de la lunette a'b', un peu en arrière et tout près de son oculaire, plaçons une lumière, la flamme d'une bougie, par exemple; si la distance n'est pas trop grande et qu'un observateur regarde à travers la lunette ab, il apercevra cette lumière ou plutôt l'image de la flamme comme un point brillant. Si la distance des deux lunettes augmentait, il deviendrait nécessaire d'augmenter aussi l'intensité de la source lumineuse ou l'ouverture des objectifs des lunettes. Plus généralement, il est évident que l'éclat de l'image perçue à travers la lunette ab dépendra à la fois

« 1° De l'intensité de la source lumineuse;

« 2° De la distance qui sépare les deux lunettes;

« 3° De l'ouverture des objectifs de ces deux lunettes;

« 4° Enfin de l'état de l'atmosphère.

« Les expériences multipliées faites à Paris en septembre, octobre et novembre ont eu pour objet de déterminer avec soin les meilleures conditions de construction et d'installation des appareils ainsi que la nature des sources lumineuses à adopter selon les circonstances, c'est-à-dire selon que les distances sont plus ou moins considérables, l'atmosphère plus ou moins chargée de vapeurs, de jour et de nuit. Il est à peine nécessaire d'ajouter que, pour produire les éclipses et les réapparitions du signal lumineux, on n'a qu'à interposer un petit écran au-devant de la lumière ou sur un point choisi du pinceau lumineux et à le retirer alternativement. On conçoit facilement comment les mouvements de cet écran peuvent être guidés et réglés en l'adaptant au bras du levier du manipulateur Morse.
« En employant le même alphabet conventionnel, on pouvait donc espérer aussi que l'on obtiendrait à peu près la même rapidité dans la transmission des dépêches qu'avec la télégraphie électrique. Il résulte encore de cette identité de l'organe essentiel de la transmission, que toutes les personnes exercées peuvent passer de l'un des systèmes à l'autre après un exercice de quelques heures au plus. C'est, d'ailleurs, ce que l'expérience a démontré…

« L'un des savants physiciens qui ont concouru à la création du nouveau système, M. Brion, est parvenu à rendre les éclipses absolument invisibles, pour un observateur non prévenu de la position exacte de la station télégraphique. »

« Ici se trouve un historique de la création de la Commission, duquel est extrait seulement le passage suivant :

« Cette Commission, constituée par un ordre du Gouverneur de Paris, était autorisée à faire construire les appareils nécessaires à ses expériences et à les installer partout où elle jugerait convenable, notamment dans les forts, ce qui lui permettrait de faire varier la portée des appareils, de jour et de nuit, et d'atteindre le maximum de 20 kilomètres entre le Mont-Valérien et le fort de Nogent. »

« Vient ensuite la description des différents modèles d'appareils, accompagnée de dessins très-détailés et qu'il eût été impossible de reproduire dans les Comptes rendus.

« Les expériences de la Commission avaient été entreprises pour tenter de mettre Paris en communication avec la province, et il était convenu que deux de ses membres partiraient en ballon pour aller s'installer, si cela était possible, au delà des lignes d'investissement. Voici ce que le Mémoire de M. Laussedat contient à ce sujet :

« Les expériences étaient terminées et les préparatifs de départ pouvaient être faits dès les premiers jours de novembre. Des retards tout à fait indépendants de la volonté des deux membres désignés opposèrent pendant près d'un mois à leur départ. Enfin le 1er décembre, le lendemain de la première affaire de Champigny, M. Mercadier, directeur général par intérim de l'administration des lignes télégraphiques ayant mis, avec une grande obligeance, à la disposition de la Commission, le ballon la Bataille de Paris, MM. Hioux et Lissajous purent s'embarquer avec un matériel soigneusement préparé et franchirent heureusement les lignes prussiennes. Un rapport de M. Lissajous, annexé à cette Notice, fait connaître en détail les services que MM. Hioux et Lissajous ont rendus ou essayé de rendre, dans des circonstances qui devenaient de jour en jour plus difficiles. »

« M. Lissajous fait connaître dans ce Rapport, également contenu dans le pli cacheté, les essais indépendants faits en province, dans le Midi, par MM. Le Verrier et Crova, et à Tours par MM. Grammassini et Matagrin. Il y rend compte de la création d'une école de télégraphie optique à Bordeaux, sur les indications de son collègue, M. Hioux, et de la construction d'un matériel dans la composition duquel entraient des verres non achromatiques d'un grand diamètre, fort avantageux au point de vue de l'économie.

« Enfin il fait connaître les résultats obtenus à l'armée du général Chanzy par MM. Hioux et Grammassini.

« M. l'inspecteur Tamisier, chef du service télégraphique à la deuxième armée, dit-il, profita de nos appareils pour relier une des divisions avec le quartier général établi à Laval. M. Hioux installa une station à Laval même, au bureau télégraphique provisoire situé rue du Bel-Air. M. Grammassini alla installer la station correspondante à la ferme du Grand-Guérouli, située aux avant-postes, à proximité de la division du général de Curten. La distance des deux stations était de 5 kilomètres en ligne directe. La correspondance fut établie de jour, par un soleil des plus vifs. La réussite fut complète. »

« Les premières expériences se firent le 4 mars. L'une des stations était à la préfecture, l'autre à Saint-Georges, à 12 kilomètres. On se servait de deux appareils à prisms (objectifs de 6 pouces d'ouverture). L'installation fut rapide; M. Baudot se servit d'une boussole et d'une carte du pays pour déterminer sa position. La correspondance se fit de jour et de nuit, à l'aide d'une simple lampe à pétrole.

« Le lendemain, 5 mars, M. Baudot, sans prévenir M. Grammassini, se transporta à Beaumont, à 22 kilomètres de Poitiers. Il s'installa en plein champ à 8h10m du soir. A 8h30m la correspondance était établie. La station de Poitiers avait retrouvé promptement la station extérieure. »

« Le 10 mars, M. Baudot se transporta à Champagné-Saint-Hilaire, à 37 kilomètres de Poitiers, à l'angle de la promenade de Blossac. Il faisait très-beau soleil chaque station était pourvue d'un miroir plan. On s'en servait pour envoyer le soleil par réflexion dans l'appareil, et la correspondance se fit ainsi de jour. La nuit venue, on employa la lampe à pétrole. La lecture des signaux se faisait à l'œil nu, à cette distance de 37 kilomètres.

« Ces expériences ont eu lieu sous les yeux de M. Morin, inspecteur des télégraphes à Poitiers, et de M. Tamisier, inspecteur télégraphique de la deuxième armée. » [38]

(i) Cette Commission était composée de MM. Brion, Hioux, Lissajous, Malot et Maurat. M. Cornu lui fut adjoint dans le courant d'octobre.


« Dans le Rapport fait au nom de la Commission chargée d’examiner les travaux géodésiques relatifs à la nouvelle méridienne de France, vous avez rappelé les avantages et les inconvénients que présentaient les signaux de nuit et vous avez constaté que l’usage de ces signaux n’avait été consacré dans aucun pays de l’Europe.

» Faut-il conclure de là que l’on doive renoncer définitivement aux observations de nuit, ou bien seulement que les procédés d’illumination essayés jusqu’au présent n’était pas parfaitement appropriés à leur desti- [898] / nation? C’est à cette dernière interprétation que je vous demande la permission de m’arrêter.

» Les signaux lumineux qui ont été employés tour à tour en France, en Espagne, en Angleterre, dans l’Inde, etc., consistaient en réverbères, c’est-à-dire en lampes à huile à double courant d’air avec réflecteurs paraboliques, en feux de Bengale et enfin en feux de poudre (ces derniers pour la détermination des longitudes, avant l’invention du télégraphe électrique). Les réverbères présentaient l’inconvénient de ne pouvoir pas toujours être dirigés commodément et sûrement vers la station d’où ils devaient être observés; ils étaient visibles des localités voisines et pouvaient, dans certaines circonstances, effrayer les populations et, par contre-coup, inquiéter les observateurs eux-mêmes; enfin leur entretien et leur surveillance exigéaient des soins particuliers qui en rendaient l’emploi coûteux. Les feux de Bengale employés par les Anglais avaient un grand éclat et envoyaient leur lumière dans toutes les directions; mais ils avaient une trop faible durée et, encore plus que les réverbères, ils pouvaient alarmer les populations. Les
feux de poudre, destinés à produire des signaux instantanés, étaient dans le même cas et n’avaient d’ailleurs qu’un objet restreint; ils ne servaient pas à la mesure directe des angles, et je n’aurais pu me dispenser de les mentionner, si les signaux que nous employions dans les expériences de télégraphie optique, poursuivies depuis l’époque du siège de Paris par les Allemands, ne me semblaient pas pouvoir répondre à tous les besoins de la Géodésie, la détermination des différences de longitude comprise, sans le secours de la télégraphie électrique (entre des stations peu éloignées, bien entendu).

» Le principe de ces signaux, que nous devons à M. Maurat, et la description de nos premiers appareils se trouvaient dans le pli cacheté ouvert, à ma demande, le 7 juillet 1873; mais il n’est peut-être pas inutile d’y revenir en quelques mots.

» Supposons un lunette dirigée d’une première station que nous occupons sur une seconde vers laquelle nous voulons envoyer de la lumière; plaçons au foyer de cette lunette un diaphragme d’une très-petite ouverture, telle que le champ de vision ne comprenne que l’édifice (tour, clocher, baraque) dans lequel est installé l’observateur qui doit percevoir nos signaux.

» Enlevons l’oculaire de notre lunette, en laissant le diaphragme, et, en arrière de ce diaphragme, sur l’axe de la lunette, dispons d’abord un verre convergent, puis une source lumineuse dont l’image conjuguée, [899] / produtite par le verre convergent, tombe précisément sur l’ouverture de ce diaphragme.

» Le faisceau lumineux transmis alors à travers la lunette ira tomber sur l’édifice compris dans le champ de vision que nous avons défini, et ne s’en écartera pas; en un mot, la lumière du signal est invisible pour tous ceux qui sont hors de ce champ.

» L’observateur éloigné recevra, au contraire, en plein ce faisceau; l’éclat de la lumière qui lui parviendra ne dépendra que de l’éclat intrinsèque de la source lumineuse et de l’état de l’atmosphère; mais, malgré la réduction de l’ouverture du diaphragme, il n’en verra pas moins l’objectif de la lunette d’émission illuminé sur toute sa surface, et plus le diamètre de cet objectif sera grand, plus les signaux seront perceptibles aux grandes distances.

» Je ne crois pas qu’il soit nécessaire d’insister sur les détails de nos appareils; il est facile de concevoir que leur installation se fera partout où l’on peut installer des instruments de Géodésie. Quant au mode d’éclairage, il est on ne peut plus simple pendant la nuit, pour des distances déjà assez grandes; ainsi, à moins que le temps ne soit pas brumeux, une simple lampe à pétrole suffit pour donner des signaux visibles à l’œil nu, à 36 kilomètres. Ces signaux seraient même certainement perceptibles à de bien plus grandes distances, à l’aide des lunettes des théodolites ordinaires. Enfin, la Commission de télégraphie optique a aussi essayé d’autres sources d’un éclat supérieur et d’une constance remarquable, dont la lumière transmise atteindrait, je suis fondé à le croire, aux plus grandes distances géodésiques, à 100 kilomètres et plus, s’il était nécessaire.

» Les comparaisons fréquentes que nous avons été à même de faire pendant nos expériences de télégraphie optique, entre les signaux de nuit que je viens de décrire et les signaux de jour, ne laissent aucun doute sur la supériorité des pointés que l’on peut faire sur les premiers. Les signaux héliotropiques eux-mêmes dont nous faisons également usage sont bien rarement calmes, et nous avons vu se produire incessamment les phénomènes de sautillement et de dilation de l’image du Soleil dont parle le général Bäyer dans son ouvré sur le Nivellement entre Swinemünde et Berlin (1). [900] /

» Au contraire, nos signaux de nuit sont presque toujours parfaitement tranquilles et uniformes, et je ne doute pas qu’en les employant on ne parvienne à la fois à économiser beaucoup de temps et à accroître la précision des mesures. Je n’ai pas besoin d’ajouter que les
appareils dont je propose l’emploi permettraient aux observateurs d’entretenir une correspondance bien plus continue et moins rudimentaire que celle dont ils ont fait usage jusqu’à ce jour, en interceptant un certain nombre de fois de suite les rayons solaires. Enfin les signaux instantanés, si faciles à produire, à l’aide de nos manipulateurs, pourraient concourir, comme je l’ai déjà dit, à la détermination des longitudes, en l’absence du télégraphe électrique. »

(1) Ce sautillement se produit surtout au milieu de la journée; dans les pays de plaines, on le constate également le soir et le matin. Bäyer estime à 30 ou 40 secondes sexagésimales le diamètre apparent du disque qui représente l’image du Soleil, dans ses plus grandes dilations. Dans les moments de calme, ce disque a encore de 10 à 15 secondes; dans les grands troubles, l’image s’éparpille et disparaît même complètement. [901]
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