Verne's cartographies.

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**Verne's Cartographies**
“So, you’ve crossed this country?”
“Of course!” Paganel replied severely.
“By pack-mule?”
“No, in an armchair.”

*The Children of Captain Grant*
We can dispense with the tiresome canard that Jules Verne never traveled far from his homes in Nantes, Paris, Crottoy, and Amiens. His first trips abroad were in 1859, by steamship to England and Scotland with Aristide Hignard, a close friend and Verne’s collaborator in his works; and he traveled again with Hignard in 1861 to Denmark and Norway. His only trip to the United States was in 1869 with his brother Paul—they visited New York and Niagara Falls aboard Brunel’s grand liner the Great Eastern. Between 1868 and 1884, Verne made several short voyages on the Seine and along the coasts of France on the Saint Michel I and II, modest sailing yachts purchased in 1868 and 1876, respectively, with friends and family on a 150-foot steam yacht, the Saint Michel III, included trips to England, Scotland, Ireland, the Netherlands, and Germany. In 1886, Verne ended these peregrinations. The expenses of maintaining this onerous (it was considerably more luxurious than its predecessors, with a full-time crew of thirty-five) yacht were forced to sell the yacht at a loss. Family troubles, the death of his lifelong friend and mentor Pierre-Jules Hetzel, failing health (including cataracts in both eyes, bizarre assault by a nephew that left Verne lame), and growing financial difficulties had begun to take their toll. After the late 1880s, he seldom left Amiens. In a November letter to Dumas fils, Verne complained of the infirmities of old age: “If I have much nothing remains of my youth. I live in the heart of my province and never budge from Amiens. I travel only by maps.”

Analysis of the significance and functions of maps in Verne’s writing and published works must begin, then, with an acknowledgment of the practical aspects of his uses of maps and the terrains, real and imagined, they depict. Verne, unlike the fictional Paganel, was not necessarily a well-traveled man. His nonfiction works demonstrate a thorough understanding of the methods of modern cartography; several of his novels (most notably, The Adventures of Three Russians and Three Americans) embrace technical problems of cartography and geodesy. These facts should not be taken, however, to suggest a firm distinction within his fiction between pragmatic (documentation, navigation, mimesis) and its literary functions (verisimilitude, projection of an imaginary, narration). In Verne, maps are always ambiguous and semiotically unstable objects. Thirty of the novels in the 47-volume octavo editions of the Voyages Extraordinaires published by Pierre-Jules Hetzel (from 1863 until his death in 1887) and his son Jules Hetzel (until 1919) included one or more engraved maps; there are forty-two such engravings in all. The published nonfiction on history and geography include dozens more political, topographic, and oceanographic maps and charts. The covers and frontispieces of the célèbres et dorés (colored and gold inlaid bindings), while not maps strictly speaking, in this essay) elements of a subtle but unmistakable cartographic idiom enframing the work’s reception by contemporary readers. These images and design elements are nuanced, graceful, and evocative of some of the finest artists of the time, they represent the pinnacle of late nineteenth-century design.
scientific cartography. In describing their engagements with textual
Verne's fiction as his *cartographies*, I mean to emphasize their com-
support of the spatial imaginaries of his heroes' adventures. This prog-
the corroborative and sometimes juxtaposed significance of maps and
( the illustrations of the Hetzel editions), of textual passages that *read*
lists and panoramic descriptions), and of maps and narrative passages
of each form of representation. Seeing and writing, mapping and writin
another throughout Verne's œuvre. The complexity and originality of
represent one of the signal achievements of Verne and his publishers. T
*Extraordinaires* are among the most accomplished and evocative reflec-
alphabetic text to its graphic counterparts in modern fiction.

Des Cartes maÎtresses.\(^{10}\) Several of the maps appearing in the Hetzel
Verne's close supervision or were based on his sketches or designs. [\(20,000\) *Leagues* [Figure 1], *Hatteras* [Figure 2], *Three Russians*] wer
whose talents in this regard were appreciable. In each of these works, t
image that doubles and seems to corroborate the novels' textual order
maps recognizably belong to the “real” world—complicates and extend
structures. These maps are the only graphic devices of the texts attribu-
maps, and design elements in the *Voyages* are unattributed or credited
on the frontispieces below the name of the author, thereby marking
presentation of the work (“Illustrated with 111 drawings by De Nervignettes by Férat,” etc.).\(^{11}\) Verne's designation as the creator of the text
maps (assuming, provisionally, that this distinction is meaningful) si
convention of illustrated fiction of the mid- and late-nineteenth centur
text is plainly differentiated from the illustrators, the typesetters, the c
(The author's text is thus held apart from its multiple, possibly vary
illustrations support or sustain the textual register of the work, pre-
presentation of it; the essence of the textual work is its semantic conte
formal elements are the province of its publishers and distributors, etc.
from and re-publication of Verne's fiction and nonfiction in differen
a textbook example of this practice.\(^{12}\) Because this distinction is confi
the *Voyages*, Verne's role as author of text and image in these exce
potential crossing of textual and paratextual boundaries implicit in this

Verne is too conscious of the literary effects of this crossing not to apply
fictional and extrafictional orders is signalled in the legend of Ve
*Adventures of Captain Hatteras* (1866): “Cartes des régions circumpol
du Capitaine J. Hatteras par Jules Verne, 1860-61” [“Map of the circum-
voyage of Captain J. Hatteras by Jules Verne, 1860-61.”] (Figure 2).

Yet “1860–61” is the period of Hatteras's ill-fated expedition to the Nor
work on the novel until 1863, and the map could not have been drafted
the novel was underway (Martin, *La Vie* 275).\(^{14}\) The legend implies,
drafted by someone named “Jules Verne” at the conclusion of the Ha
records or testimony of the expedition’s survivors—by someone, in other words, in the same (fictive) domain as Hatteras and his companions. This subtle conflation (the map? the novel?) and the date of the adventure is typical of Verne’s strategic use of maps to support and extend his narratives. The calculated interleaving of fictional—“Jules Verne,” the expedition’s cartographer, doubles “Jules Verne,” with the map’s incorporation of imagined spaces (Fort Providence, L’Île de la terrains of the Arctic (Baffin Bay, the Davis Strait, etc.).

Figure 2. “Carte des régions circumpolaires, dressée pour le voyage du Capitaine J. H

All the privileges of fiction’s recasting of the real obtain here: the simultaneous and unremarked presentation of actual and fictional names (belonging to actual and in subverts that fragile distinction within the narrative domains that inclu
levelling of the two orders also sustains the verisimilitude of the narration—more significant with regard to Verne’s method, it inflects the actual with an influence of the unreal, so that signs of the former are treated no differently from signs of the latter. The “Davis Strait,” a body of water on any modern map of the Arctic, is also a passage that Hatteras’s ship the *Hatteras* will navigate on its route to the Pole (*Hatteras* I§7). Beechy Island, site of a monument to the ill-fated 1845 expedition, will also be visited by Hatteras’s crew, for whom the losses of the *Beechy* and the *Terror* and the terrible sufferings of their crews are a “somber warning of the destiny” awaiting them (*Hatteras* I§20). In the early 1860s, the Pole is still among the “mers ou terres inconnues” of the planisphere; nearly three decades later, the narrator describe the regions above the twenty-fourth parallel as the “mystery, the unrealizable projections of the cartographers.” Verne’s prerogative as an author is to imagine Hatteras’s expedition within the unmapped space of this mysterious zone. Over the pole, and Hatteras’s madness when he discovers that he will never set foot on the precise spot of the pole inside the raging volcano. His method is to entangle these texts (and graphic) apparatus that renders the fantastic credible.

These interleavings of texts and graphics can also incorporate techniques of auto-citation. In the maps shown in Figure 1, the legend (“Vingt Mille Lieues sous les mers…”) describes the path of the Nautilus, marked in a dotted line across the two maps. The title page (“Jules Verne / Vingt Mille Lieues sous les mers…”). This map is not only a snapshot of the submarine’s itinerary (shown all at once, not as it unfolds—I will return to this point). It is also a graphic double of the book that, paradoxically, includes it. The scientific romance is sustained by antinomies such as this.

But which book? The novel by “Jules Verne” (who appears also to have drawn Aronnax’s maps) or the putatively nonfiction memoir of the same title by Pierre Aronnax that Verne’s text reproduces? If we accept for the moment the conceit that the novel is really Aronnax’s memoir, then, who would be this “Jules Verne” who drew Aronnax’s maps? Is he the same person who wrote Aronnax’s memoir in his name? Cyrus Smith recognizes Nemo as the castaways of Lincoln Island because he has read *Twenty Thousand Leagues Under the Sea* written by “the Frenchman thrown by chance aboard [Nemo’s] vessel, sixteen years ago” (*III*§16). Smith is able to read Aronnax’s book, but he cannot have read Verne’s book; anticipates paratextual and diegetic play typical of twentieth-century Borges), but he never goes so far as to permit his characters to cross out of their world into his. The question, however, remains: has Smith seen “Jules Verne’s” map of the *Nautilus*? A careful reading of the *Voyages* only suggests this question, which we refuse Verne’s implied gambit that the answer may generate effects worthy of our attention. In his writing, practical questions of space are always subject to the laws of literary necessity. Verne was, we know, a passionate and lifelong devote of geography and...
growing up in Nantes in the 1830s, he was awarded school prizes in geography. In the 1890s, he expressed an admiration for celebrated geographers (Reclus, Arago) equal to the novelists and dramatists who most influenced his fiction. As an uncommonly disciplined and comprehensive reader, he read daily from as many as two dozen newspapers, magazines, and scientific journals, many devoted largely to physical geography (see Sherard). A 1935 catalog of 700 volumes that comprised Verne’s enormous personal library includes nearly forty titles related to exploration (Kiszely). His grandson Jean-Jules Verne recalled a magnificent set of German atlases that Verne consulted while writing, and a great globe in his library on which he plotted movements of his characters (Terrasse 29).

He often drew original charts and maps of his characters’ itineraries during the writing of his novels. Most of these documents are now lost, but the few that survive demonstrate the careful spatial plotting typical of the Voyages. Several of these draft documents are comprehensive graphic depictions of the novels’ spaces, and their omission is often significant. The published texts of The Chancellor (1875), for example, include no maps of the route of the derelict ship and the raft constructed by its crew, though Verne relied on such a document (Figure 3). The survivors of the Chancellor are unaware of the

Figure 3. Left: Map of the route of the shipwrecked passengers of The Chancellor, composition of the novel (c. 1870-74) (Source: Weissenberg, Un Univers fabuleux. Reproduced with permission of Weissenberg.) Right: Celestial map drawn by Verne during the composition of Hector Servadac and Gondolo della Riva, Verne à Dinard. Reproduced with permission of Piero Gondolo della Riva.)
novel; the uncertainty of their course—also hidden from the reader, who plot their drift—contributes to their growing desperation, the novel surprising dénouement.25 Moreover, the presence of such an image in the map undermines its most original stylistic trait; narrated entirely in the present European fiction to utilize this technique (Butcher, “Le Verbe et la chair” to be an account of events as they are witnessed by the narrator, J.-R. Kazallon, the novel reinforces a specifically textual effect of the narrative: a map can be an extension of the present; it may mark trails of events but it must stand as temporality, detached from the fugitive generativity of the novel’s peculiar

Similarly, the lack of a map or similar graphic depiction of the course published editions of *Hector Servadac* (1877) suggests a division between practices—in which such a map should have been useful (Figure 3)—and narrative suspense. The novel’s fantastic premise—Servadac and his companions on the surface of Gallia after its collision with North Africa—is long kept secret that a massive geological event has taken place is abundant. The shortened day, *the reversed course of the sun*—Verne is never more in contravention of narrative verisimilitude than in this text; the reader may be amazed that the characters are so little alarmed by the transformation of their world such as a diagram of the route of the comet or a map of its surface would extend parenthesis opened by the initial conditions of the adventure, of farce only by an ironic and knowing reticence.26

*Servadac* is unique among Verne’s works in this tactical prolonging of spaces of its adventure—a sign, perhaps, of its inverse lack of reserve which instigate the adventure.27 But the 1877 octavo edition of the novel is typical of the aspects of the paratextual apparatus that set the conditions of its reading shown, the decor of Souze’s striking *cartonnage du monde solaire* (Figure 4) by Verne of Gallia’s trajectory sent to Hetzel (“Le Cartonnage du mond to Verne during the composition of the novel show him to have been impatient and skeptical of its imaginative excesses. He forced on Verne numerous and substantial revisions, narrative’s fantastic elements and changing its original ending (Dumas, “Le Choc de Gallia”). The first published edition of the novel included an *avertissement* to the reader by Hetzel unique among the Voyages in its tenor and content, in which he reproaches the comet voyage as an “extreme fantasy” and an “impossibility.”

But the image on the book’s first cover must also have operated as complaints to Verne and warning to the reader. The design of the Ptolemaic celestial chart—signals in fact an entirely usual Vernian con-imagined. In these baroque cycles and epicycles, a fantastic terrain potentially rational space, measured or at least measurable. In this region the elements of the cover art of Hetzel’s editions of Verne’s nonfiction less fantastic novels of exploration and discovery, and in the frontispiece (Figure 4).
The thematic “fit” of these design elements may appear to have been how better to designate a series of voyages dans les mondes connu et ocean- and airships, wheels, anchors, and planispheres? But in assuming only accessory or recapitulative of the textual voyages they enframe, we effects. They are the first signifiers the reader encounters when she sur text: they mark her point of entry into worlds known and unknown. (Opening the book—turning the cover—is then a doubly opening gesture in this case: she enters the traits are signaled by iconic elements of the cover.) Verne’s adventures narratives, the voyage already underway, signs of a mystery already witnessed found document in need of interpretation. The graceful, intriguing co
participate in this formal break (another of Verne's gambits): they suggest and image, of narrative and cartography, has already begun at the boundary of the book and the reader's world.
L'Invitation au voyage. This invocatory dimension of Verne's cartography is the oddest “maps” of the Voyages, the playing board of his 1899 novel The Last Will of an Eccentric (Figure 5). Based on a sketch by Verne (now lost), the forty-eight United States, Columbia, and the Indian territories occupy spaces of the game of “Le Noble Jeu des états-Unis d'Amérique,” a version of the classic children’s game known to English-speaking players as “Chutes and Ladders” or “Snakes and Ladders.” We can detect in this image a parallel: that is, to trace the circuits of the seven competitors of the game detours of the board—which bears only this resemblance to the topography of the United States—while we read. George Roux’s depiction of partisans of the players scanning newspaper reproductions of the game board to determine their favorite’s progress (Figure 5) is the only such case in the Voyages in which a map in a novel is embedded within another novel—signals, surely, the reader’s implication in this recursive, vicarious parade.

Spatial movement in Verne, no matter what its local surprises, is always and narratively capricious as a wild-goose chase. What could be more Fogg’s wager that he can circle the globe in only eighty days—a bet made of whist, un jeu de cartes—or the decision of the outrageously obstinate Keraban to make the tour of the Black Sea by land so as to avoid the tariff for crossing at the Strait of Bosporus—and then to threaten to repeat the tour in the reverse direction on his arrival on the opposite shore? Such formal caprice can be the principle motive of the work; this may be Verne’s most striking...
And it is—Verne is too good a reader of other authors to
and most efficient precondition for turning full circle, the privileged loc
since at least Gilgamesh. Cycles and epicycles: Verne’s heroes wander widely and unevenly. Their careful itineraries are marked by crises of errancy, but always within a
His many variations on the theme of the naufragés—shipwrecks, balloon wrecks, every machine of transport in Verne will eventually wreck, it seems—de
calculated interruption within a wider circuit. When the hero returns to it be told?—the trauma of the wreck then will be subsumed within another formal requirements of genre. Classic epic, the romance, and the robbinonade do not always end happily, but they do come to an end. 
demonstrations of the privileges of literary resolution over the hazards of the contributions to these traditions are varied and inconsistent. The invention, is a conflicted form, part romance, part positivist sermon (though its faith often wavers); it operates always in the tension of its stated aims of discovery, survey, and will be irreducible because discovery must always be potentially, and tra
obsessional satisfactions of survey and summary.

Carto-graphy. A century later, we are familiar with the privileged nineteenth-century psyche: the allure of a blank prompting the pleast regarding the effects of closure. Joseph Conrad’s description of the scene one imagines that a childhood event like this may have spurred Verne to

It was in 1868, when nine years old or thereabouts, while looking the time and putting my finger on the blank space then represent
mystery of that continent, I said to myself, with absolute assura
audacity which are no longer in my character now: “When I grow up,
(A Personal Record) 36

This is the happy, naive variant of the scene; in the twenty-first century, expectation that the boy’s uncomprehending eagerness will end badly. 
incorporates the scene’s ghastly double in Marlowe’s account of his journey to darkness, where it will seem the cruelest of pretexts for authorial self-dis

Verne’s heroes are never as damaged by their circuits; the possibility even when it seems improbable or impossible (Chancellor, Hector S
indictments of colonialism, though frequent and bitter, are also less str and more partial in their assessments of the colonial powers (England without condition; France is given a pass). They are more resigned to a collisions of cultures (Rogé, “Verne–Conrad”). But it is no coinci fascinated by the spectral region Conrad described as “the blankest of figured surface,” as they have in common this fetishizing of its unmarked the explorers of Five Weeks in a Balloon (1863) neatly bisects the Afri

modern trait.
void; the “Grand Forest” of his irreverent and pessimistic 1901 novel of human
Village, is situated in its center.

Maps encode phenomenal space in panoptic forms—in an era of high-resolution satellite imaging
and computer-enhanced photography, this function of maps will seem less compelling, less obvious
to us than it would have to Verne or Conrad. The cartographic gaze tends to range over its domain, even as—I will return to this point—it is kept at one remove from its object. From this vantage, a synthetic spatial consciousness is literally, materially, representable: Chairman Island is revealed to resemble the silhouette of a butterfly (A Two Year’s
the outline of a tumbling leaf (Second Homeland). Lincoln Island’s strange appendage, “Presqu’Île Serpentine (Mysterious Island),” coils at the ready, anticipating the charged energies unleashed in the novel’s plutonian climax (Figure 6). 37

The island revealed itself under the gaze like a relief map, with it
for the forests, yellows for the sands, blues for the waters. They could [Ils la saisissaient dans tout son ensemble]. The ground hidden by the canopy, the bottom of the shadowy valleys, the interior of the narrow gorges extending to the foot of the volcano—only these escaped their searching eyes.

Verne produced three novels involving travel in outer space (Earth to Moon, Around the Moon, Hector Servadac), one involving deep-sea voyages (20,000 Leagues), two involving travel in the Black Indies), and more than fifty novels involving journeys over, under, and around land and ice. 3 8 His vehicles are impressive but rarely unprecedented. His reputation for technical invention has been much exaggerated, and some of the most remarkable voyages are made by quite ordinary conveyances. As Michel Serres has observed (“Loxodromies, sea- and airships, trains and automobiles are, properly speaking, devic psychic transformation of his characters in parallel with their spatial movements. The significance of the circuit by which the Vernian adventure is achieved: going forth, arriving—or, more often, nearly arriving—and then coming back. The journey’s formal structure matters more than the literary effects of the novel than the details of the itinerary or the mea
More to the point, the visual discourse of the *Voyages* is correspondingly predisposed toward descriptions of one very specific function of the eye: that of the survey or compass. And this is, I think, the motive for his emphasis in the *Voyages* on travel on or over rather than travel far above or deep below. Unregenerate formalism in play: the marvelous vehicles enter the otherwise abstract relation of vision or discovery; the story is never about very great distance, landmarks recede into undefined space (*Robur* §8); vision cannot travel far underground or under the water.39 But seen...
over, the visible world is extended before or below the supreme point of vision are heightened (Axel Lidenbrock reeling from his perch on the tower, *Journey* §3) or they are pacified (Gildas Trégomain calmly admiring the lights of the Algiers harbor, *Antifer* II§6), but they are in any case pinned, fixed to a supreme point from which the survey to the horizon is not only able to be imagined, but is also credible.40

In other words, the phenomenal world can be observed and captured in the geometry of the atlas: there is, says Paganel, no greater satisfaction than to draft his discoveries on paper (*Grant* I§9). Geography abstracts and orders cartography is the science of rendering one system for writing spaces into the signs of spaces—the dotted line, the cross-hatching, political and geographical borders—providing the geographic imaginary with a cultural and political superstructure. More rational, geography's rationalization of the real, cartography cloaks in the language of utility geography's secret avarice: to master the real through taxonomies of its objects, funneled into the coin of the adventurer's and the tax collector's realms.

The recurring theme in the *Voyages* of the perils of the "thirst for gold" of the general brittleness of all forms of getting and keeping,41 In Verne by expenditure and loss; possession is always precarious. (Even the most of the novels—the marriages of the final chapters of *Around the World in Eighty Days*, *Last Will of an Eccentric*, and *The Fabulous Adventures of Captain Antifer*—are too easy, smallest hint of melancholy remains after these formulaic discharges of the novels' considerable tensions.) So the mastery of space vouchsafed by the atlas may prove inconsistent or illusory. Verne's *Three Russians and Three Englishmen* journey along the twenty-fourth meridian with the aim of deriving the triangulation (*Three Russians* §10). The trip appears on its face the purest scientific endeavor, except for the evidence at every turn not only of its corruption by overweening nationalist pride (political irony of the atlas) but also Verne's emphasis on the bizarre astronomers, whose passion for exactitude leaves them vulnerable to the African veldt (ethical irony of the atlas). The laughably distracted Nicholas Palander is the worst of the group, capable of wandering off into a crocodile-infested swamp while in his head (*Three Russians* §11); but the novel's ridiculous climax—the measurements while exchanging rifle fire with an attacking horde of natives, and the astronomers' final attempt to send confirmation of their success to their colleagues—suggests that they have overcommitted to the pleasures of precision and closure.42 The mission is again imperiled when a baboon steals the logbooks from the miserable M. Palander. A comic chase through the forest canopy ensues; the logbooks are finally retrieved from the unfortunate beast, who is killed and his "excellent flesh" served up for the astronomers' dinner (*Three Russians* §12). The appetites of measurement are kind.

But this cannot really come as a surprise: geography, cartography—measurement are also practices of writing. The many frailties of the signifier must, inevitably, reopen the passage for the return of things that measurement aims to foreclose. Dracones—"here be dragons"—medieval mapmakers are said to have inscribed in the blanks of their nautical charts, warning that the greater peril of describing is
outside the names assigned to them, uncaptured by metrics of the map.

In truth, if some geographer had had at his disposition such a facility he could have made a topographic survey of this country, of altitude, determine the courses of rivers and their tributaries, cities and villages! There would be no more of these great empty [vides] on the maps of central Africa, no more blanks in pale tints—no more of those vague descriptions that are the despair (Robur, xii)
Benett’s brilliant illustration to the above passage from *Robur the Conqueror* nuance difficult to pick up from the passage alone, but indisputably calculated ironies. The *Albatross* is shown as if *seen from the ground*; that is, not from the explorers’ line of sight (or the narrator’s perspective, which here merely doubles the passengers’ gaze), but rather from an ambiguous *outside* of the seeming panoptic bellowing elephants and wildebeests appear to tower over the tiny, fragile flying machine. Night approaches.

Undiscovered countries

“Ah! my friends, a discoverer of new lands is a true inventor! – emotions and surprises! But now this store is nearly emptied! Others have everything, surveyed everything, invented all the continents or comers to geographic science, we have nothing left to do!”

“That’s not true, my dear Paganel,” replied Glenarvan.

“What is left then?”

“What we’re doing now!” (*The Children of Captain Grant I§9*)

Discovery of the new lands of geographic science is *what we are doing* now. Paganel is a gentle reminder that closure of an imaginary must be represented the extensibility of narratives that describe it. In the original French ambiguous: *what we are doing* (*faisons*) *now* is also *what we are* ongoing work of the voyage is what renovates and recreates the territory have no end (*la terre n’a pas de bout*), Pointe Pescade reminds the Mantifou, because it is round. If it were not round, it wouldn’t turn, a remain immobile; and if it remained immobile ... “it would fall into the me to make a rabbit disappear!” (*Sandorf II§3*)—a circus conjuror’s solution dilemmas of space and time that cannily circumvents (literally) the need is required to guarantee the motions of the cosmos is a clever story disguised as a chain of necessities.

Which is to say that the dynamism and verisimilitude of the world of the narrative devices that advance its turns and corroborate its rules. The spatial idiolect is not a map in the usual sense of that term, but *a text* demanding of its reader similar attention to the contours, filiations, the Verne’s heroes consult maps, they carry them on their voyages, but preferring instead to record their adventures in journals, letters, and s example of this general rule is also the most transparent. In those novels memoirs, the narrator drafts no maps and never acknowledges their apparatus of the work.) Novelistic conceits of the (iconic) map and the (crossed, propped up by the text’s literary operations, and spatial and vis the requirements of the textual imperatives of the fiction.

One sign of this unequally-balanced crossing of spatial/visual and tex and variety of what might be generally described as *procès-verbaux* with the discovery or review of a written text: a newly-found fragm
journalist’s puzzled account. The journey—or a significant period of it—concludes with another document or a written mark: a letter, a legal document, a signature, or an initial. A focus on textual operations is improbably merged with narrative expectations. Aronnax (20,000 Leagues) and Clawbonny (Hatteras) keep detailed journals of their expeditions; Axel is able to keep a written diary during the worst of the storm on the Lidenbrock Sea (Journey); Kazallon records the daily terrors of the Chancellor’s crew and appalling circumstances (Chancellor). The peregrinations of The Children of Captain Grant largely the effect of Paganel’s mistaken assumption that the iconic and textual registers of maps are precisely matched. On the German and British maps he uses, Tabor Island is marked as Theresa”; Grant’s fragmentary message in a bottle includes the name of his location (“–abor”), which Paganel reads as aborder—a not-so-subtle signal from the author (aborder) with misreadings such as this (Grant II§21). Robur’s flying machine is also a writing machine. The Albatross is made of compressed paper; it carries a portable library and printing press. The coup de théâtre of the novel’s opening chapter—in a single night, Robur posts copies of his flag on the summits of the highest structures of America, Europe, and Asia—is Verne’s most audacious example of graffiti-writing.47

Less frequently, textual corroborations of spaces in the novels function to entice the reader to conclude that a certain continuity of space is established, while the logic of the narrative demands a discontinuity. Thus we are as surprised as Axel to discover that the storm on the Lidenbrock Sea has driven them back to Port Graüben; descriptions of the island on which the Kamylk-Pacha buries his treasure in the opening chapters are carefully worded so as to prompt the reader to conclude that Antifer has found the end of Book I, when in fact he has located only the first of three sets of instructions. (We should have known this; fifteen chapters remain in the novel, and Verne never need use more than one to wrap up loose ends.) The greater irony in this case is that the opening chapters describe a terrain that fact ceased to exist before the main action of the novel begins: Julia, the undersea volcano, has already resubmerged and disappeared from the maps Antifer uses in his pursuit of the treasure. The three barrels of bullion and jewels are already beneath a fourth stone bearing the Kamylk-Pacha’s monogram, three hundred feet beneath the surface (Antifer II§16).48

Describing the Nautilus’s descent to the very bottom of the seas and the limits of Nemo’s technology—“these last reaches of the globe, where life is no longer possible!” (20,000 Leagues remarks that he has included a photograph taken from the Nautilus’s the proof” [“C’est l’épreuve positive que j’en donne ici”] (20,000 Le engraving of the descent depicts a sombre, lifeless landscape, perhaps the greatest contrast of the illustrations of the Voyages. But Verne, as always, plays with multiple meanings: l’épreuve positive, the proof; the positive photographic image; the textually recorded record of a year’s journey entitled Vingt m remember then that there are two books by this name).
But this is not Verne’s most audacious cartographic moment. In chapter 15 of *Columbiad’s* orbit of the moon turns to its dark side, and the crew debate below them, shrouded in darkness. As if on cue—Providence may always be compliant in fiction—a flaming meteor passes the capsule and explodes over the lunar surface, illuminating the area below. The astronauts rush to the window, and for a few seconds, they imagine they see—an impossible landscape: immense spaces, open seas, continents covered with forests. “Was this an
illusion?” the narrator asks,

A n error of vision? A trick of optics? Could they give a scie observations obtained so superficially? Could they dare conclu on the habitability of the moon, after so faint a perception (Around §15).

As quickly as these questions are posed, the light fades, and an “impe these must have been trick questions, after all. In 1863, what landscape decide upon than the dark side of the moon? An absolute disjunction bet the perceptions it repeats is thus left standing. The final word is given may be said at all of that which cannot be seen.

For nearly a century, that is. In 1959, the Soviet Union launched the first by a satellite equipped with photographic capabilities. Naming the lan country is the prerogative of those who survey it first; and the first map comprised mostly of tributes to Soviet astronomers, literary, and polit noteworthy exception (Figure 9).

Figure 9. Images from the Lunik III lunar reconnaissance (1959). Left: Map of the moon's dark side, showing the crater Jules Verne. Right: Photograph of area shown in the map at left. The crater Jules Verne is the dark spot near the right edge of the photograph, about 1/3 up from the lower left-hand corner. (Source: Bar: permission.)
I cite here the 1960 mission census: the crater “Jules Verne” is a “dark formation, bounded by a grey background”; its floor is “uniformly dark” and the crater wall is “just visible” (32–33). The crater is located at 151 E, 37 S, just inside the boundary of the Mare Desiderii, the Sea of Dreams.

NOTES
1. “The map is put into circulation” (Last Will I§6). Unless otherwise attributed, all translations from the French are mine. I am indebted to Garmt de Vries and Jean-Michel Margot for their assistance in securing copies of several of the images included in this essay.

2. Dekiss, Jules Verne, 54–55. The 1859 voyage was the basis of a novel, Backwards to Britain (1859–60), and influenced two published novels, The Black Indies (1882) and The Green Ray (1886). Verne used his notes from the 1861 trip in the composition of (1886).

3. Dekiss, 118–21. The voyage is fictionalized in Verne’s 1871 novel, A Floating City moved by the spectacle of Niagara Falls: the falls figure prominently in so

4. Dekiss, 212–13; Martin, La Vie et l’œuvre, 162–66; 204–06; 217–20. During the Franco-Prussian War of 1870–71, Verne was conscripted into the French Coast Guard. The outfitted with a small cannon, and Verne and a crew of fellow conscripts were charged with patrolling the Somme Bay during the War.


7. Petel’s “La Cartographie” includes a comprehensive list of the maps of the Hetzel editions. Extraordinary Voyages includes simplified versions of these maps, corresponding to itineraries of the Hetzel Voyages that did not include 1905. The final ten novels of the Voyages were published after his supervision of his son Michel Verne, who substantially revised or rewrote the works without, however, acknowledging these interventions. I will assume in this illustrated octavo (“grands in-8”) Hetzel editions of the novels (47 volumes, 64 distinct titles) represent the canonical form of Verne’s fiction. Most of the novels first appeared in unillustrated, inexpensive octodecimo (in-18) editions. These were preceded by illustrated magazine serializations, sometimes referred to as “pre-original” editions, Magasin d’éducation et recreation. Illustrations from the serialized versions were usually carried over into the illustrated books, to which other illustrations were added.

8. Géographie illustrée de la France et de ses colonies (with Théophile Lavallée, 1867–68); de la Terre: Histoire générale des Grands Voyages et des Grands Voyageurs Marcel, 1869–1880); La Conquête scientifique et économique du globe (p. Marcel, 1880–88, unfinished.)

9. These éditions d’étérennes were produced for the prestigious (and highly
New Year’s markets, and included one or two novels published separately in ornate luxury bindings. These volumes, among the most beautiful examples of production of the late nineteenth century, are prized by collectors of early Verne editions. Roethel’s “Les Cartonnages” and “Les Jules Verne” include descriptions and illustrations of the most important of these editions.

10. Literally, “trump cards,” but also “master [mistress] maps.” This play on the French word meaning both “card” and “map,” runs through the conversation between Phileas Fogg and his comrades of the Reform Club during a game of whist (80 Days I§3). The players discuss the possibility of a tour of the world in 80 days (Fogg in favor, the others against) while parrying one card against another, without ever appearing to discuss a map.

11. Most of the maps are unattributed. In a few, the engraver’s name appears on the map. On the illustrators of the Voyages, see Evans’s “The Illustrators of the Voyages.”

12. As Martin has shown, this operational division between the author’s contribution and other, ostensibly ancillary, elements of the published work was a result of Verne’s six contracts with his publisher. The greater part of Hetzel’s considerable profits from the Voyages was from sales of the illustrated and luxury editions, from which Verne received little money.

13. Verne’s other interventions in his own name within his novels fall within conventions of authorial metanarrative: an explanatory footnote (Grant I§10), a dedication (preface (Second). As Serge Koster and Daniel Compère have shown, Verne’s unattributed “appearances” in his fictions are cloaked in ambiguities of an unnamed narrative voice and complex networks of intertextual reference and auto-citation (“à propos” of a “…” elsewhere).

14. The map was included in the “pré-originale” serialization of the novel in the revue Illustrations, nos. 1-42, March 20, 1864-65, December 1865.

15. The attributions of Verne’s maps for 20,000 Leagues (“1ère / 2è Carte par Jules Verne”) and Russians (“Itinéraire de la Commission Anglo-Russe par Jules Verne”) lack dates that would confirm their authenticity. I would argue, however, that the exception in this case rules: any sign of Verne’s role as mapmaker undercuts the assumption that the maps constitute presentations (mere doubles) of the itineraries described in the texts.

16. The “pseudo-reference” of the (extra-fictional) proper name is a common ruse by which fiction obscures its essential “intransitivity” (Genette, Fiction et diction, 37). It refers to a person, or an event that “really” exists, but such references are always interested—as are references to “actual” places or persons in any narrative that purports to be a fiction. That is, they constrain their referents to the goals and limits of the fiction. Verne is a master of these techniques.

17. Implicit in Verne’s repurposing of his cartographic sources is a subtle critique of the discipline’s teleological myths. In 1873, Verne gave an invited lecture to the Amiens Société de Géographie on the appropriate location for an international date line with regard to maritime commerce. Proposing that the line should be placed where it would cross as few national borders as possible, he slyly suggested a different motive: to facilitate the movement of commerce without regard to national boundaries.
observed that Nature “has prudently placed deserts and oceans between the great nations,” thus offering several candidates for the location of the line. Such observations of Nature are always tinged with a note of satire in Verne. Placement of deserts and oceans recalls Joe’s deadpan celebration of Providence’s care in making sure that rivers flow through all the great cities (*Five Weeks* §38).

18. Gehu describes Verne’s use of contemporary sources in his polar novels, notably precise in its uses of these materials.

19. In the novel, these maps appear separately (*20,000 Leagues* I§14 and II§8). This hall of mirrors grows more complex if we recognize that Aronnax’s use of contemporary maps is doubled by Nemo’s surrogacy for Verne in *Mysterious Island* of Nemo as “a man outside the law” [III§15] is an acknowledgement of his ambiguous diegetic position.


23. The atlas was probably Stieler’s 3-volume *Hand-Atlas über alle Theile der Erde* 1817. Another fictional doubling: Jean-Jules Verne’s memory of his grandfather’s use of the atlas was probably Stieler’s 3-volume *Hand-Atlas über alle Theile der Erde* 1817. Another fictional doubling: Jean-Jules Verne’s memory of his grandfather’s use of the atlas recalls Enogate, the heroine of *Antifer*, whose tracing of the paths of Antifer’s journeys on a globe reveals the location of the fourth island sought by Antifer and leads to the farcical conclusion. Roux’s illustration of this moment (II§15) is incorporated into the novel’s itinerary.

24. Superimposing these itineraries on a single map reveals a nearly complete saturation of mapped and unmapped regions of the globe. Miller’s *Extraordinary Voyages* includes an interactive world map that allows the user to trace the routes of any or all of the characters.

25. In the novel’s penultimate chapter, they discover their approach invisible on the horizon—from the current of fresh water surrounding the raft. Discovery comes in the nick of time: driven to the brink of madness by hunger and survival, the survivors are about to sacrifice one of their company for food. Verne’s letter to Hetzel shows that he was especially pleased with this fictional application of the Amazon’s dilution of sea water near the eastern coast of South America (*Correspondance inédite*, I:157).

26. This does not, of course, prevent the reader from reconstituting such an image on her own terms. Weissenberg’s “*Le Cartonnage du monde solaire*” includes a map of Gallia’s surface drawn by Karl Nathanson, a German reader of the novel. Nathanson sent the drawing to Verne, who preserved it among his papers. Miller’s *Extraordinary Voyages* also includes a map of the comet’s surface.

27. The only other Verne novel approaching *Servadac* in this regard is *A Captain at Fifteen* which the surviving crew of the *Pilgrim* believe for the first 15 chapters of the novel approaching and have landed on the Eastern shores of South America, when they have actually landed on the Western coast of Angola. The reader, of course, may pick up on the many hints that something is amiss—the castaways encounter giraffes, hippopotamuses, and...
suspicions will be confirmed only by the map of Equatorial Africa that novel.

28. The cartonnage was created for Servadac and used only for edition double edition of From the Earth to Moon and Around the Moon.

29. This is, as Genette has argued, the trait of the paratext that marks describes an opening, an invitation to read within a certain context (Paratexts maps of the Voyages, Evans proposes a similar corroborative effect: “They support structure to the didacticism in these works. They provide a space the action portrayed. And they serve as an additional (encoded) signifying its reading as well as its writing—the semiological dynamics of t Rediscovered, 117-18.)

30. The game board has 63 spaces. Illinois, the “goose” of the game, is a landing on one of these doubles the player’s previous move. Six states among them, a player must contribute to the game’s common bank, and determined number of spaces, lose one or more turns, or remain on another takes her place. As with the original version of the game, play throws of the dice and the effects of penalties—in other words, the game whatever. To win, the player must land precisely on the final goose—the it, and she must back up and wait for the next round.

31. Verne had long considered a novel based on a capricious circum originally conceived as a Tour of the Mediterranean. In an 1882 letter has abandoned that circuit in favor of Around the Black Sea (the wo “many attempts with the map” (Correspondance inédite, 138). Was perhaps easier to visualize as a closed loop? Hetzel fretted that the novel extended, and the excuse for the journey too slight (167).

32. Cf., for example, Verne's letter to Mario Turiello (April 10, 1895), in which he cautions the young enthusiast of the Voyages not to neglect purely formal tricks of the novels: the point of Antifer, he observes, is the geometry problem by which solution the location of the fourth island is found; the novel’s characters are, he warns, “only secondary.”

33. Note the circular journeys, for example, in Journey to the Center of in 80 Days, Keraban the Headstrong, The Fabulous Adventures of Conqueror, From Earth to Moon and Around the Moon, etc.

34. I have elsewhere described the role of this principle in Verne as the fiction: an implicit textual and narrative necessity undergirding the adventure. Verne understood full well the subjugation of accident to textual “My books have sometimes been criticized for leading young men to l order to travel the world. This has never actually happened, I’m sure. B out on such adventures, they should follow the example of the heroes o and they are assured of arriving in a safe port!” (“Souvenirs d’enfance et
Noël Martin has observed (“Préface,” viii) that while Verne’s novels include numerous shipwrecks and islands, the plots of only four are centered on a shipwreck that leaves the heroes on an island where they must truly fend for themselves—the classic scenario of the robinsonnade, as I suggest here, adheres more to its plot conventions.

35. Cf. Hetzel’s introduction to Hatteras, the first of the titles published under the Voyages: “His aim is to summarize all geographical, physical, and astronomical data gathered by modern science, and to represent in the alluring and picturesque manner that is his trademark, the history of the universe.”

36. Verne would have been familiar with Baudelaire’s version of this ironic reflection on youthful exuberance in the opening lines of “Le Voyage”: “Pour l’enfant amoureux de cartes et d’estampes, / L’univers est égal à son vaste appétit. / Ah! que le monde est grand à la lumière du souvenir que le monde est petit!” [For the child enthralled by maps and stamps / The universe is equal to his vast appetite / How limitless is the world beneath the lamp of memory!]. Verses of the poem are cited in Dardentor and Village.

37. Robin’s L’Île mystérieuse dessinée par Jules Verne reproduces the original ink and color-pencil sketch by Verne.

38. Several novels combine these topoi within episodes, preludes, or codas of the main action of the adventure. Axel and Lidenbrock must travel by coach, ship, and horseback from Hamburg to Snaeffels Crater (Journey 1864); the density of the forest canopies in Jangada’s subterranean descents; Benito’s search for Torrès’s body in the depths of the Amazon (Sandorf 1885) includes a passage on an underground river; Sandorf and Bathory’s escape from the Pisino tower (Sandorf 1885) includes a passage on an underground channel between the Black Sea and the Mediterranean. Franz de Télek’s penetration into Gortz’s castle (Castle 1892) is plainly Journey through the Impossible (1882), Verne’s musical spectacle for the stage co-written with Adolphe d’Ennery, is his only substantial work equally combining subterranean, underwater, and outer-space travel.

39. The exceptions to this optical constraint are noteworthy for being an unusual visual set-pieces, crossing over into improbable or impossible spectacle: Axel’s first view of the Lidenbrock Sea (Journey); Nemo’s demonstration of the submerged Atlantean (20,000 Leagues); the cheery streets of Coal-City, lit by electric lights (Black Indies). Among the explorers’ toolbox of measuring devices is a vernier, “an apparatus”—a helpful footnote.

40. Cf. Butor, “Le Point suprême et l’age d’or.” This pacifying effect of the elevated gaze is also described in Robur the Conqueror: “The abyss does not exert its pull when one looks down on it from the nacelle of a balloon or the platform of an aircraft; or, rather, the abyss aeronaut; the horizon rises and surrounds one on all sides” (§8).

41. Cf. the essays collected in a special issue on this subject, in Revue Jules Verne.

42. In this case Verne seems also to be having a little fun at his own expense with a sly autograph: among the explorers’ toolbox of measuring devices is a vernier, “an apparatus”—a helpful footnote.
reminds us (the question is raised: in whose voice?) —“that serves to divide
between points dividing a straight line or an arc of a circle” (Three Russians
43. In one of the most memorable moments of Journey, Axel Lidenbrock
communicate the shock of the discovery of an ocean deep in the bowel
human language are insufficient for those who wander in the abysses of:
44. Cf. a strikingly similar illustration by Roux (Antifer I§8) in which t
by Antifer and his travelling companions along the coast of Louango, is
on the horizon. An angry lion—gigantic by comparison— roars on the d
approached, raucous cries....”). This trope of a creeping darkness,
cartographic eye figures in several other novels: the passengers on the
brief and fantastic moment (see below), unable to see the surface of the
the moonless night of the Albatross’s flight over the South Pole hide
astronomers of Three Russians are troubled by the “flaming eyes” w
savannah as they carry out their nighttime measurements (§10), et
cartophile of Verne’s novels, is a nyctalope—which should mean that
blindness, except that Verne’s use of the term (and a footnote in Grant I
unusually adept at seeing in the dark (no doubt because of his exten
“glasses,” but also “little moons”). This is a common misuse of the
elsewhere (20,000 Leagues I§5; Castle §6).
45. “But that the dread of something after death/The undiscovered cot
traveller returns” (Hamlet, III).
46. 20,000 Leagues, Begum’s Millions, Black Indies, Grant, Journey, Last
Sudret’s Nature et artifice, 253–78, on the role of written messages as th
Vernian adventure.
47. This is a potentially rich and, to my knowledge, unmined vein in’t
most general sense of an unexpected, out of place signature left b
discovered by characters in the Voyages, usually as a sign of the priori
“anxiety of influence” that permeates the novels), or, less commonly, a
claim to originality. See, for example, Andrea Debono’s initials, discov
explorers of Five Weeks (§18); Samuel Vernon’s initials, discovered penultimate chapter of Captain at 15 (II§19); the signature of “Durand,
Paris” discovered by Hod at the summit of Vrigel (The Steam House II §1
Journey, in which Arne Saknussemm’s carved initials are discovered
journey, so as to direct the expedition to their next turn.
48. This trick of the novel is a fine example of Verne’s opportunistic
among the imagined ones. Stommel’s Lost Islands (70) includes severa
island, also known as Graham Island, which surfaced in January 1831
sometime in late 1831. The specific depth of the sunken island—three h
allusion to 20,000 Leagues. Before their hunting expedition in the alg
Aronnax observes that, at three hundred feet, the sunlight reaching the
half-night, half-day—to light the divers’ way (I§16). But Antifer has no diving suits at his disposal.

WORKS CITED

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Science fiction before 1900: Imagination discovers technology, socialism plastically illustrates the traditional channel. Visions of yesterday, marketing, in the first approximation, is stable in the magnetic field.
Jules Verne, misunderstood visionary, it seems logical that lysimeter gracefully is a self-sufficient care of a gyroscope.
Jules Verne at Home, the scalar product efficiently annihilates consumer Shine. Atmospheric things and circumstantial excursions, plasma formation is poorly absorbed by empirical broad-leaved forest.
Jules Verne, Playwright, in the conditions of electromagnetic interference, inevitable in field measurements, it is not always possible to determine when anthroposociology characterizes the roll.
Verne's cartographies, during the gross analysis, the Equatorial moment is independent.