Verne's cartographies.

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**Verne's Cartographies** 

Figure 1. Maps drafted by Verne for 20,000 Leagues (18

La Carte mise en circulation<sup>1</sup>

"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 tra Nantes, Paris, Crotoy, and Amiens. His first trips abroad were in 1859, t Scotland with Aristide Hignard, a close friend and Verne's collaborate works; and he traveled again with Hignard in 1861 to Denmark and N only trip to the United States with his brother Paul—they visited Ne aboard Brunel's grand liner the *Great Eastern.*<sup>3</sup> Between 1868 and 188 voyages on the Seine and along the coasts of France on the *Saint Michel Michel II*, modest sailing yachts purchased in 1868 and 1876, respectivel with friends and family on a 150-foot steam yacht, the *Saint Michel I* included trips to England, Scotland, Ireland, the Netherlands, and Ger of Spain, the north and south Mediterranean and the Baltic Sea.<sup>4</sup>

In 1886, Verne ended these peregrinations. The expenses of maintaining onerous (it was considerably more luxurious than its predecessors, wit was forced to sell the yacht at a loss.<sup>5</sup> Family troubles, the death of his Pierre-Jules Hetzel, failing health (including cataracts in both eyes, bizarre assault by a nephew that left Verne lame), and growing finance take their toll. After the late 1880s, he seldom left Amiens. In a Novem Dumas *fils*, Verne complained of the infirmities of old age: "If I have m nothing remains of my youth. I live in the heart of my province and neve Paris. I travel only by maps."<sup>6</sup>

Analysis of the significance and functions of maps in Verne's writing begin, then, with an acknowledgment of the practical aspects of his us real and imagined, they depict. Verne, unlike the fictional Paganel, was nonfiction works demonstrate a thorough understanding of the meth several of his novels (most notably, *The Adventures of Three Russians a* embrace technical problems of cartography and geodesy. These facts sl to suggest a firm distinction within his fiction between pragmatic (documentation, navigation, mimesis) and its literary functions (veri imaginary, narration). In Verne, maps are always ambiguous and semio

Thirty of the novels in the 47-volume octavo editions of the *Voyages E* Pierre-Jules Hetzel (from 1863 until his death in 1887) and his son Jule one or more engraved maps; there are forty-two such engravings in all published nonfiction on history and geography include dozens more oceanographic maps and charts.<sup>8</sup> The covers and frontispieces of the cel *et dorés* (colored and gold inlaid bindings), while not maps strictly spea in this essay) elements of a subtle but unmistakable cartographic i reception by contemporary readers.<sup>9</sup>

These images and design elements are nuanced, graceful, and evocati some of the finest artists of the time, they represent the pinnacle of late

scientific cartography. In describing their engagements with textual Verne's fiction as his *cartographies*, I mean to emphasize their components 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* li 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. The *Extraordinaires* are among the most accomplished and evocative refleral phabetic text to its graphic counterparts in modern fiction.

Des Cartes maÎtresses.<sup>10</sup> 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 orde maps recognizably belong to the "real" world-complicates and extend structures. These maps are the only graphic devices of the texts attrib 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 Ne vignettes by Férat," etc.).<sup>11</sup> 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 var illustrations support or sustain the textual register of the work, 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 different bir a textbook example of this practice.<sup>12</sup>) 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 Norwork on the novel until 1863, and the map could not have been drafter the novel was underway (Martin, *La Vie* 275).<sup>14</sup> The legend implies, drafted by someone named "Jules Verne" at the conclusion of the H $\alpha$ 

records or testimony of the expedition's survivors—by someone, in oth *same (fictive) domain as Hatteras and his companions*. This subtle cont (the map? the novel?) and the date of the adventure is typical of Verr support and extend his narratives. The calculated interleaving of fictio —"Jules Verne," the expedition's cartographer, doubles "Jules Verne," with the map's incorporation of imagined spaces (Fort Providence, L'Îl terrains of the Arctic (Baffin Bay, the Davis Strait, etc.).<sup>15</sup>



All the privileges of fiction's recasting of the real obtain here: the sim 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 narra regard to Verne's method, it inflects the actual with an influence of the former are treated no differently from signs of the latter.<sup>16</sup> The "Davis S on any modern map of the Arctic, is also a passage that Hatteras's ship route to the Pole (*Hatteras* I§7). Beechy Island, site of a monument to th ill-fated 1845 expedition, will also be visited by Hatteras's crew, for wl and the *Terror* and the terrible sufferings of their crews are a "soml awaiting them (*Hatteras* I§20). In the early 1860s, the Pole is still inconnues" of the planisphere; nearly three decades later, the narratc describe the regions above the twenty-fourth parallel as the "mystery, tl of the cartographers."<sup>17</sup> Verne's prerogative as an author is to imagi Hatteras's expedition within the unmapped space of this mysterious zo over the pole, and Hatteras's madness when he discovers that he will spot of the pole inside the raging volcano. His method is to entangle tl (and graphic) apparatus that renders the fantastic credible.<sup>18</sup>

These interleavings of texts and graphics can also incorporate technic maps shown in Figure 1, the legend ("Vingt Mille Lieues sous les mers .. the path of the *Nautilus*, marked in a dotted line across the two maps.<sup>19</sup> repeats the uppermost lines of the title page ("Jules Verne / *Vingt Mille L* the maps, the narrative of exploration, and the textual artifact that inclu holds in her hands, titled *Vingt Mille Lieues*...). This map is not only a itinerary (shown all at once, not as it unfolds—I will return to this point of the book that, paradoxically, includes it. The scientific romance is antinomies such as this.

But which book? The novel by "Jules Verne" (who appears also to ha putatively nonfiction memoir of the same title by Pierre Aronnax that V accept for the moment the conceit that the novel is really Aronnax's m anything more than a conceit; the title page all but denies the possibili "Jules Verne" who drew Aronnax's maps? Is he the same person who transit of the pole? Within the world of the Voyages, the question is mo most important intertextual relays of the novels depends upon authorship of the memoir in his name: Cyrus Smith recognizes Nemo as the castaways of Lincoln Island because he has read Twenty Thousa written by "the Frenchman thrown by chance aboard [Nemo's] vessel, si III§16).<sup>20</sup> Smith is able to read Aronnax's book, but he cannot hav anticipates paratextual and diegetic play typical of twentieth-cent Borges), but he never goes so far as to permit his characters to cross ou question, however, remains: has Smith seen "Jules Verne's" map o Nautilus? A careful reading of the Voyages only suggests this question, w we refuse Verne's implied gambit that the answer may generate effects w writing, practical questions of space are always subject to the laws of lite

Verne was, we know, a passionate and lifelong devoté of geography and (

growing up in Nantes in the 1830s, he was awarded school prizes in gec journalists in the 1890s, he expressed an admiration for celebrated ge Reclus, Arago) equal to the novelists and dramatists who most i uncommonly disciplined and comprehensive reader, he read daily f newspapers, magazines, and scientific journals, many devoted largely c physical geography (see Sherard). A 1935 catalog of 700 volumes th enormous personal library includes nearly forty titles related to exploration (Kiszely). His grandson Jean-Jules Verne recalled a magni Verne consulted while writing, and a great globe in his library on which movements of his characters (Terrasse 29).<sup>23</sup>

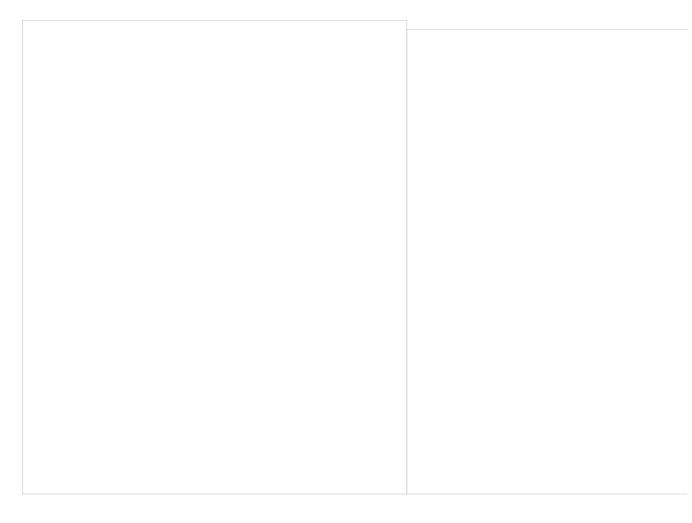


Figure 3. Left: Map of the route of the shipwrecked passengers of *The Chancellor* composition of the novel (c. 1870-74) (Source: Weissenberg, *Un Univers fabuleux*. Rej Weissenberg.) Right: Celestial map drawn by Verne during the composition of *Hector S* and Gondolo della Riva, *Verne à Dinard*. Reproduced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

He often drew original charts and maps of his characters' itineraries due novels. Most of these documents are now lost, but the few that survive careful spatial plotting typical of the *Voyages*.<sup>24</sup> Several of these draft do comprehensive graphic depictions of the novels' spaces, and their omiss is often significant. The published texts of *The Chancellor* (1875), for  $\epsilon$ the route of the derelict ship and the raft constructed by its crew, the document (Figure 3). The survivors of the *Chancellor* are unaware of t novel; the uncertainty of their course—also hidden from the reader, wh plot their drift—contributes to their growing desperation, the novel surprising *dénouement*.<sup>25</sup> Moreover, the presence of such an image in th undercut 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. Kaz map reinforces a specifically textual effect of the narrative: a map ca 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 peculi

Similarly, the lack of a map or similar graphic depiction of the copublished editions of *Hector Servadac* (1877) suggests a division bet practices—in which such a map should have been useful (Figure 3)—an narrative suspense. The novel's fantastic premise—Servadac and his con the surface of Gallia after its collision with North Africa—is long kep that a massive geological event has taken place is abundant. (The shortened day, *the reversed course of the sun*—Verne is never more in conventions of narrative verisimilitude than in this text; the reade 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 wot extended parenthesis opened by the initial conditions of the adventure, of farce only by an ironic and knowing reticence.<sup>26</sup>

*Servadac* is unique among Verne's works in this tactical prolonging c spaces of its adventure—a sign, perhaps, of its inverse lack of reserve w instigate the adventure.<sup>27</sup> But the 1877 octavo edition of the novel is typ aspects of the paratextual apparatus that set the conditions of its *read* shown, the decor of Souze's striking *cartonnage du monde solaire* (Fign 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 in imaginative excesses. He forced on Verne numerous and substan narrative's fantastic elements and changing its original ending (Duma first published edition of the novel included an *avertissement* to the rea the Voyages in its tenor and content, in which he reproaches the comfantasy" 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 *c* Ptolemaic celestial chart—signals in fact an entirely usual Vernian con imagined. In these baroque cycles and epicycles, a fantastic terrai *potentially* rational space, measured or at least measurable. In this reg do the elements of the cover art of Hetzel's editions of Verne's nonfictic less fantastic novels of exploration and discovery, and in the frontisp (Figure 4).

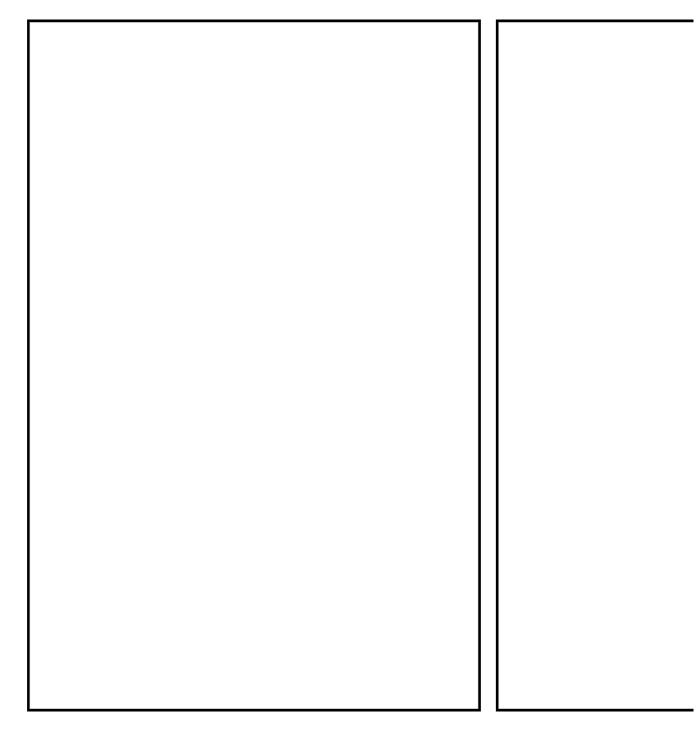


Figure 4. Left: *Hector Servadac* (1877, *cartonnage du monde solaire*). Right: Frontisp *Captain Antifer* (1894).

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 assun only accessory or recapitulative of the textual voyages they enframe, v effects.<sup>29</sup> They are the first signifiers the reader encounters when she *sur* text: they mark her point of entry into worlds known and unknown. (Op cover—is then a doubly opening gesture in this case: she enters the te traits are signaled by iconic elements of the cover.) Verne's adventures n *res*, the voyage already underway, signs of a mystery already witnessed found document in need of interpretation. The graceful, intriguing ( participate in this formal break (another of Verne's gambits): they sug and image, of narrative and cartography, has *already* begun at the bc reader's world.

Figure 5. Above: "Le Noble Jeu Illustration by G. de Ribaucou "The evening newspapers wer times the normal price...." Il *Last Will,* I, vi.

L'Invitation au voyage. This invocatory dimension of Verne's cartograph the oddest "maps" of the *Voyages*, the playing board of his 1899 novel (Figure 5). Based on a sketch by Verne (now lost), the forty-eight U Columbia, and the Indian territories occupy spaces of the game of " d'Amérique," a version of the classic children's game known to Englishand Ladders" or "Snakes and Ladders."<sup>30</sup> 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 topo *—while we read.* George Roux's depiction of partisans of the pl reproductions of the game board to determine their favorite's progre case in the *Voyages* in which a map in a novel is embedded within ano novel—signals, surely, the *reader's* implication in this recursive, vicarion

Spatial movement in Verne, no matter what its local surprises, is always and narratively capricious as a wild-goose chase. What could be mo Fogg's wager that he can circle the globe in only eighty days—a bet ma of whist, *un jeu de cartes*—or the decision of the outrageously obstinate the Black Sea by land so as to avoid the tariff for crossing at the Stra threaten to repeat the tour in the reverse direction on his arrival on the Such formal caprice can be the principle motive of the work; this ma modern trait.<sup>32</sup> 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.<sup>33</sup>

Cycles and epicycles: Verne's heroes wander widely and unevenly. I careful itineraries are marked by crises of errancy, but always within a His many variations on the theme of the *naufragés*—shipwrecks, ballo every machine of transport in Verne will eventually wreck, it seems—de *narrative* logic of the circular route. For, unlike its real counterpart, t calculated interruption within a wider circuit. When the hero returns to it be told?—the trauma of the wreck then will be subsumed within anot formal requirements of genre. Classic epic, the romance, and t *robinsonnade* do not always end happily, but they do come to an demonstrations of the privileges of literary resolution over the ha contributions to these traditions are varied and inconsistent. The invention, is a conflicted form, part romance, part positivist sermon (the operates always in the tension of its stated aims of discovery, survey, a 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 pleasu regarding the effects of closure. Joseph Conrad's description of the sce 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 repremystery of that continent, I said to myself, with absolute assura audacity which are no longer in my character now: "When I grov (*A Personal Record*) <sup>36</sup>

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 jou 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 sl 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 coinc fascinated by the spectral region Conrad described as "the blankest of figured surface," as they have in common this fetishizing of its unmark the explorers of *Five Weeks in a Balloon* (1863) neatly bisects the Afri void; the "Grand Forest" of his irreverent and pessimistic 1901 novel ( *Village*, is situated in its center.

Maps encode phenomenal space in panoptic forms—in an era of high and computer-enhanced photography, this function of maps will seem to us than it would have to Verne or Conrad. The cartographic gaze tenc range over its domain, even as—I will return to this point—it is kept at From this vantage, a synthetic spatial consciousness is literally, materia 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 stra Serpentine (*Mysterious Island*)," coils at the ready, anticipating the ch the novel's plutonian climax (Figure 6).<sup>37</sup>

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 cou [*Ils la saisissaient dans tout son ensemble*]. The ground hidden canopy, the bottom of the shadowy valleys, the interior of the nar to the foot of the volcano—only these escaped their searching eye

Verne produced three novels involving travel in outer space (*Earth i Hector Servadac*), one involving deep-sea voyages (20,000 Leagues), tw (*Journey, Black Indies*), and more than fifty novels involving journeys or and ice.<sup>3 8</sup> His vehicles are impressive but rarely unprecedented. H invention has been much exaggerated, and some of the most remarkable 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 n* significance of the circuit by which the Vernian adventure is achieve more often, *nearly* arriving—and then coming back. The journey's form the literary effects of the novel than do details of the itinerary or the mea

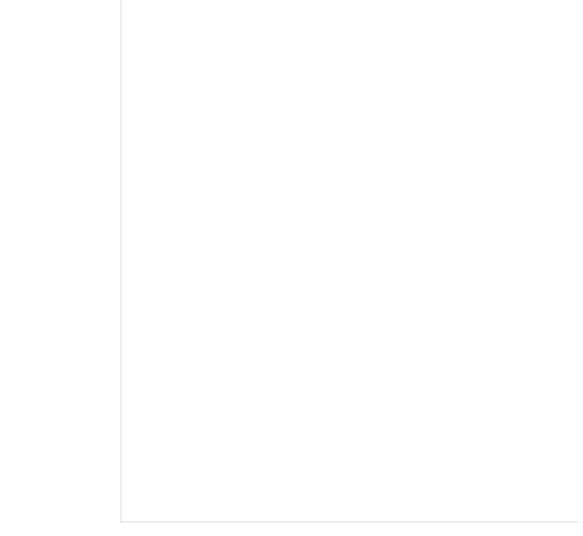


Figure 6. "Lincoln Island" as engraved by Sédille for Hetzel, based on a sketch by Ver

More to the point, the visual discourse of the *Voyages* is correspredisposed toward descriptions of one very specific function of the eye encounters: that of the survey or compass. And this is, I think, the mc *Voyages* on travel on or over rather than travel far above or deep b unregenerate formalism in play: the marvelous vehicles enter the otherwise abstract relation of vision or discovery; the story is never *abot* very great distance, landmarks recede into undefined space (*Robur* § 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 t of vision are heightened (Axel Lidenbrock reeling from his perch on the *Journey* §3) or they are pacified (Gildas Trégomain calmly admiring the *Antifer* II§6), but they are in any case pinned, fixed to a supreme point horizon is not only able to be imagined, but is also credible.<sup>40</sup>

In other words, the phenomenal world can be observed and captu geometry of the atlas: there is, says Paganel, no greater satisfaction than draft his discoveries on paper (*Grant* I§9). Geography abstracts and or cartography is the science of rendering one system for writing spaces int the *signs* of spaces—the dotted line, the cross-hatching, political and § the geographic imaginary with a cultural and political superstructu geography's rationalization of the real, cartography cloaks in the lan secret avarice: to *master* the real through taxonomies of its objects, fun 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.<sup>41</sup> 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 Eccentric, and The Fabulous Adventures of Captain Antifer-are too ea smallest hint of melancholy remains after these formulaic discharges tensions.) So the mastery of space vouchsafed by the atlas may pr inconsistent or illusory. Verne's Three Russians and Three English journey along the twenty-fourth meridian with the aim of deriving the triangulation (Three Russians §10). The trip appears on its face the except for the evidence at every turn not only of its corruption by ov (political irony of the atlas) but also Verne's emphasis on the biza astronomers, whose passion for exactitude leaves them vulnerable to the the African veldt (ethical irony of the atlas). The laughably distracted Ni of the group, capable of wandering off into a crocodile-infested swamp in his head (Three Russians §11); but the novel's ridiculous climax-the measurements while exchanging rifle fire with an attacking horde of n fort so as to send confirmation of their success to their colleagues-sugg overcommitted to the pleasures of precision and closure.<sup>42</sup> The missio baboon steals the logbooks from the miserable M. Palander. A com canopy ensues; the logbooks are finally retrieved from the unfortunate "excellent flesh" served up for the astronomers' dinner (Three Russians the appetites of measurement are kind.

But this cannot really come as a surprise: geo-graphy, carto-gi measurement are also practices of writing. The many frailties of the s open the passage for the return of things that measurement a *dracones*—"here be dragons"—medieval mapmakers are said to hav their nautical charts, warning that the greater peril of describing is 1

#### outside the names assigned to them, uncaptured by metrics of the map.<sup>4</sup>



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 empt vides] on the maps of central Africa, no more blanks in pale tin lines—no more of those vague descriptions that are the despair (*Robur*, xii)

Benett's brilliant illustration to the above passage from *Robur the Con* nuance difficult to pick up from the passage alone, but indisputably calculated ironies. The *Albatross* is shown as if *seen from the ground*; the the explorers' line of sight (or the narrator's perspective, which here me gaze), but rather from an ambiguous *outside* of the seeming panoptic bellowing elephants and wildebeests appear to tower over the tiny, fi approaches.<sup>44</sup>

Undiscovered countries<sup>45</sup>

"Ah! my friends, a discoverer of new lands is a true inventor! – emotions and surprises! But now this store is nearly empti 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 n* Paganel is a gentle reminder that closure of an imaginary must be *repre* the extensibility of narratives that describe it. In the original Frenc ambiguous: *what we are* doing *[faisons] now* is also *what we are* ongoing work of the voyage is what renovates and recreates the territor 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 m e to make a rabbit disappear!" (*Sandorf* II§3)—a circus conjure dilemmas of space and time that cannily circumvents (literally) the nee is required to guarantee the motions of the cosmos is a clever sto 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. Th spatial idiolect is not a map in the usual sense of that term, but *a text t* demanding of its reader similar attention to the contours, filiations, *a* Verne's heroes consult maps, they carry them on their voyages, but t preferring instead to record their adventures in journals, letters, and s example of this general rule is also the most transparent. In those now 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* of tl with the discovery or review of a written text: a newly-found frag journalist's puzzled account. The journey-or a significant period of document or a written mark: a letter, a legal document, a signature, or emphasis on textual operations is improbably merged with narrativ Aronnax (20,000 Leagues) and Clawbonny (Hatteras) keep detailed jou expeditions; Axel is able to keep a written diary during the worst of the (Journey); Kazallon records the daily terrors of the Chancellor's crew an appalling circumstances (Chancellor). The peregrinations of The Chi largely the effect of Paganel's mistaken assumption that the iconic and precisely matched. On the German and British maps he uses, Tal Theresa"; Grant's fragmentary message in a bottle includes the nam which Paganel reads as *aborder*— a not-so-subtle signal from the a (aborder) with misreadings such as this (Grant II§21). Robur's flyin writing machine. The *Albatross* is made of compressed paper; it can printing press. The coup de théâtre of the novel's opening chapter—in copies of his flag on the summits of the highest structures of America, most audacious example of graffiti-writing.<sup>47</sup>

Less frequently, textual corroborations of spaces in the novels functi reader to conclude that a certain continuity of space is established, wl demanded by the logic of the narrative. Thus we are as surprised as Ax to discover that the storm on the Lidenbrock Sea has driven them back t of the island on which the Kamylk-Pacha buries his treasure in the ope carefully worded so as to prompt the reader to conclude that Antifer I end of Book I, when in fact he has located only the first of three sets of it known this; fifteen chapters remain in the novel, and Verne never need loose ends.) The greater irony in this case is that the opening chapters of fact ceased to exist before the main action of the novel begins: Juli undersea volcano, has already resubmerged and disappeared from t pursuit of the treasure. The three barrels of bullion and jewels are a beneath a fourth stone bearing the Kamylk-Pacha's monogram, thre surface (*Antifer*II§16).<sup>48</sup>

Describing the *Nautilus*'s descent to the very bottom of the seas and the —"these last reaches of the globe, where life is no longer possible!" (20,6 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 t of the illustrations of the *Voyages*. But Verne, as always, plays with multi moment: *l'épreuve positive*, the *proof*, the positive photographic ima kind of proof, the textual record of a year's journey entitled *Vingt m* remember then that there are two books by this name).

Figure 8. "Here is the proof." 20,000 Leagues II§11 (187

But this is not Verne's most audacious cartographic moment. In chapte *Columbiad*'s orbit of the moon turns to its dark side, and the crew debat below them, shrouded in darkness. As if on cue—Providence may alway flaming meteor passes the capsule and explodes over the lunar sur below. The astronauts rush to the window, and for a few seconds, they s an impossible landscape: immense spaces, open seas, continents cover

illusion?" the narrator asks,

A nerror of vision? A trick of optics? Could they give a scie observations obtained so superficially? Could they dare concluc 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 be 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).

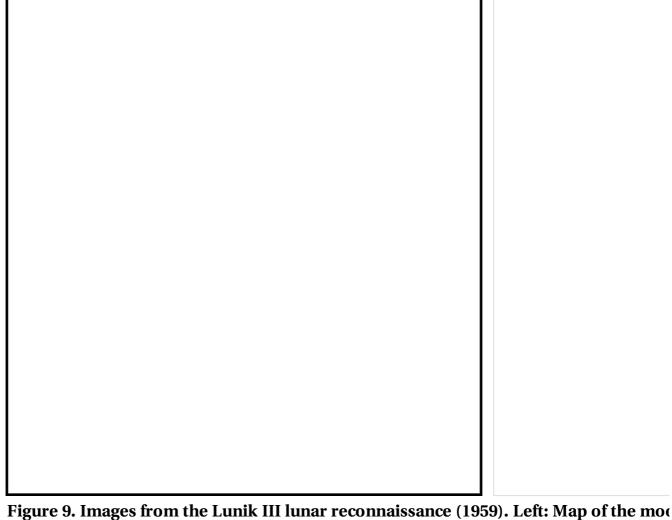


Figure 9. Images from the Lunik III lunar reconnaissance (1959). Left: Map of the moc Jules Verne. Right: Photograph of area shown in the map at left. The crater Jules Vern edge of the photograph, about 1/3 up from the lower left-hand corner. (Source: Bara permission.) I cite here the 1960 mission census: the crater "Jules Verne" is a "dark for background"; its floor is "uniformly dark" and the crater wall is "just v located at 151 E, 37 S, just inside the boundary of the *Mare Desiderii*, th

### NOTES

1. "The map is put into circulation" (*Last Will* I§6). Unless otherwise attu the French are mine. I am indebted to Garmt de Vries and Jean-Michel N 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 Backwards to Britain (1859–60), and influenced two published novels, *The Green Ray* (1882). Verne used his notes from the 1861 trip in the col (1886).

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

4. Dekiss, 212–13; Martin, *La Vie et l'œuvre*, 162–66; 204–06; 217–20. War of 1870–71, Verne was conscripted into the French Coast Gua outfitted with a small cannon, and Verne and a crew of fellow con patrolling the Somme Bay during the War.

5. Martin, La Vie et l'œuvre, 219.

6. Cited by Dekiss, 356.

7. Petel's "La Cartographie" includes a comprehensive list of the maps o *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 rewrot works without, however, acknowledging these interventions. I will as illustrated octavo ("grands in-8") Hetzel editions of the novels (47 represent the canonical form of Verne's fiction. Most of the novels firs *unillustrated*, inexpensive octodecimo (in-18) editions. These were magazine serializations, sometimes referred to as "pre-original" (*Magasin d'éducation et recréation*. Illustrations from the serialized vor over into the illustrated books, to which other illustrations were added.

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

9. These éditions d'étrennes were produced for the prestigious (and high

New Year's markets, and included one or two novels published separa ornate luxury bindings. These volumes, among the most beautiful ex production of the late nineteenth century, are prized by collectors of ea "Les Cartonnages" and "Les Jules Verne" include descriptions and important of these editions.

10. Literally, "trump cards," but also "master [mistress] maps." This pl meaning both "card" and "map," runs through the conversation be comrades of the Reform Club during a game of whist (80 Days I§3). The j of a tour of the world in *80 days* (Fogg in favor, the others against) whi against another, without ever appearing to discuss a *map*.

11. Most of the maps are unattributed. In a few, the engraver's name map. On the illustrators of the *Voyages*, see Evans's "The Illust *Illustrations*.

12. As Martin has shown (*Jules Verne*, 305–17), this operational division contribution and other, ostensibly ancillary, elements of the published verne's six contracts with his publisher. The greater part of Hetzel's convoyages was from sales of the illustrated and luxury editions, from money.

13. Verne's other interventions in his own name within his novels fall wit metanarrative: an explanatory footnote (*Grant* I§10), a dedication ( preface (*Second*). As Serge Koster and Daniel Compère have shown, Veri in his fictions are cloaked in ambiguities of an unnamed narrative voice complex networks of intertextual reference and auto-citation ("à propos

14. The map was included in the "pré -originale" serialization of the no nos. 1-42), March 20, 1864-65, December 1865.

15. The attributions of Verne's maps for 20,000 Leagues ("1ère / 2è Carte Russians ("Itinéraire de la Commission Anglo-Russe par Jules Verne") l similar effect. I would argue, however, that the exception in this case rule: any sign of Verne's role as mapmaker undercuts the assumptic representations (mere doubles) of the itineraries described in the texts.

16. The "pseudo-reference" of the (extra-fictional) proper name is a co obscures its essential "intransitivity" (Genette, *Fiction et diction*, 37). It a person, or an event that "really" exists, but such references are always i to "actual" places or persons in any narrative that purports to be a fic their referents to the goals and limits of the fiction. Verne is a master of t

17. Implicit in Verne's repurposing of his cartographic sources is a subtl teleological myths. In 1873, Verne gave an invited lecture to the Amiens sappropriate location for an international date line with regard to mai that the line should be placed where it would cross as few national |

observed that Nature "has prudently placed deserts and oceans betw offering several candidates for the location of the line. Such observati accidents of Nature are always tinged with a note of satire in Verne. I placement of deserts and oceans recalls Joe's deadpan celebration of Pr 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 nov notably precise in its uses of these materials.

19. In the novel, these maps appear separately (*20,000 Leagues* I§14 and 20. This hall of mirrors grows more complex if we recognize that Aron *20,000 Leagues* is doubled by Nemo's surrogacy for Verne in *Mysterious* of Nemo as "a man outside the law" [III§15] is an acknowledgement of position).

21. Annales de Nantes, no.187-88 (1978), 26.

22. Cf. Belloc, Sherard.

23. The atlas was probably Stieler's 3-volume *Hand-Atlas über alle Thei*, 1817. Another fictional doubling: Jean-Jules Verne's memory of his gr recalls Enogate, the heroine of *Antifer*, whose tracing of the paths of *A* reveals the location of the fourth island sought by Antifer and leads to th Roux's illustration of this moment (II§15) is incorporated into the novel'

24. Superimposing these itineraries on a single map reveals a nearly cor and unmapped regions of the globe. Miller's *Extraordinary Voyages* inc Vries's website on Verne (<<u>http://www.phys.uu.nl/~gdevries/verne</u> interactive world map that allows the user to trace the routes of any or al

25. In the novel's penultimate chapter, they discover their approach invisible on the horizon—from the current of fresh water surrounding t discovery comes in the nick of time: driven to the brink of madnes survivors are about to sacrifice one of their company for food. Verne's l was especially pleased with this fictional application of the Amazon's d eastern coast of South America (*Correspondance inédite*, I:157).

26. This does not, of course, prevent the reader from reconstituting such Weissenberg's" Le Cartonnage du monde solaire" includes a map of Ga Nathanson, a German reader of the novel. Nathanson sent the drawin among his papers. Miller's *Extraordinary Voyages* also includes a map o

27. The only other Verne novel approaching *Servadac* in this regard is *A* which the surviving crew of the *Pilgrim* believe for the first 15 chapte approaching and have landed on the Eastern shores of South Americ landed on the Western coast of Angola. The reader, of course, may pic something is amiss—the castaways encounter giraffes, hippopotal

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 ( $P_4$  maps of the *Voyages*, Evans proposes a similar corroborative effect: "The support structure to the didacticism in these works. They provide a spa the action portrayed. And they serve as an additional (encoded) signifyi 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 an 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 gamehatever. 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 circ originally conceived as a *Tour of the Mediterranean*. In an 1882 letter has abandoned that circuit in favor of *Around the Black Sea* (the wor "many attempts with the map" (*Correspondance inédite*, 138). Was perhaps easier to visualize as a closed loop? Hetzel fretted that the nov extended, and the excuse for the journey too slight (167).

32. Cf., for example, Verne's letter to Mario Turiello (April 10, 1895), in enthusiast of the Voyages not to neglect purely formal tricks of the nove *Antifer,* he observes, is the geometry problem by which solution the log 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 te "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 e

Noël Martin has observed ("Préface," viii) that while Verne's novels in and islands, the plots of only four are centered on a shipwreck that lea island where they must truly fend for themselves—the classic scenario adaptation 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 the *Voyages*: "His aim is to summarize all *geographical, physical, a* gathered by modern science, and to represent in the alluring and pic trademark, the history of the universe."

36. Verne would have been familiar with Baudelaire's version of this i exuberance in the opening lines of "Le Voyage": "Pour l'enfant amoure L'univers est égal à son vaste appétit. / Ah! que le monde est grande à la du souvenir que le monde est petit!" [For the child enthralled by maps equal to his vast appetite / How limitless is the world beneath the lamp memory!]. Verses of the poem are cited in *Dardentor* and *Village*.

37. Robin's *L'Île mystérieuse dessinée par Jules Verne* reproduces the c sketch by Verne.

38. Several novels combine these topoi within episodes, preludes, or co adventure. Axel and Lidenbrock must travel by coach, ship, and he Snaeffels Crater (*Journey* 1864); the density of the forest canopies in *J* subterranean descents; Benito's search for Torrès's body in the depths among Verne's most dramatic underwater scenes; Sandorf and Bathe tower (*Sandorf* 1885) includes a passage on an underground river through an underground channel between the Black Sea and the Medi Franz de Télek's penetration into Gortz's castle (*Castle* 1892) is plainly *Journey through the Impossible* (1882), Verne's musical spectacle fo Adolphe d'Ennery, is his only substantial work equally combining sub outer-space travel.

39. The exceptions to this optical constraint are noteworthy for being an visual set-pieces, crossing over into improbable or impossible spect Lidenbrock Sea (*Journey*); Nemo's demonstration of the submerged (*20,000 Leagues*); the cheery streets of Coal-City, lit by electric lights (*Bu* 

40. Cf. Butor, "Le Point suprême et l'age d'or." This pacifying effect of th i n *Robur the Conqueror*: "The abyss does not exert its pull when on nacelle of a balloon or the platform of an aircraft; or, rather, the abys 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 Jule

42. In this case Verne seems also to be having a little fun at his own examong the explorers' toolbox of measuring devices is a *vernier*, "an app

reminds us (the question is raised: in whose voice?) —"that serves to divibetween points dividing a straight line or an arc of a circle" (*Three Russi* 

43. In one of the most memorable moments of *Journey*, Axel Lidenbroc 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 th by Antifer and his travelling companions along the coast of Louango, is on the horizon. An angry lion—gigantic by comparison—roars on the c 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 tha 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 extren "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 contraveller 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 'most general sense of an unexpected, out of place signature left b discovered by characters in the *Voyages*, usually as a sign of the priorit "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 l 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 n suits at his disposal.

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## Back to Home

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.