Verne’s cartographies

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Figure 1. Maps drafted by Verne for 20,000 Leagues (1870)

La Carte mise en circulation

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

_The Children of Captain Grant_ I§11 (1867)

We can dispense with the tiresome canard that Jules Verne never traveled far from his homes in Nantes, Paris, Crotoy, 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 on several early theatrical works; and he traveled again with Hignard in 1861 to Denmark and Norway. In 1867, he took his only trip to the United States 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 its successor, the _Saint Michel II_, modest sailing yachts purchased in 1868 and 1876, respectively. He made five long voyages with friends and family on a 150-foot steam yacht, the _Saint Michel III_, purchased in 1877. These included trips to England, Scotland,
In 1886, Verne ended these peregrinations. The expenses of maintaining the Saint Michel III proved onerous (it was considerably more luxurious than its predecessors, with a full-time crew of ten); he was forced to sell the yacht at a loss. Family troubles, the death of his longtime friend and mentor Pierre-Jules Hetzel, failing health (including cataaracts in both eyes, diabetes, and sequelae of a 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 1894 letter to Alexandre Dumas fils, Verne complained of the infirmities of old age: “If I have maintained a taste for work..., nothing remains of my youth. I live in the heart of my province and never budge from it, even to go to Paris. 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 an armchair traveler. 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 Englishmen [1872]) embrace technical problems of cartography and geodesy. These facts should not be taken, however, to suggest a firm distinction within his fiction between pragmatic applications of mapmaking (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) include one or more engraved maps; there are forty-two such engravings in all. The six volumes of Verne’s published nonfiction on history and geography include dozens more political, topographic, and oceanographic maps and charts. The covers and frontispieces of the celebrated cartonnages colorés et dorés (colored and gold inlaid bindings), while not maps strictly speaking, are (as I will argue later in this essay) elements of a subtle but unmistakable cartographic idiom enframing the works’ reception by contemporary readers.

These images and design elements are nuanced, graceful, and evocative; drafted and engraved by some of the finest artists of the time, they represent the pinnacle of late nineteenth-century popular-scientific cartography. In describing their engagements with textual methods and procedures of Verne’s fiction as his cartographies, I mean to emphasize their complex relations to his texts in support of the spatial imaginaries of his heroes’ adventures. This program is clearly discernible in the corroborative and sometimes juxtaposed significance of maps and elements resembling maps (the illustrations of the Hetzel editions), of textual passages that read like maps (Verne’s taxonomic lists and panoramic descriptions), and of maps and narrative passages that underscore limitations of each form of representation. Seeing and writing, mapping and writing, double and redouble one another throughout Verne’s œuvre. The complexity and originality of this play of word and image represent one of the signal achievements of Verne and his publishers. Taken as a whole, the Voyages Extraordinaires are among the most accomplished and evocative reflections on the relations of the alphabetic text to its graphic counterparts in modern fiction.

Des Cartes maîtresses. Several of the maps appearing in the Hetzel Voyages were drafted under Verne’s close supervision or were based on his sketches or designs. Maps in three of the novels (20,000 Leagues [Figure 1], Hatteras [Figure 2], Three Russians) were drafted by Verne himself, whose talents in this regard were appreciable. In each of these works, the attribution to Verne of an image that doubles and seems to corroborate the novels’ textual orders—terrains shown in these maps recognizably belong to the “real” world—complicates and extends effects of the novels’ formal structures. These maps are the only graphic devices of the texts attributed to Verne; other images, maps, and design elements in the Voyages are unattributed or credited to one or more artists listed on the frontispieces below the name of the author, thereby marking their accessory role in the presentation of the work (“Illustrated with 111 drawings by De Neuville,” “Illustrated with 53 vignettes by Férat,” etc.). Verne’s designation as the creator of the text (in the strict sense) and of its maps (assuming, provisionally, that this distinction is meaningful) subtly trangresses a common convention of illustrated fiction of the mid- and late-nineteenth century, in which the author of the text is plainly differentiated from the illustrators, the typesetters, the designers of the binding, etc. (The author’s text is thus held apart from its multiple, possibly varying, mass-produced forms; illustrations support or sustain the textual register of the work, adding value to a specific presentation of it; the essence of the textual work is its semantic content; its plastic or paratextual formal elements are the province of its publishers and distributors, etc. Hetzel’s frequent excerpting from and re-publication of Verne’s fiction and nonfiction in different bindings and formats would be a textbook example of this practice.) Because this distinction is confirmed in every other novel in the Voyages, Verne’s role as author of text and image in these exceptional cases also marks a
potential crossing of textual and paratextual boundaries implicit in this convention. Verne is too conscious of the literary effects of this crossing not to apply them openly. A sly mixing of fictional and extrafictional orders is signalled in the legend of Verne’s map for Voyages and Adventures of Captain Hatteras (1866): “Cartes des régions circumpolaires, dressée pour le voyage du Capitaine J. Hatteras par Jules Verne, 1860-61” [“Map of the circumpolar regions, drafted for the 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 North Pole; Verne did not begin work on the novel until 1863, and the map could not have been drafted much before the writing of the novel was underway (Martin, La Vie 275). The legend implies, however, that the map was drafted by someone named “Jules Verne” at the conclusion of the Hatteras expedition, based on records or testimony of the expedition’s survivors—by someone, in other words, who belongs to the same (fictive) domain as Hatteras and his companions. This subtle conflation of the date of the work (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 and nonfictional realms—“Jules Verne,” the expedition’s cartographer, doubles “Jules Verne,” the author—is homologous with the map’s incorporation of imagined spaces (Fort Providence, L’Île de la Reine) among actual terrains of the Arctic (Baffin Bay, the Davis Strait, etc.).

Figure 2. “Carte des régions circumpolaires, dressée pour le voyage du Capitaine J. Hatteras par Jules Verne, 1860-61”

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 imagined places and persons) subverts that fragile distinction within the narrative domains that include them. This parallelism or levelling of the two orders also sustains the verisimilitude of the narrative—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 found on any modern map of the Arctic, is also a passage that Hatteras’s ship the Forward must cross en route to the Pole (Hatteras I§7). Beechy Island, site of a monument to the 129 dead of John Franklin’s ill-fated 1845 expedition, will also be visited by Hatteras’s crew, for whom the losses of the Erebus 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 of Topsy-Turvy (1889) will describe the regions above the twenty-fourth parallel as the “mystery, the unrealizable desideratum of the cartographers.” Verne’s prerogative as an author is to imagine the fantastic terminus of Hatteras’s expedition within the unmapped space of this mysterious zone: the volcanic crater rising 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
that imagining with a textual (and graphic) apparatus that renders the fantastic credible.18

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 ... par Jules Verne”) describes the path of the Nautilus, marked in a dotted line across the two maps.19 At the same time, the legend repeats the uppermost lines of the title page (“Jules Verne / Vingt Mille Lieues sous les mers”), joining the maps, the narrative of exploration, and the textual artifact that includes them (a book the reader holds in her hands, titled Vingt Mille Lieues...). 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 set-theoretical antinomies such as this.

But which book? The novel by “Jules Verne” (who appears also to have drawn this map), 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—though this is never anything more than a conceit; the title page all but denies the possibility—then, who would be this “Jules Verne” who drew Aronnax’s maps? Is he the same person who drew the map of Hatteras’s transit of the pole? Within the world of the Voyages, the question is more than academic. One of the most important intertextual relays of the novels depends upon the Aronnax’s presumptive authorship of the memoir in his name: Cyrus Smith recognizes Nemo as the mysterious benefactor of 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” (Mysterious III§16).20 Smith is able to read Aronnax’s book, but he cannot have read Verne’s book; Verne anticipates paratextual and diegetic play typical of twentieth-century fiction (Auster, Ballard, 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 Aronnax’s journey on the Nautilus? A careful reading of the Voyages only suggests this question, which will seem absurd only if 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 devoté of geography and cartography. As a young man growing up in Nantes in the 1830s, he was awarded school prizes in geography.21 In interviews with journalists in the 1890s, he expressed an admiration for celebrated geographers of his time (Elisée Reclus, Arago) equal to the novelists and dramatists who most influenced his fiction.22 An uncommonly disciplined and comprehensive reader, he read daily from as many as two dozen newspapers, magazines, and scientific journals, many devoted largely or exclusively to political and physical geography (see Sherard). A 1935 catalog of 700 volumes then remaining from Verne’s enormous personal library includes nearly forty titles related to descriptive geography and exploration (Kiszely). His grandson Jean-Jules Verne recalled a magnificent set of German atlases Verne consulted while writing, and a great globe in his library on which the author liked to trace the movements of his characters (Terrasse 29).23

Figure 3. Left: Map of the route of the shipwrecked passengers of The Chancellor, drawn by Verne during the composition of the novel (c. 1870-74) (Source: Weissenberg, Un Univers fabuleux. Reproduced with permission of éric Weissenberg.) Right: Celestial map drawn by Verne during the composition of Hector Servadac (c. 1876) (Source: Rionnet and Gondolo della Riva, Verne à Dinard. Reproduced with permission of Piero Gondolo della Riva.)

He often drew original charts and maps of his characters’ itineraries during the composition of these novels. Most of these documents are now lost, but the few that survive (Figure 3)—demonstrate the
careful spatial plotting typical of the *Voyages*. Several of these draft documents are, in fact, the only comprehensive graphic depictions of the novels' spaces, and their omission from published versions 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 their position for most of the novel; the uncertainty of their course—also hidden from the reader, who has no map from which to plot their drift—contributes to their growing desperation, the novel's building tension, and its surprising dénouement. Moreover, the presence of such an image in the published text would have undercut its most original stylistic trait: narrated entirely in the present tense—the first long work of European fiction to utilize this technique (Butcher, "Le Verbe et la chair")—*The Chancellor* purports to be an account of events as they are witnessed by the narrator, J.-R. Kazallon. Thus, the absence of a map reinforces a specifically textual effect of the narrative: a map cannot pretend to an ongoing extension of the present; it may mark trails of events but it must stand as a whole outside of narrative temporality, detached from the fugitive generativity of the novel's peculiar grammar.

Similarly, the lack of a map or similar graphic depiction of the course of the comet Gallia in published editions of *Hector Servadac* (1877) suggests a division between Verne's compositional practices—in which such a map should have been useful (Figure 3)—and his methods for sustaining narrative suspense. The novel's fantastic premise—Servadac and his comrades have been swept up on the surface of Gallia after its collision with North Africa—is long kept a mystery, though evidence that a massive geological event has taken place is abundant. (The reduced pull of gravity, the shortened day, the reversed course of the sun—Verne is never more irreverent with regard to the conventions 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.) Apparently realist devices such as a diagram of the route of the comet or a map of its surface would immediately collapse the extended parenthesis opened by the initial conditions of the adventure, and maintained to the point of farce only by an ironic and knowing reticence.

*Servadac* is unique among Verne's works in this tactical prolonging of uncertainty regarding the spaces of its adventure—a sign, perhaps, of its inverse lack of reserve with regard to the events that instigate the adventure. But the 1877 octavo edition of the novel is typical of the *Voyages* in certain aspects of the paratextual apparatus that set the conditions of its reading. As éric Weissenberg has shown, the decor of Souze's striking *cartonnage du monde solaire* (Figure 4) was based on a sketch by Verne of Gallia's trajectory sent to Hetzel ("Le Cartonnage du monde solaire"). Hetzel's letters 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, limiting the 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 cometary voyage as an “extreme fantasy” and an “impossibility.”

But the image on the book's first cover must also have operated as a counterpoint to Hetzel's complaints to Verne and warning to the reader. The design of the *cartonnage*—half orrery half Ptolemaic celestial chart—signals in fact an entirely usual Vernian conflation of the actual and the imagined. In these baroque cycles and epicycles, a fantastic terrain is implicitly joined to a potentially rational space, measured or at least measurable. In this regard, it functions precisely as do the elements of the cover art of Hetzel's editions of Verne's nonfiction geographical writings, his less fantastic novels of exploration and discovery, and in the frontispieces of many of the novels (Figure 4).
The thematic “fit” of these design elements may appear to have been dictated by their material—how better to designate a series of *voyages dans les mondes connu et inconnus* than by images of ocean- and airships, wheels, anchors, and planispheres? But in assuming that these elements are only accessory or recapitulative of the textual voyages they enframe, we may miss their inductive effects. They are the first signifiers the reader encounters when she surveys the (unopened) Vernian 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 text, into an imaginary whose traits are signaled by iconic elements of the cover.) Verne’s adventures nearly always begin in *medias res*, the voyage already underway, signs of a mystery already witnessed, a letter in need of a reply, a found document in need of interpretation. The graceful, intriguing elements of the cartonnages participate in this formal break (another of Verne’s gambits): they suggest that the crossing of text 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 plainly evident in one of 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, the District of 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 an open invitation to read in parallel: that is, to trace the circuits of the seven competitors of the game according to sequences and 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)—the only such case in the Voyages in which a map in a novel is embedded within another illustration of the same novel—signals, surely, the reader’s implication in this recursive, vicarious parade.

Spatial movement in Verne, no matter what its local surprises, is always as procedurally determinate and narratively capricious as a wild-goose chase. What could be more unnecessary than Phileas Fogg’s wager that he can circle the globe in only eighty days—a bet made during an extended game 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 (Keraban)? Such formal caprice can be the principle motive of the work; this may be Verne’s most strikingly modern trait. And it is—Verne is too
Cycles and epicycles: Verne’s heroes wander widely and unevenly. Their most determined and careful itineraries are marked by crises of errancy, but always within a general figure of the circle. His many variations on the theme of the naufragés—shipwrecks, balloon wrecks, train wrecks, etc.; every machine of transport in Verne will eventually wreck, it seems—demonstrate his mastery of the narrative logic of the circular route. For, unlike its real counterpart, the literary wreck is always a calculated interruption within a wider circuit. When the hero returns to tell his tale—how else could it be told?—the trauma of the wreck then will be subsumed within another arc and submitted to the formal requirements of genre. Classic epic, the romance, and their modern offspring the robinsonnade do not always end happily, but they do come to an end, and in unambiguous demonstrations of the privileges of literary resolution over the hazards of the real. Verne’s contributions to these traditions are varied and inconsistent. The “scientific romance,” his 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 summary. This tension will be irreducible because discovery must always be potentially, and traumatically, at odds with the obsessional satisfactions of survey and summary.

Carto-graphy. A century later, we are familiar with the privileged scene of this conflict in the nineteenth-century psyche: the allure of a blank prompting the pleasures of closure and anxieties regarding the effects of closure. Joseph Conrad’s description of the scene is its best known version; one imagines that a childhood event like this may have spurred Verne to his writing:

It was in 1868, when nine years old or thereabouts, while looking at a map of Africa of the time and putting my finger on the blank space then representing the unsolved mystery of that continent, I said to myself, with absolute assurance and an amazing audacity which are no longer in my character now: “When I grow up, I shall go there.” (A Personal Record)

This is the happy, naive variant of the scene; in the twenty-first century, we can only read it with the expectation that the boy’s uncomprehending eagerness will end badly. As, of course, it does: Conrad incorporates the scene’s ghastly double in Marlowe’s account of his journey to and from the heart of darkness, where it will seem the cruelest of pretexts for authorial self-discovery.

Verne’s heroes are never as damaged by their circuits; the possibility of a safe return is held open even when it seems improbable or impossible (Chancellor, Hector Servadac, Journey, etc.). His indictments of colonialism, though frequent and bitter, are also less sharply drawn than Conrad’s and more partial in their assessments of the colonial powers (England is nearly always condemned without condition; France is given a pass). They are more resigned to an inevitable outcome of the collisions of cultures (Rogé, “Verne–Conrad”). But it is no coincidence that Verne was also fascinated by the spectral region Conrad described as “the blankdest of blank spaces on the Earth’s figured surface,” as they have in common this fetishizing of its unmarked terrains. The trajectory of the explorers of Five Weeks in a Balloon (1863) neatly bisects the African continent through that void; the “Grand Forest” of his irreverent and pessimistic 1901 novel of human origins, The Aerial 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 toward the widest possible 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 Vacation), New Switzerland, 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).

The island revealed itself under the gaze like a relief map, with its various tints, greens for the forests, yellows for the sands, blues for the waters. They could see it in its entirety [ils la saissaient dans tout son ensemble]. The ground hidden beneath the immense 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. (Mysterious Island 11)

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 underground adventures (Journey, Black Indies), and more than fifty novels involving journeys over, or flying above land, sea, and ice. 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,” 208–09), Verne’s balloons, sea- and airships, trains and automobiles are, properly speaking, devices that enable temporal and psychic transformation of
characters in parallel with their spatial movements. Thus the general 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 to the literary effects of the novel than do details of the itinerary or the means of travel.

Figure 6. “Lincoln Island” as engraved by Sédille for Hetzel, based on a sketch by Verne. *Mysterious Island* (1875) I§22.

More to the point, the visual discourse of the *Voyages* is correspondingly, overwhelmingly, predisposed toward descriptions of one very specific function of the eye with regard to the spaces it encounters: 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. (This suggests Verne’s unregenerate formalism in play: the marvelous vehicles enter the action so as to support an otherwise abstract relation of vision or discovery; the story is never about the vehicle.) Viewed from a very great distance, landmarks recede into undefined space (*Robur* §5); for obvious reasons, our vision cannot travel far underground or under the water.39 But seen from a secure vantage on or over, the visible world is extended before or below the supreme point of the gaze. Subjective anxieties of vision are heightened (Axel Lidenbrock reeling from his perch on the steeple of Vor Frelsers Kirk, *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 rigorous, closed geometry of the atlas: there is, says Paganel, no greater satisfaction than that of the navigator able to draft his discoveries on paper (*Grant* I§9). Geography abstracts and orders the phenomenal world; cartography is the science of rendering one system for writing spaces into another system for writing the signs of spaces—the dotted line, the cross-hatching, political and geologic borders—providing the geographic imaginary with a cultural and political superstructure. More rational still than 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, fungible and constant, which is 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” is, in this regard, an allegory of the general brittleness of all forms of getting and keeping.41 In Verne, these are always shadowed by expenditure and loss; possession is always precarious. (Even the most classically comedic endings 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, too conventional; just the 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 under some conditions inconsistent or illusory. Verne’s Three Russians and Three Englishmen set out on their zigzag journey along the twenty-fourth meridian with the aim of deriving the exact length of the meter by 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 singlemindedness of the astronomers, whose passion for exactitude leaves them vulnerable to the unquantifiable dangers of 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 calculating logarithms in his head (Three Russians §11); but the novel’s ridiculous climax—the astronomers take their final measurements while exchanging rifle fire with an attacking horde of natives, and must torch their fort so as to send confirmation of their success to their colleagues—suggests that the team is perhaps overcommitted to the pleasures of precision and closure. 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 §22). Tooth and claw: not all the appetites of measurement are kind.

But this cannot really come as a surprise: geo-graphy, carto-graphy—these disciplines of measurement are also practices of writing. The many frailties of the signifier must, inevitably, re-open the passage for the return of things that measurement aims to foreclose. Hic sunt 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 that some things will persist outside the names assigned to them, uncaptured by metrics of the map.

In truth, if some geographer had had at his disposition such a machine, with what facility he could have made a topographic survey of this country, obtain measurements of altitude, determine the courses of rivers and their tributaries, and the positions of cities and villages! There would be no more of these great empty places [ces grandes vides] on the maps of central Africa, no more blanks in pale tints, marked by dotted lines—no more of those vague descriptions that are the despair of the cartographers! (Robur, xii)

Benett’s brilliant illustration to the above passage from Robur the Conquerer (Figure 7) captures a nuance
difficult to pick up from the passage alone, but indisputably in keeping with the novel’s calculated ironies. The *Albatross* is shown as *if seen from the ground*; that is, not from the position of 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 panopticon of the airship’s deck. The bellowing elephants and wildebeests appear to tower over the tiny, fragile flying machine. Night approaches.44

Undiscovered countries45

“Ah! my friends, a discoverer of new lands is a true inventor! – from this he has such emotions and surprises! But now this store is nearly emptied! Others have seen everything, surveyed everything, invented all the continents or new worlds; we late-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*§9)

Discovery of the new lands of geographic science is *what we are doing now*; Glenarvan’s rejoinder to Paganel is a gentle reminder that closure of an imaginary must be represented, and is thus subject to the extensibility of narratives that describe it. In the original French, the sense of his reply is ambiguous: *what we are doing* [*faisons*] now is also *what we are making* [*faisons*] now. The ongoing work of the voyage is what renovates and recreates the territories it crosses. The world can have no end [*la terre n’a pas de bout*], Pointe Pescade reminds the kindly but dimwitted Cap Mantifou, because it is round. If it were not round, it wouldn’t turn, and if it didn’t turn, it would remain immobile; and if it remained immobile … “it would fall into the sun in less time that it takes me to make a rabbit disappear!” (*Sandorf* II§3)—a circus conjurer’s solution to the knottier dilemmas of space and time that cannily circumvents (literally) the need for a prime mover. All that 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 *Voyages* are products of the narrative devices that advance its turns and corroborate its rules. The purest example of Verne’s spatial idiolect is not a map in the usual sense of that term, but a *text that is read like or as a map*, demanding of its reader similar attention to the contours, filiations, and boundaries it describes. Verne’s heroes consult maps, they carry them on their voyages, but they very rarely create them, preferring instead to record their adventures in journals, letters, and scientific accounts. (The best example of this general rule is also the most transparent. In those novels that are not first-person memoirs, the narrator drafts no maps and never acknowledges their presence in the paratextual apparatus of the work.) Novelistic conceits of the (iconic) map and the (textual) description are thus crossed, propped up by the text’s literary operations, and spatial and visual imaginaries subjected to the requirements of the textual imperatives of the fiction.

One sign of this unequally-balanced crossing of spatial/visual and textual registers is the number and variety of what might be generally described as *procès-verbaux* of the *Voyages*. The novels begin with the discovery or review of a written text: a newly-found fragment, a mysterious letter, a 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.46 Frequently, this emphasis on textual operations is improbably merged with narrative requirements of the story. Aronnax (*20,000 Leagues*) and Clawbonny (*Hatteras*) keep detailed journals of the progress 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 passengers under the most appalling circumstances (*Chancellor*). The peregrinations of *The Children of Captain Grant* are 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 called “Marie-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 that epics may begin (*aborder*) with misreadings such as this (*Grant* II§21). Robur’s flying machine is also a kind of 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 as an enticement to the reader to conclude that a certain continuity of space is established, when in fact a discontinuity is demanded by the logic of the narrative. Thus we are as surprised as Axel, Lidenbrock, and Hans are 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 of *Antifer* are carefully worded so as to prompt the reader to conclude that Antifer has found the treasure at 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 needs more than one to wrap up loose ends.) The greater irony in
this case is that the opening chapters describe a terrain that has in fact ceased to exist before the main action of the novel begins: Julia Island, the product of an 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 unreachable, buried 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 II§11)—Aronnax remarks that he has included a photograph taken from the Nautilus’s window (Figure 8). “Here is the proof” [“C’est l’épreuve positive que j’en donne ici”] (20,000 Leagues II§11). De Neuville’s engraving of the descent depicts a sombre, lifeless landscape, perhaps the most still and foreboding of the illustrations of the Voyages. But Verne, as always, plays with multiple valences of his text in this moment: l’épreuve positive, the proof, the positive photographic image, is embedded in another kind of proof, the textual record of a year’s journey entitled Vingt mille lieues sous les mers (we remember then that there are two books by this name).

Figure 8. “Here is the proof.” 20,000 Leagues II§11 (1870)

But this is not Verne’s most audacious cartographic moment. In chapter 15 of Around the Moon, the Columbiad’s orbit of the moon turns to its dark side, and the crew debate the nature of the mysteries 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 world below. The astronauts rush to the window, and for a few seconds, they see—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 scientific justification for observations obtained so superficially? Could they dare conclude one way or another on the habitability of the moon, after so faint a perception of the invisible disk? (Around §15).

As quickly as these questions are posed, the light fades, and an “impenetrable night” returns. But these
must have been trick questions, after all. In 1863, what landscape could be more impossible to decide upon than the dark side of the moon? An absolute disjunction between the written record and the perceptions it repeats is thus left standing. The final word is given to a textual account of what 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 successful orbit of the moon by a satellite equipped with photographic capabilities. Naming the landmarks of the undiscovered country is the prerogative of those who survey it first; and the first maps of the moon’s dark side are comprised mostly of tributes to Soviet astronomers, literary, and political figures. But there is one 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: Barabashov, et al. Reproduced with 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 an unpublished early novel, Backwards to Britain (1859–60), and influenced two published novels, The Black Indies (1877) and The Green Ray (1882). Verne used his notes from the 1861 trip in the composition of A Lottery Ticket (1886).

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

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 Saint-Michel I was 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. Miller’s Extraordinary Voyages includes simplified versions of these maps, as well as additional maps corresponding to itineraries of the Hetzel Voyages that did not include a map. Verne died in March 1905. The final ten novels of the Voyages were published after his death under the editorial supervision of his son Michel Verne, who substantially revised or rewrote many of these posthumous works without, however, acknowledging these interventions. I will assume in this essay that the illustrated octavo
8. Géographie illustrée de la France et de ses colonies (with Théophile Lavallée, 1867–68); Découverte de la Terre: Histoire générale des Grands Voyages et des Grands Voyageurs (3 vols., with Gabriel Marcel, 1869–1880); La Conquête scientifique et économique du globe (projected 3 vols., with Gabriel Marcel, 1880–88, unfinished.)

9. These éditions d’êtresnnes were produced for the prestigious (and highly profitable) Christmas and New Year’s markets, and included one or two novels published separately in the preceding year in ornate luxury bindings. These volumes, among the most beautiful examples of commercial book 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 carte, 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 §3). The players discuss the feasibility of a tour of the world in 80 days (Fogg in favor, the others against) while parrying one card (carte) against another, without ever appearing to discuss a map.

11. Most of the maps are unattributed. In a few, the engraver’s name is marked in a corner of the map. On the illustrators of the Voyages, see Evans’s “The Illustrators” and Marucci’s Les Illustrations.

12. As Martin has shown (Jules Verne, 305–17), this operational division between the author’s textual contribution and other, ostensibly ancillary, elements of the published work was strictly enforced by 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 §10), a dedication (Dardentor), or an initialed preface (Second). As Serge Koster and Daniel Compère have shown, Verne’s unsigned “appearances” in his fictions are cloaked in ambiguities of an unnamed narrative voice (Floating City, Antifer), or in complex networks of intertextual reference and auto-citation (“à propos,” Jules Verne, écrivain).

14. The map was included in the “pré-originale” serialization of the novel in the Magasin (vols. 1-4, 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 Three Russians (“Itinéraire de la Commission Anglo-Russe par Jules Verne”) lack dates that might mark a similar effect. I would argue, however, that the exception in this case (Hatteras) proves a general rule: any sign of Verne’s role as mapmaker undercuts the assumption that the maps constitute representations (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 appears to speak of a place, 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 this procedure.

17. Implicit in Verne’s repurposing of his cartographic sources is a subtle critique of that 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 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 regarding the felicitous accidents of Nature are always tinged with a note of satire in Verne. His observation on the lucky placement of deserts and oceans recalls Joe’s deadpan celebration of Providence’s admirable care in making sure that rivers flow through all the great cities (Five Weeks §38). Cf. Butcher’s “De la ligne.”

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

19. In the novel, these maps appear separately (20,000 Leagues §14 and II§8.)

20. This hall of mirrors grows more complex if we recognize that Aronnax’s surrogacy for Verne in 20,000 Leagues is doubled by Nemo’s surrogacy for Verne in Mysterious Island (Smith’s description of Nemo as a “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 book form in unillustrated, inexpensive octodecimo (in-18) editions. These were preceded by illustrated magazine serializations, sometimes referred to as “pre-original” editions, usually in Hetzel’s Magasin d’éducation et récréation. Illustrations from the serialized versions were usually carried over into the illustrated books, to which other illustrations were added.


23. The atlas was probably Stieler’s 3-volume *Hand-Atlas über alle Theile der Erde*, first published in 1817. Another fictional doubling: Jean-Jules Verne’s memory of his grandfather’s use of the globe 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 novel’s farcical conclusion. Roux’s illustration of this moment (II§15) is incorporated into the novel’s frontispiece (Figure 4).

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 such a map. Garnt de Vries’s website on Verne (<http://www.phys.uu.nl/~gdevries/verne/verne.html>) includes an interactive world map that allows the user to trace the routes of any or all of the Voyages.

25. In the novel’s penultimate chapter, they discover their approach to the Amazon delta—still invisible on the horizon—from the current of fresh water surrounding the raft (*Chancellor* §56). The discovery comes in the nick of time: driven to the brink of madness by hunger and thirst, the survivors are about to sacrifice one of their company for food. Verne’s letters to Hetzel show 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* (1878), in which the surviving crew of the Pilgrim believe for the first 15 chapters of the novel that they are 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, hippopotami, and lions (!)—but her suspicions will be confirmed only by the map of Equatorial Africa that opens the second half of the novel.

28. The cartonnage was created for Servadac and used only for editions of that novel and a special 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 its importance to reading: it describes an opening, an invitation to read within a certain context (*Paratexts*). With regard to the maps of the Voyages, Evans proposes a similar corroborative effect: “They constitute a narratological support structure to the didacticism in these works. They provide a spatially defined framework for the action portrayed. And they serve as an additional (encoded) signifying system that parallels—in its reading as well as its writing—the semiological dynamics of the text itself” (*Jules Verne Rediscovered*, 117-18).

30. The game board has 63 spaces. Illinois, the “goose” of the game, is assigned to fourteen spaces—landing on one of these doubles the player’s previous move. Six states are penalty spaces: landing on them, a player must contribute to the game’s common bank, and then advance or fall back a determined number of spaces, lose one or more turns, or remain on the space indefinitely, until another takes her place. As with the original version of the game, play is determined exclusively by throws of the dice and the effects of penalties—in other words, the game has no strategic aspect whatever. To win, the player must land precisely on the final goose—the sixty-third space; overshoot it, and she must back up and wait for the next round.

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

32. Cf., for example, Verne’s letter to Mario Turivel (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 departure for 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 the Earth, Around the World in 80 Days, Keraban the Headstrong, The Fabulous Adventures of Captain Antifer, Robur the Conqueror, From a man outside the law* [III§15] is an acknowledgement of Nemo’s ambiguous diegetic position.)
34. I have elsewhere described the role of this principle in Verne as the “providential grace” of his fiction: an implicit textual and narrative necessity undergirding the apparent accidents of the adventure. Verne understood full well the subjugation of accident to textual method in his writing: “My books have sometimes been criticized for leading young men to leave the domestic hearth in order to travel the world. This has never actually happened, I'm sure. But if children should ever set out on such adventures, they should follow the example of the heroes of the Extraordinary Voyages, and they are assured of arriving in a safe port!” (“Souvenirs d’enfance et de jeunesse,” 61). Charles-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 a deserted island where they must truly fend for themselves—the classic scenario of the robinsonnade. Verne’s adaptation of the robinsonnade, as I suggest here, adheres more to its formal structure than to its plot conventions.

35. Cf. Hetzel’s introduction to Hatteras, the first of the titles published under the general rubric of the Voyages: “His aim is to summarize all geographical, physical, and astronomical knowledge 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 grande à la clarté des lampes! / Aux yeux 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 / How it shrinks in the eyes 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 and Village suggest subterranean descents; Benito’s search for Torrès’s body in the depths of the Amazon (Jangada) is among Verne’s most dramatic underwater scenes; Sandorf and Bathory’s escape from the Pisino tower (Sandorf 1885) includes a passage on an underground river; Nemo steers the Nautilus through an underground channel between the Black Sea and the Mediterranean (20,000 Leagues); Franz de Telek’s penetration into Gortz’s castle (Castle 1892) is plainly a descensus ad infernos, etc. 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 among Verne’s most audacious 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 plain to Aronnax (20,000 Leagues); the cheery streets of Coal-City, lit by electric lights (Black Indies).

40. Cf. Butor, “Le Point suprême et l’âge d’or.” This pacifying effect of the elevated gaze is 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 doesn’t open up below the 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 5 (1998).

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 into fractions the interval between points dividing a straight line or an arc of a circle” (Three Russians §7).

43. In one of the most memorable moments of Journey, Axel Lidenbrock complains that he cannot communicate the shock of the discovery of an ocean deep in the bowels of the earth: “The words of human language are insufficient for those who wander in the abysses of the globe” (Journey §30).

44. Cf. a strikingly similar illustration by Roux (Antifer §8) in which the Portalaître, the ship taken by Antifer and his travelling companions along the coast of Louango, is depicted as a tiny silhouette on the horizon. An angry lion—gigantic by comparison— roars on the darkening shore: “As evening approached, raucous cries....” This trope of a creeping darkness, boundary, or frame of the cartographic eye figures in several other novels: the passengers on the Columbusi are, but for one brief and fantastic moment (see below), unable to see the surface of the moon’s dark side (Around); the moonless night of the Albatross’s flight over the South Pole hides it from view (Robur); the astronomers of Three Russians etc.
are troubled by the “flaming eyes” watching from the darkened savannah as they carry out their nighttime measurements (§10), etc. Paganel, the most literal cartophile of Verne’s novels, is a nyctalope—which should mean that he is afflicted with night-blindness, except that Verne’s use of the term (and a footnote in Grant §6) indicates that Paganel is unusually adept at seeing in the dark (no doubt because of his extremely large lunettes—literally, “glasses,” but also “little moons”). This is a common misuse of the term, and Verne repeats it elsewhere (20,000 Leagues §5; Castle §6).

45. “But that the dread of something after death/The undiscovered country, from whose bourn/No traveller returns” (Hamlet, III).

46. 20,000 Leagues, Begum’s Millions, Black Indies, Grant, Journey, Last Will, Three Russians, etc. Cf. Sudret’s Nature et artifice, 253–78, on the role of written messages as the “generators” of the typical Vernian adventure.

47. This is a potentially rich and, to my knowledge, unmined vein in Verne’s texts. Graffiti (in the most general sense of an unexpected, out of place signature left by a prior visitor) are often discovered by characters in the Voyages, usually as a sign of the priority of a precursor (traces of an “anxiety of influence” that permeates the novels), or, less commonly, as a signal of the futility of a claim to originality. See, for example, Andrea Debono’s initials, discovered on Benga Island by the explorers of Five Weeks (§18); Samuel Vernon’s initials, discovered by the dog Dingo in the penultimate chapter of Captain at 15 (II§19); the signature of “Durand, dentiste, 14, rue Caumartin, Paris” discovered by Hod at the summit of Vrigel (The Steam House II§1). The model of this theme is Journey, in which Arne Saksnussemm’s carved initials are discovered at several junctures of the 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 reworking of actual spaces among the imagined ones. Stommel’s Lost Islands (70) includes several illustrations of the fugitive island, also known as Graham Island, which surfaced in January 1831 and disappeared from view sometime in late 1831. The specific depth of the sunken island—three hundred feet—is perhaps an allusion to 20,000 Leagues. Before their hunting expedition in the algae forests of Crespo Island, Aronnax and Nautilus are troubled by the sunken island—three hundred feet—is perhaps an allusion to 20,000 Leagues. Before their hunting expedition in the algae forests of Crespo Island, Aronnax and Nautilus are troubled by the “flaming eyes” watching from the darkened savannah as they carry out their nighttime measurements (§10), etc. Paganel, the most literal cartophile of Verne’s novels, is a nyctalope—which should mean that he is afflicted with night-blindness, except that Verne’s use of the term (and a footnote in Grant §6) indicates that Paganel is unusually adept at seeing in the dark (no doubt because of his extremely large lunettes—literally, “glasses,” but also “little moons”). This is a common misuse of the term, and Verne repeats it elsewhere (20,000 Leagues §5; Castle §6).

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In cartography, a chart is a special-purpose map generally designed for the use of navigators. Ex. The mapping of the seafloor also revealed that these huge underwater mountain ranges are bisected by a deep trench which in places is more than 2000 meters deep.

23. 1. 2019- The most detailed map of Jules Verne's Lincoln Island (the Mysterious Island), here I've translated it to English and rendered it in colour. (a much higher-resolution print of it is here) I felt that doing this map was necessary because while the ebook is free, the map is important when reading the book an. Cartography or mapmaking (in Greek chartis - map and graphein - write) is the study and practice of making representations of the Earth on a flat surface. The discipline of cartography combines science, aesthetics, and technical ability to create a balanced and readable representation that is capable of communicating information effectively and quickly. Cartography, however mechanized it becomes, remains both a science and an art.