VERNIANA

Jules Verne Studies – Etudes Jules Verne

Vol. 2

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V E R N I A N A

Jules Verne Studies — Etudes Jules Verne

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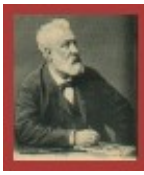
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Editorial

Volker Dehs

Une année après la parution de son premier volume, *Verniana* lance son deuxième rejeton et raffermit la voie ouverte en 2008. Fidèle à son but d'offrir aux lecteurs des textes originaux et inédits, *Verniana 2* présente un éventail d'articles très divers. Nous sommes particulièrement heureux d'accueillir quelques contributions de la conférence Eaton à Riverside (Californie) de 2009. Cette conférence, consacrée à l'œuvre de notre écrivain, a été la première du genre aux Etats-Unis, et méritait de ce fait une mention spéciale. La suite avec d'autres contributions de cette même conférence est prévue dans *Verniana 3*.

Parmi les auteurs de Verniana 2, des noms nouveaux dans la recherche vernienne côtoient ceux de pionniers en la matière, présentant des sujets variés et des approches diverses de cette recherche, prouvant qu'il reste encore beaucoup à dire au sujet de Jules Verne et de son œuvre. Aux recherches bio-bibliographiques se joignent des analyses consacrées à des œuvres particulières et à des aspects très spéciaux. Parfois, les perspectives étonneront sans doute – comme par exemple celles qui cernent le personnage de l'inépuisable capitaine Nemo. Tout en restant un élément constitutif et incontournable des *Voyages extraordinaires*, le maître du *Nautilus* s'est détaché depuis longtemps déjà de son contexte original pour inspirer et prendre des identités nouvelles dans tous les genres, y compris la psychothérapeutique pour les enfants ! [1] Il serait, à mon avis, erroné de voir dans la multitude des approches une manifestation de l'arbitraire. Avec les temps qui changent, les manières de percevoir et d'interpréter les sujets littéraires se modifient aussi, comme les éléments d'un kaléidoscope qui présentent toujours des éléments recomposés dont certains résultats ne laissent pas de surprendre par leur aspect inattendu.

Une publication comme *Verniana* peut également témoigner du fait que la diversification des approches a non seulement une dimension temporelle, mais aussi spatiale. Il n'est pas surprenant que l'œuvre de Verne, internationale par excellence, soit perçue de manière différente au sein de traditions culturelles et sociales qui ne sont pas les mêmes en France, en Roumanie, en Tunisie, aux Etats-Unis ou en Inde. Il suffit parfois de confronter les vues provenant de différents coins du monde sur le même sujet pour s'apercevoir que cette confrontation même peut apporter du nouveau. Certes, nous sommes encore au début de la réalisation du vœu de Zvi Har'El qui était de mettre en pratique une revue vraiment internationale, mais la perspective est prometteuse et la publication est jeune encore…

Voici donc le deuxième volume bouclé, et comme il s'agit d'ores et déjà de penser au troisième, je tiens à faire à nos lecteurs et éventuels auteurs deux suggestions. Un produit accessoire, mais bien intéressant des dernières années a été de confronter l'œuvre de Jules

Verne à celle de ses prédécesseurs, contemporains et successeurs dont beaucoup de noms avaient risqué de tomber dans un oubli pas toujours justifié. Je me contente de nommer explicitement Albert Robida, Alphonse Brown, André Laurie, Paul d'Ivoi et Louis Boussenard, pour rester dans le domaine francophone. [2] L'étude de ces auteurs serait certainement profitable pour accorder un nouveau sens à cette « réévaluation », si souvent réclamée pour Jules Verne.

Cette réévaluation ne consisterait donc pas seulement à placer l'auteur des *Voyages extraordinaires* sur le piédestal étroit, déjà occupé par ses grands confrères et compatriotes comme Hugo, Flaubert, Proust, etc. – au détriment de bien d'autres ; ceci ne perpétuerait qu'une pratique devenue obsolète. L'approche novatrice serait plutôt de remettre son nom dans le contexte de la littérature dédaignée comme *populaire* dont les manifestations multiples ont été ignorées à plus de 90 % par la critique littéraire. En effet, il s'agirait de mieux définir en quoi Jules Verne se démarquerait de ses confrères qui ont essayé d'exploiter le(s) même(s) genre(s) que lui. La hiérarchisation dans les arts, dans la musique et les lettres, lorsqu'elle réclame occuper un statut immuable, m'a toujours paru être un contre-sens qui nous a privés et nous prive encore de maintes découvertes intéressantes.

La deuxième suggestion va plutôt dans le sens inverse. L'année du centenaire de 2005 nous a apporté une telle avalanche de publications sur Jules Verne – non seulement en langue française ! – que même les spécialistes ont du mal à séparer le bon grain de l'ivraie. Cette avalanche ayant eu une existence éphémère dans le commerce, elle a malheureusement entraîné avec elle de nombreuses publications qui mériteraient toujours une appréciation critique. Notre rubrique consacrée aux « comptes rendus » est encore assez modeste, mais elle est ouverte et reste prête à remédier à ce manque, d'autant plus que la lacune n'est pas comblée par les autres revues, nationales, consacrées à Jules Verne.

« Forüt ! fit tranquillement le guide.

– En avant ! » répondit mon oncle. » (*Voyage au centre de la Terre*, ch. XVI)

Göttingen, janvier 2010

NOTES

1. En effet, la thérapeute allemande Ulrike Petermann a fait entrer le capitaine Nemo depuis plus de vingt ans dans son travail, comme en témoigne son livre *Die Kapitän-Nemo-Geschichten. Geschichten gegen Angst und Stress* (Freiburg : Herder 2001, 2005).
2. Voir deux numéros spéciaux de la revue *Le Rocambole. Bulletin des amis du roman populaire* n° 30, printemps 2005 (« Dans le sillage de Jules Verne ») et n° 32, automne 2005 (« Les cousins de Jules Verne ») ainsi que plusieurs études in *Science Fiction Studies* et le recueil *Les Contemporains de Jules Verne. Aux frontières de la légitimation littéraire*. Dossier établi par Daniel Compère et Arnaud Huftier. Revue *Lez Valencienne* n° 40, PUV 2007.


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Editorial

Volker Dehs

One year after the appearance of its first volume, *Verniana* launches its second, strengthening its scholarly mission first begun in 2008. True to its goal of providing readers with original and previously unpublished criticism about Jules Verne, *Verniana* 2 presents a broad assortment of different articles. We are especially pleased to include a number of papers delivered at the Eaton Conference, Riverside (California) in 2009. The theme of this conference, focusing on the works of Verne, was the first of its kind in the United States, and thus deserves special mention. Other papers from this conference will be published in *Verniana* 3.

The many authors featured in *Verniana* 2, from the newcomers to Vernian research to some of its earliest pioneers, represent a wide variety of topics and approaches, proving that there is still much to say about Jules Verne and his oeuvre. Bio-bibliographical studies join textual analysis of individual novels along with discussions of other specialized aspects of Verne's works. Occasionally, surprising new perspectives are offered — such as those that seek to explicate the many identities of the unfathomable Captain Nemo. While remaining an exemplary and essential component of the *Extraordinary Voyages*, the master of the *Nautilus* has long since detached himself from his original context to take on a host of new identities outside of literature, including psychotherapy for children! [1] It would be, in my view, erroneous to see this multitude of approaches as a manifestation of the arbitrary. As times change, ways of perceiving and interpreting literary texts will also change, in the same way as a kaleidoscope reconstructs its same elements in continually new and surprising ways.

A publication like *Verniana* also clearly demonstrates that this diversity of approaches not only has a temporal dimension, but also a spatial one. It is not surprising that Verne's oeuvre, preeminently international as it is, might be perceived differently within cultural and social traditions that are not the same in France, Romania, Tunisia, the United States or India. To produce new insights, it is sometimes enough that views from different corners of the world be brought to bear on the same topic. *Verniana* is still in the early stages of realizing Zvi Har'El's dream of becoming a truly international scholarly journal, but its prospects are promising and the publication is still in its infancy ...

Here, then, is the second volume wrapped up, and since it's already time to be thinking about the third, I wish to offer two suggestions to our readers and potential authors. An ancillary but interesting approach in recent years has been to compare the works of Jules Verne to those of his predecessors, contemporaries and successors, including many authors whose literary legacy was at risk of slipping into a not always justified oblivion.I will explicitly

name a few, such as Albert Robida, Alphonse Brown, André Laurie, Paul d'Ivoi and Louis Boussenard, in French literature alone. [2] The study of these authors would certainly be beneficial to giving a new meaning to the literary "reassessment," so often demanded for Jules Verne.

This reassessment should not consist of merely placing the author of *Extraordinary Voyages* on the narrow pedestal already occupied by the likes of his famous literary colleagues and countrymen Hugo, Flaubert, Proust, et al., at the expense of many others; doing so would only perpetuate a practice that has become obsolete. This truly innovative approach, instead, would be to reinsert his name into the context of that vast literature traditionally looked down upon as being “popular” — 90% of whose works have been ignored by the literary critics. Indeed, doing so would better define the ways in which Jules Verne stood out from his colleagues who tried to exploit the same genre(s). Creating hierarchies in the arts, music, and literature, and especially when the hierarchy claims to be immutable, has always seemed to be nonsensical to me; it has deprived and continues to deprive us of many interesting discoveries.

The second suggestion goes rather in the opposite direction. The centennial year of 2005 brought us such an avalanche of publications on Jules Verne — not only in French! — that even experts have had difficulty in separating the wheat from the chaff. This avalanche had a fleeting existence in the publishing industry, and it has unfortunately taken with it many publications that still deserve a critical appraisal. Our “book review” section is still fairly modest, but it is now open and ready to remedy this problem, especially since this gap is not being filled by the other — national — journals dedicated to Jules Verne.

« Forüt ! said quietly the guide.

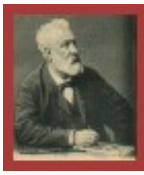
– Forward! » answered my uncle.» (*Journey to the Centre of the Earth*, ch. XVI)

Göttingen, January 2010

(Translated by Arthur B. Evans)

NOTES

1. Indeed, the German therapist Ulrike Petermann has, for more than twenty years, incorporated Captain Nemo into her work, as evidenced in her book *Die Kapitän-Nemo-Geschichten. Geschichten gegen Angst und Stress* (Freiburg: Herder 2001, 2005).
2. See two special issues of the journal *Le Rocambole. Bulletin des amis du roman populaire* n° 30, printemps 2005 («Dans le sillage de Jules Verne») and n° 32, automne 2005 («Les cousins de Jules Verne») as well as many articles in *Science Fiction Studies* and the collection *Les Contemporains de Jules Verne. Aux frontières de la légitimation littéraire (*edited by Daniel Compère and Arnaud Huftier) in the series *Lez Valencienne* n° 40, Presses Universitaires Valenciennes, 2007.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Spherical Geometry in *Mirifiques aventures de maître Antifer*

Garmt de Vries-Uiterweerd

Abstract

The geometry behind the plot of Jules Verne's novel *Mirifiques aventures de maître Antifer* (a treasure hidden on an island that lies at the circumcentre of three other islands) is studied. The location of the final treasure island as given by Verne is about 100 km away from the location that is found using vector algebra. It can be concluded that Verne did in fact use the method he describes in the novel, drawing lines on a globe.

Résumé

La géométrie derrière l'intrigue du roman *Mirifiques aventures de maître Antifer* (un trésor caché dans un îlot situé au circoncentre de trois autres îlots) est examinée. La position du dernier îlot fournie par Verne se trouve à une centaine de kilomètres de la position qu'on obtient en utilisant l'algèbre de vecteurs. On peut en conclure que Verne employait en effet la méthode qu'il décrit dans le roman, en dessinant des lignes sur un globe terrestre.

Introduction

Jules Verne was one of the first novelists to bring science and mathematics into literature. But he was not a mathematician. Despite his meticulous research and the assistance he asked of experts, mathematical errors often pop up in his works, for various reasons.

In *Hector Servadac*, for instance, the period of the comet Gallia's orbit is much shorter than it should be based on its perihelion and aphelion (Crovisier 2005). Even if Verne was aware of this, it was a narrative necessity to ignore Kepler's law in this case, as he could not have his heroes spend several years in the cold outer regions of the solar system. As another example, the cryptoanalysis described in *La Jangada* is faulty in several respects, clearly a result of Verne's own imperfect understanding of the field (De Vries-Uiterweerd, in preparation). And of course, Verne's works are full of the simple errors in transcription, chronology and unit conversions that even the cleverest mathematician might commit. [1]

In the case of Mirifiques aventures de maître Antifer (hereafter abbreviated as MA), an original and captivating novel about a treasure hunt along various portions of the globe, whose plot revolves around a bit of mathématique amusante, a mathematical inaccuracy provides an interesting clue regarding the method that Verne used for his calculations. This article will describe the spherical geometry behind the plot, and show why Verne's results were off. [2]

Synopsis of the novel

For a better understanding of the following discussion, a brief synopsis of the novel is in order.

Captain Antifer receives a strange inheritance: the latitude and longitude of an island in the Imamate of Muscat, where the wealthy Egyptian nobleman Kamylk-Pacha buried an enormous treasure (*MA* 1, ch. V–IX). On this island, however, he only finds another longitude, to be combined with the latitude that is in the possession of a second heir (*MA* 1, ch. XVI). The two legatees travel to Mayumba Bay, only to find yet another longitude, which, when combined with the third inheritor's latitude, leads to an island in the Spitsbergen archipelago (*MA* 2, ch. X–XIII). And once again, this island does not contain the treasure, but only a document giving directions to find the fourth and final island, which is located at the centre of the circle formed by the three islands already visited:

> The three islands are situated on the circumference of the same circle. Well, let us assume that they all lie in one plane, join them pairwise by a straight line […] and draw a perpendicular line through the midpoint of each of these two lines… These two perpendicular lines will meet at the centre of the circle, and at this central point […] the fourth island must by necessity be located!
>
> [Les trois îlots sont situés à la circonférence d'un même cercle. Eh bien, supposons-les tous les trois dans un même plan, réunissons-les deux à deux par une ligne droite […] et élevons une perpendiculaire au centre de chacune de ces deux lignes… Ces deux perpendiculaires se rencontreront au centre du cercle, et c'est à ce point central […] qu'est nécessairement situé l'îlot numéro quatre!] (*MA* 2, ch. XV)

Antifer's nephew Juhel takes his globe and determines the centre of this circle: 37° 26′ N, 10° 33′ E. [3] Antifer and his friends set sail to this position, but no island, however small, is to be found. Then comes the revelation: Kamylk-Pacha buried his treasure on the volcanic island Julia, which had appeared in these waters on 28 June, 1831, and disappeared again in December of the same year, taking the treasure with it to the bottom of the sea (MA 2, ch. XVI).

Validity of the method described by Verne

It is useful to investigate in some detail how Juhel determines the coordinates of the fourth island:

> Juhel placed the globe in the middle of the table. With a flexible ruler and a ruling pen in his hand, as if he worked on a flat surface, he drew a line between Muscat and Mayumba, and another line between Mayumba and Spitsbergen. Through the respective midpoints of each of these two lines he drew two perpendicular lines, which intersected precisely at the centre of the circle.
>
> [Juhel plaça le globe au milieu de la table. Une règle flexible et un tire-ligne à la main, comme s'il eût opéré sur une surface plane, il joignit par une ligne Mascate à Ma-Yumba, et par une seconde ligne Ma-Yumba au Spitzberg. Sur ces deux lignes, en leur milieu respectif, il éleva deux perpendiculaires, dont le croisement s'effectua précisément au centre du cercle.] (*MA* 2, ch. XV)

In a plane, the problem is straightforward, and the centre of a triangle's circumcircle (called the circumcentre) can be found as described by Verne (see Fig. 1). [4] In three-dimensional space, where the three islands lie on the surface of a sphere, matters are not that simple.

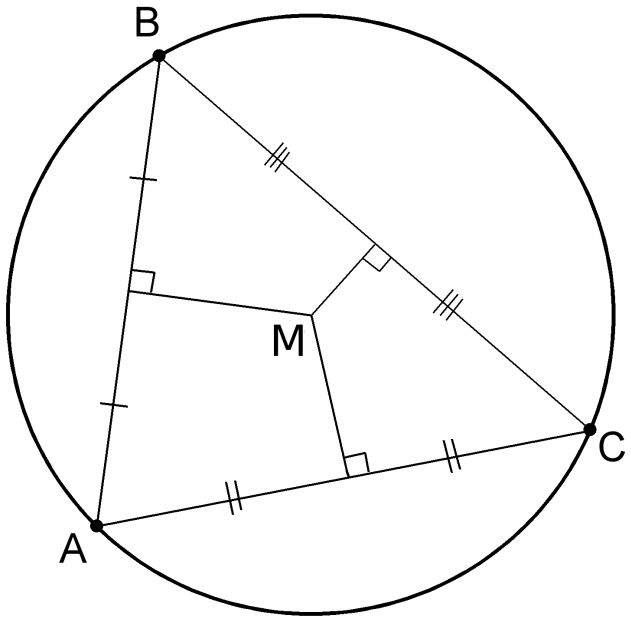

Figure 1. Construction of a triangle's circumcircle in a plane. All points on the perpendicular bisector of AB are equidistant to points A and B, and all points on the perpendicular bisector of BC are equidistant to points B and C. Hence, the intersection of these lines has equal distance to points A, B and C and is therefore the circumcentre of the triangle.

Of course, the three points lie on a uniquely defined circle, but whereas this circle lies entirely on the Earth's surface (it is the intersection of the sphere with the plane defined by the three points), its centre lies below the surface, as do the lines between the points (see Fig. 2). Because the treasure island does not lie deep underground, the problem must be solved on the surface.

Many well-known theorems from two-dimensional Euclidean geometry do not apply on a curved surface like the surface of the Earth. For instance, the sum of the angles in a triangle on a sphere is always larger than 180° and parallel lines do not exist. It is not a priori evident that on a curved surface the circumcentre of three points can be found by the same method as in a plane.

Rather than by a straight line, each pair of islands must be connected by an arc of a great circle in order to operate entirely on the Earth's surface. A great circle (a circle whose centre lies at the centre of the Earth) is the spherical equivalent of a straight line in a plane: a segment of a great circle is the shortest path between two points. The perpendicular bisectors of these arcs between the pairs of islands, again drawn along great circles, do indeed intersect in one point, which is equidistant to each of the islands (see Fig. 3).

Although Juhel's method is theoretically correct, it must be pointed out that in practice it is not as accurate as suggested by Verne's description:

> And having carefully determined the meridian and the parallel, he pronounced firmly:
>
> "Thirty-seven degrees twenty-six minutes North, and ten degrees thirty-three minutes East of the Paris meridian."
>
> [Et, après avoir relevé avec soin le méridien et le parallèle, il prononça d'une voix ferme:
>
> «Trente-sept degrés vingt-six minutes de latitude nord, et dix degrés trente-trois minutes de longitude à l'est du méridien de Paris.] (*MA* 2, ch. XV)

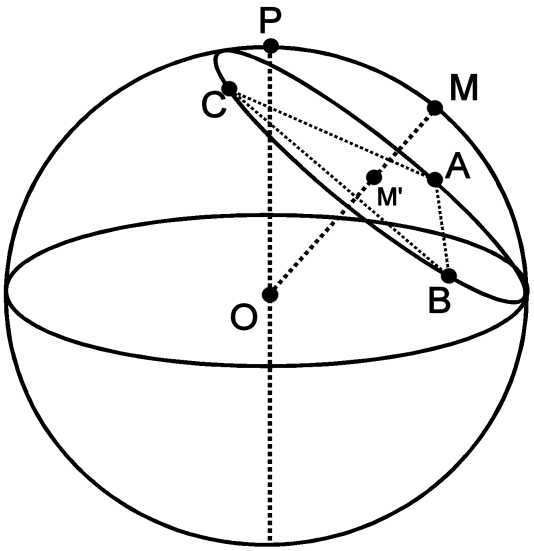

Figure 2. The three islands and their circumcircle. O denotes the centre of the Earth, P is the North Pole. Point M ′ is the (subterranean) circumcentre of the islands at A, B and C. Point M is the location of the fourth island, directly above M′.

It is not easy to draw a line through the exact centre of an arc, exactly perpendicular to it and lying exactly on a great circle. Deviations are inevitable. We will assume that the globe used by Juhel has a radius of about 20 cm, as depicted in the illustration by George Roux (see Fig. 4). The mean radius of the Earth is 6,371 km. Hence, any deviation in Juhel's construction of the circumcentre and the reading of its coordinates on his globe is magnified

with a factor 6,371,000:0.2, or almost 32 million, when applied to the real surface of the Earth. A deviation of 1 mm on the globe becomes an error of 32 km in reality. It is impossible to read the island's coordinates to an accuracy of one arc minute, which would correspond to 0.058 mm on the globe—the thickness of a human hair!

Determination of the circumcentre using vector algebra

A better solution would be to use an exact formula, as can be derived from spherical geometry. Juhel might have been able to perform this sort of calculation, as he is an experienced sailor, and "he was not deficient in either practice or theory [ni la pratique ni la théorie ne lui manquaient]" (*MA* 1, ch. IV).

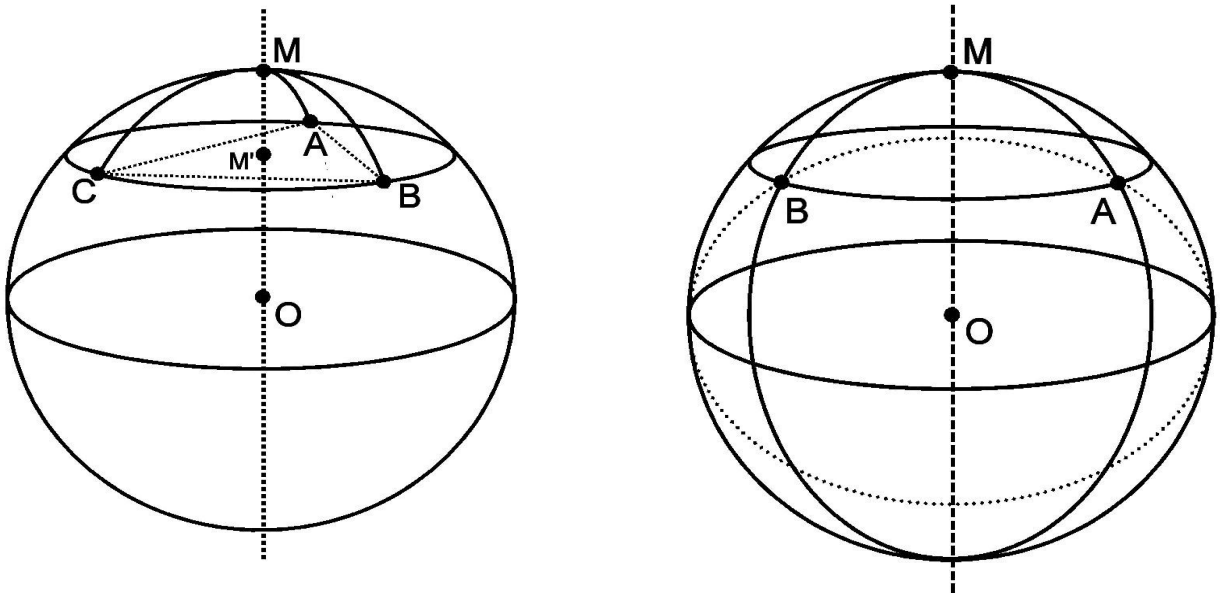

Figure 3. Construction of a triangle's circumcentre on a sphere. The Earth as represented in Fig. 2 is rotated, such that the points A, B and C lie on a parallel (left). The point M′, the centre of this parallel, lies on the sphere's axis. The point M lies directly above M′, i.e. at the new pole. Hence, it lies at equal distances from each of the three points and is therefore the circumcentre of A, B and C on the surface of the sphere. The sphere is then rotated around its new polar axis until A and B lie at equal distances from the prime meridian (right). From the symmetry of the situation (invariance under reflection in the plane defined by the prime meridian), it is clear that the prime meridian intersects the arc AB of the great circle through A and B perpendicularly in its middle. A similar argument applies to BC and AC. Since all meridians intersect at the pole, M is indeed the intersection of the perpendicular bisectors of the arcs connecting the islands.

Consider again the three points A, B and C in Fig. 3. The points define a plane parallel to the equator. The lines connecting the points also lie in this plane. The line OM through the centre of the Earth and the pole is perpendicular to the equator and therefore to the plane through A, B and C. A well-known theorem states that any line that is perpendicular to two

intersecting lines is perpendicular to the plane defined by those lines. Hence, the line through O perpendicular to AB, BC and AC intersects the Earth's surface at M. This line can be found using simple vector algebra.

Each point on the Earth's surface can be represented by a vector whose origin is at the Earth's centre; a line between two points can be represented by the difference between two vectors. The cross product $\boldsymbol{\mu}$ of **b**–**a** and **c**–**b** (see Fig. 5) equals:

$$\boldsymbol{\mu} = (\mathbf{b}-\mathbf{a}) \times (\mathbf{c}-\mathbf{b}) = \mathbf{b}\times\mathbf{c} - \mathbf{b}\times\mathbf{b} - \mathbf{a}\times\mathbf{c} + \mathbf{a}\times\mathbf{b} = \mathbf{a}\times\mathbf{b} + \mathbf{b}\times\mathbf{c} + \mathbf{c}\times\mathbf{a} \quad (1)$$

It is perpendicular to both **b**–**a** and **c**–**b** and therefore points towards the North Pole. This means that, up to a normalisation factor, which does not affect its direction, **μ** is equal to the vector **m** pointing from O to M, the circumcentre of A, B and C. Note the invariance of this expression under permutation of **a**, **b** and **c**, which is a result of the fact that the order in which the three islands are visited is irrelevant.

Figure 4. Juhel and his globe. (Illustration by George Roux.)

Substitution of the positions of the three islands in Muscat (24° 59′ N, 54° 57′ E), Mayumba (3° 17′ S, 7° 23′ E) and Spitsbergen (77° 19′ N, 15° 11′ E) into Eq. 1 yields the coordinates of M: 37° 02′ N, 9° 30′ E (see Fig. 6). The steps involved in this rather straightforward calculation are detailed in the Appendix, for the benefit of the reader who wishes to follow them one by one.

Deviation of Verne's result from the exact calculation

The result as found by means of exact equations differs slightly from the position found by Juhel: 37° 26′ N, 10° 33′ E. The difference is 0.93°, corresponding to a distance of 103 km. [5] On a globe with a radius of 20 cm, the error would be 3.2 mm. From this discrepancy, some conclusions can be drawn regarding the method used by Verne to reach his result.

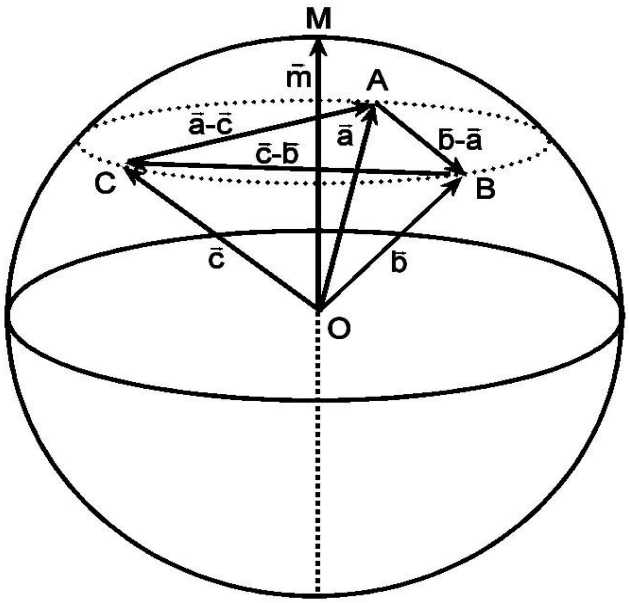

Figure 5. Points on a sphere, represented by vectors. Vector **a** points from O to A, vector **b** from O to B, etc. Furthermore, **b**–**a** points from A to B, etc.

It is clear that calculations based on vector algebra were beyond Verne's own capabilities. The possibility that Verne consulted a mathematician, like he did for earlier novels such as *De la Terre à la Lune* or *Sans dessus dessous*, can also be ruled out. A mathematical expert would have used the method outlined above (or an equivalent method) and arrived at the correct result. A truly skilled mathematician might have taken into account the fact that the Earth's surface is not a sphere but approximately an ellipsoid. The mathematics of ellipsoidal geometry were known at the time. However, calculating distances on an ellipsoid requires the use of iterative methods, and an analytical expression corresponding to Eq. 1 cannot be found. It is unlikely that anyone would have taken all this extra trouble. Besides, the effect of the Earth's non-spherical shape is small (it only causes an error of 19 km in the calculation of Julia's position) and cannot explain the discrepancy.

It is worth noting at this point that Jules Verne's brother Paul, who, like Juhel, was a sea captain, proofread the novel, mainly the "hydrographic" aspects (Dumas 1988, p. 464). Spherical trigonometry is an integral part of a sea captain's education, even though in everyday practice one tends to apply a limited set of well-known formulae, rather than to derive algebraic expressions from scratch. Many officers may lack the mathematical skills for

such an active use of trigonometry. But Paul Verne had been educated at a high-level, and he had been an officer in the Marine Impériale; he would probably have been capable of performing the sort of calculations outlined above. Yet he apparently accepted the numbers as given in the novel and did not suggest the use of an exact formula. He may have realised that such precision was not needed for the story and that the geometric construction on a globe was more illustrative, or he may simply have been swept along by the narrative without considering the precision of Juhel's method. [6]

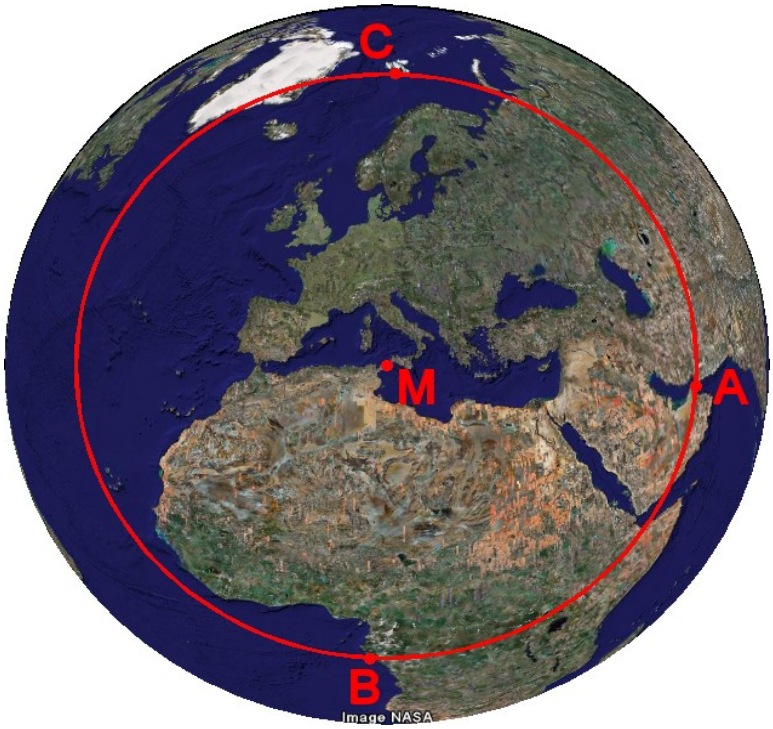

Figure 6. Azimuthal projection of the Earth, with the three islands at points A, B and C and the island Julia at the pole M.

Since no algebraic calculations were used, Verne must have employed some geometric construction method, either on a (two-dimensional) map or on a (three-dimensional) globe. In general, cartographic projections distort angles, distances and/or directions on the Earth's surface. If Verne had reconstructed the circumcentre on a flat map, this would most probably have been a map which, like the one used by Antifer, "was drawn according to Mercator's planispheric projection [était dressée d'après la projection planisphérique de Mercator]" (*MA* 1, ch. IV). On such a map, with its large distortions at high latitudes, the circumcentre as determined by plane geometry would be located in the North Sea, almost 2000 km from Julia's true position, due to the third island, Spitsbergen, which lies at 77° 19′ N.

The most likely possibility is that Verne did in fact work with rulers and pens on a globe, just like Juhel does in the novel. The inaccuracy inherent to this approach explains the deviation in Verne's results quite well. One might even expect a larger error than only a few millimeters on the globe's surface.

Obviously, Verne did not determine the circumcentre from the positions of the first three islands. He chose the island Julia first, as he needed its brief existence for the final plot twist. He probably took a compass and drew a circle around this island, running through some interesting parts of the world, and picked the coordinates of the three islands such that they lay on the circle. Reading off the coordinates is slightly easier than reconstructing a circumcentre, since it does not involve drawing perpendicular bisectors and determining their intersection (an exercise Verne may or may not have done to verify his result). Still, Verne's results are remarkably accurate, considering he suffered from bad eyesight and writer's cramp at the time when he wrote *Mirifiques aventures de maître Antifer*.

Conclusions

From the spherical geometry behind the plot of *Mirifiques aventures de maître Antifer*, it can be shown that Verne did in fact use the method he describes in the novel, drawing lines on a globe rather than calculating the circumcentre algebraically. His results, corresponding to a deviation of 3.2 mm on a globe with a radius of 20 cm, are quite good, although the deviation of 103 km on the surface of the Earth is too large for the method to be of use in a real-life treasure hunt.

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Notes

1. Uniquely, an error made by J.T. Maston in *Sans dessus dessous* is in fact a major plot point, only to be revealed at the end of the novel. The correct calculations are given in an appendix by Albert Badoureau, Verne's advisor for this novel.
2. The mathematical concepts behind the plot of *MA* were discussed in an earlier article by the author (De Vries-Uiterweerd, Garmt. "Meetkunde op een boloppervlak." *De Verniaan* 42 (2008): 12–17.).
3. All longitudes given in this article are relative to the meridian of Paris, as in the novel.
4. All figures, except the original illustration from the novel, were created by the author.
5. The position of the island as given by Verne differs both from the exact circumcentre of the first three islands and from the Julia island's true position, 37° 10′ N, 10° 23′ E. It is important to distinguish these deviations. The first is a result of Verne's inaccurate determination of the circumcentre, the second is probably due to an error in Verne's sources or imprecise measurements of the island's position during the few months of its existence.
6. Thanks to Bernhard Krauth and Philippe Valetoux for sharing their experience and their opinions on this topic.

Appendix

The following outline will allow the interested reader to repeat the calculations that lead to the determination of the circumcentre of three points **a**, **b** and **c** on the Earth's surface.

1. Convert all latitudes and longitudes into decimal numbers.
2. Convert the positions of the three points from spherical to Cartesian coordinates:

$$x = R \cos(\theta) \cos(\varphi), \quad (2)$$

$$y = R \cos(\theta) \sin(\varphi), \quad (3)$$

$$z = R \sin(\theta), \quad (4)$$

where R is the average radius of the earth, θ is the latitude and φ is the longitude.

3. Determine the cross product **a**×**b**, given by:

$$\mathbf{a}\times\mathbf{b} = (a_y b_z - a_z b_y,\ a_z b_x - a_x b_z,\ a_x b_y - a_y b_x), \quad (5)$$

and similarly for **b**×**c** and **c**×**a**.

4. Add **a**×**b**, **b**×**c** and **c**×**a** to find **m**.

Garmt de Vries-Uiterweerd (garmtdevries@gmail.com)is a physicist at the University of Gent. He has read and collected the works of Jules Verne since the age of eleven. He has been an active member of the Dutch Jules Verne Society since its beginning, as webmaster, as assistent editor of the magazine *Verniaan*, and as president of the Society. He has translated various Verne texts into Dutch, among others *Les méridiens et le calendrier* and *Souvenirs d'enfance et de jeunesse*.


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Les Mystères du deuxième acte – à propos d'un fragment dramatique de Jules Verne (et quelques autres)

Volker Dehs

Abstract

There still remain certain unresolved questions about Jules Verne's life; his relationship with the theater, for example, is especially notable. The specific focus of the article which follows is a Vernian play recently published but of which only the second act survives. The article's author identifies the play's original title as well as the names of two Verne's collaborators and offers probable reasons why this work, although accepted by the Théâtre de Cluny in 1883, was never performed on stage.

Résumé

Il reste toujours des questions pas encore résolues dans la vie de Jules Verne, parmi lesquelles ses rapports avec le monde du théâtre occupent une place privilégiée. L'article qui suit se consacre plus spécialement à une pièce récemment publiée dont n'est conservé que le deuxième acte. Dehs en identifie le titre original ainsi que les noms des deux collaborateurs de Verne et présente les raisons probables pourquoi cette œuvre – quoique acceptée par le Théâtre de Cluny en 1883 – n'a jamais vu les feux de la rampe.

1. Quelques questions ouvertes

Lorsque nous passons en revue ce que nous savions de la vie et de l'œuvre de Jules Verne en 1955 et en 1978, et quand nous le comparons à ce que l'on en connaît aujourd'hui, on constate que la recherche vernienne a progressé de manière constante. En même temps, cette constatation devrait nous rendre modestes quant aux résultats que de futures recherches et l'exploitation de documents encore inédits pourront nous réserver dans cette biographie qui reste loin d'être définitive. Voici, en guise d'exemples, quelques problèmes aptes à aiguiller l'ambition et l'initiative des chercheurs :

• Qui est cette madame de Mauclair (ou Mauclerc, nom d'ancienne noblesse bretonne) qui accompagne toute la vie de Jules Verne, à qui il a adressé des lettres lors de son voyage en Scandinavie (1861) ; dont il a introduit l'homonyme dans son roman *La Maison à vapeur* (1880) et la fille chez Hetzel en 1903 [1], dont le mari – d'après les notes de Verne – s'est suicidé à Antibes ou Monaco en mai 1890 [2], et qui rendit à Honorine un document autographe après la mort du romancier [3] ?

• Par quelle(s) personne(s) Jules Verne avait-il obtenu en 1862 la somme fabuleuse de 207.000 francs (l'équivalent d'environ 700.000 euros ou d'un million de dollars) pour demander à l'impresario Émile Perrin la direction de l'Opéra comique ? [4]

• Que faut-il penser du titre légendaire de *Confitebor*, désignant un « opuscule » sur le paysan picard , dont le biographe Charles Lemire prétendit que le titre « fut à tort changé par le compositeur en *Confiteor*. Son personnage et la couleur locale en furent amoindris. » [5] La publication à laquelle Lemire fait référence n'a pas encore été retrouvée.

• Que sont devenues les nouvelles (?) intitulées *Aventures en Calabre* et *Un Radeau sur le Rhin*, annoncées par le *Musée des familles* en 1857 ? [6] Ou bien les deux manuscrits de la pièce écrite avec Adolphe d'Ennery d'après le roman *Les Tribulations d'un Chinois en Chine* (1888-90) dont Jules Verne fit récupérer au moins le deuxième, en 1899, après la mort d'Ennery, par son fils Michel pour le terminer avec l'auteur Jules Mary (1851-1922) sous le titre *Likao* et la faire jouer au Châtelet pendant l'Exposition universelle de 1900 ? [7]

Questions sur questions qui seraient faciles de multiplier, mais dont on chercherait en vain les réponses dans les biographies publiées à ce jour. Deux des questions évoquées plus haut concernent plus particulièrement le monde du spectacle et nous rappellent que le théâtre a joué un rôle considérable tout au long de la vie de Jules Verne, non seulement dans sa jeunesse. [8] Les adaptations des *Voyages extraordinaires* à la scène constituaient sans aucun doute une sorte de synthèse dans l'esprit de leur auteur, qui avait ainsi pu réconcilier ses ambitions dramatiques avec son statut reconnu de romancier. Et Verne a même esquissé quelques tentatives peu connues de revenir à la scène après 1863 par des pièces originales n'ayant rien à voir avec le cadre exotique de ses romans.

Cet article se propose de mettre en lumière le sort d'une de ces pièces, dont le texte paraît particulièrement mystérieux parce qu'il n'en subsiste que le deuxième acte et dont la date de rédaction demeure – jusqu'à ce jour – hypothétique.

2. L'affaire Mitonnart–Troufignol

La présence de cette pièce fragmentaire dans le fonds des manuscrits de Jules Verne, déposé en 1982 à la Bibliothèque municipale de Nantes [9] après la mort de Jean Jules-Verne (1892-1980), petit-fils de l'écrivain, posait des problèmes aux spécialistes, car il ne correspondait à aucune oeuvre dont le titre était connu. Bien que la plus grande partie du texte manuscrit soit écrite par deux mains différentes dont aucune n'est celle de Jules Verne, quelques passages et corrections du romancier des *Voyages extraordinaires* sont bien la preuve d'une collaboration, comme elle était habituelle à l'époque en matière dramatique. Jules Verne fut-il à l'origine de ce projet jamais abouti, eut-il une part égale à celle de ses

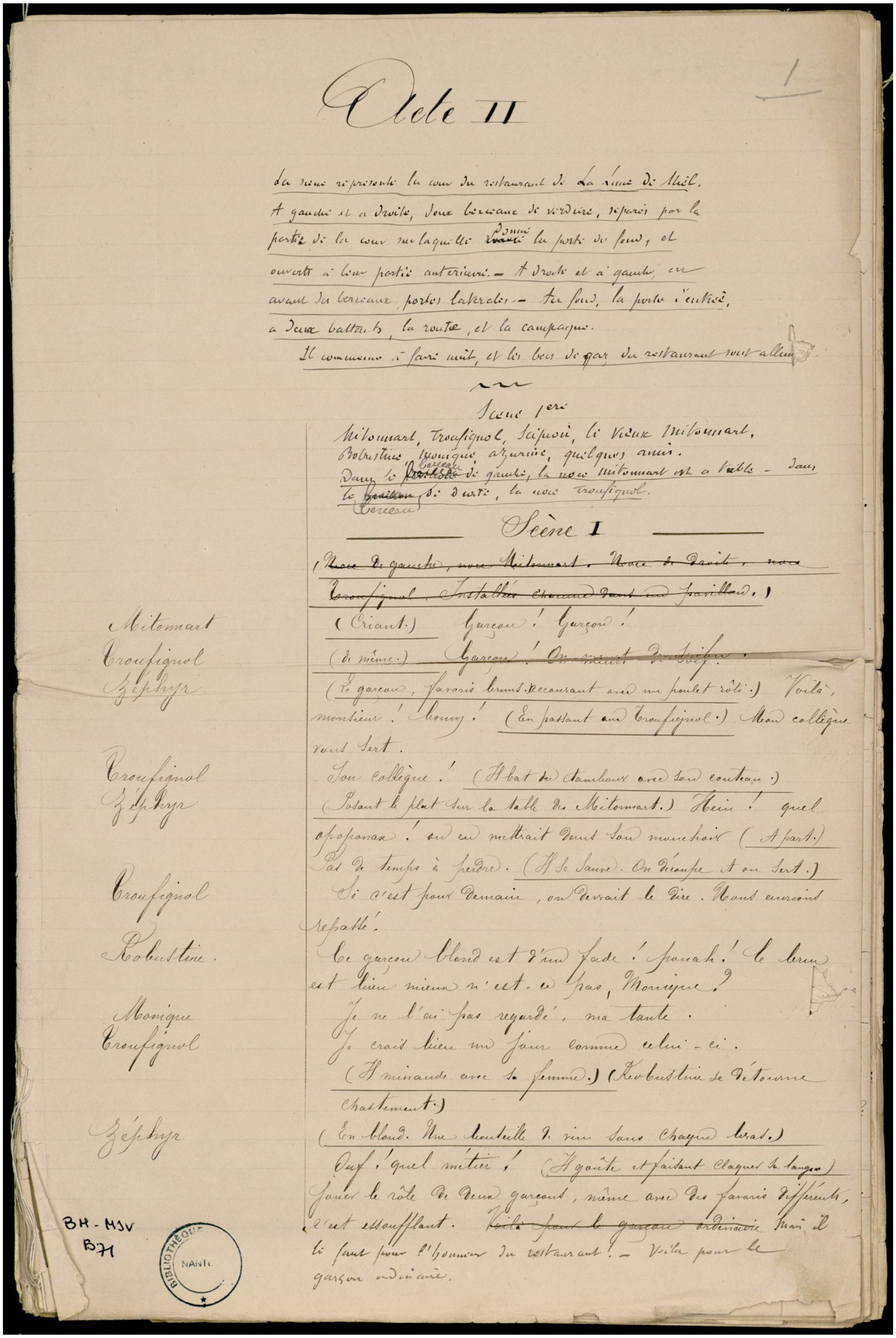
collaborateurs ou a-t-il seulement revu (même partiellement) le texte – rien ne permet de le savoir avec certitude. Le domicile amiénois de Verne indiqué sur le manuscrit est la preuve d'une rédaction au moins postérieure à juillet 1871. L'état fragmentaire de cette œuvre est d'autant plus regrettable que l'action de la comédie est bien menée et se distingue par un humour effréné.

C'est l'histoire des deux noces Mitonnart et Troufignol qui ont apparemment subi des rivalités et des confusions plus ou moins compromettantes au cours du premier acte. Au second, elles se retrouvent justement dans le même restaurant en pleine campagne où il faudra passer la nuit. Le conflit menace de reprendre et de s'aggraver, mais les deux couples sont réconciliés par l'intervention du maire Poitrineux, un vrai boute-en-train, et se décident à continuer la fête en bonne entente. A la fin du 2e acte, des complications s'annoncent : Poitrineux confond les deux clés qui permettent aux maris d'accéder aux chambres de leurs épouses, et lui-même est poursuivi par une actrice, l'impétueuse Corniska, qui paraît avoir à régler un compte avec lui [10]…

Dans mon introduction à la publication récente de ce texte amusant [11], j'ai proposé de dater la rédaction de l'œuvre vers 1879, en me fondant sur des éléments du contenu. Christian Robin, l'auteur du tableau chronologique des pièces de Verne, qui termine le même volume, ne semble pas avoir partagé cette opinion, puisqu'il date la pièce de 1874 – toutefois sans apporter des arguments propres à justifier son choix. [12] La mention de Jules Verne et l'adresse probablement parisienne d'un autre nom, ajoutées au crayon bleu à la fin du manuscrit [13], m'avaient amené à identifier le collaborateur de Verne comme étant Alfred-Néoclès Hennequin (1842-1887), auteur dramatique, d'origine belge, qui avait connu son apogée entre 1870 et 1880 avec des comédies dont les critiques et le public vantaient l'esprit et la bonne humeur. Comment s'étaient établis des rapports entre les deux auteurs, rapports qui avaient abouti à cette collaboration ? On l'ignore, tout simplement.

Or, la réalité a été tout autre, comme l'a révélé un examen attentif du journal *Le Gaulois* (presque entièrement disponible sur le site de *Gallica*), journal de la bonne société, de tendance royaliste et de haute tenue littéraire, dont les rédacteurs et journalistes ont toujours été bien informés en ce qui concerne les affaires de Jules Verne. [14] Parcourant le quotidien parisien, on découvre en 1883-1884 quelques mentions d'une pièce de Jules Verne qui pourraient bien avoir une relation avec cette mystérieuse pièce dont ne subsiste que le deuxième acte. 1883-1884, c'est l'époque où Jules Verne envisageait une candidature à l'Académie française – candidature qui, à son profond regret, ne devait jamais se réaliser – et où sa pièce *Kéraban-le-têtu*, montée le 3 septembre 1883 au Théâtre de la Gaîté-Lyrique connaît un échec écrasant.

Un premier indice se trouve dans le numéro du 4 octobre 1883 : « Lorsque le succès de *L'Affaire de Viroflay* sera épuisé, M. Maurice Simon montera, au Cluny, une pièce de MM. Jules Verne et Émile Abraham. » [15] Maurice Simon, directeur du Théâtre de Cluny de 1882 à 1885 [16], s'est sans doute ravisé, peut-être par suite des mauvaises critiques que subit à cette époque *Kéraban-le-têtu*. En tout cas, il remplaça la pièce annoncée par deux autres, une comédie ancienne par Burni et Raymond, *Le Cabinet Piperlin* (1878), jouée du 25 octobre 1883 au 6 janvier 1884, et surtout par *Trois femmes pour un mari* par Grenet-Dancourt, qui devait connaître une longue vie. Créée le 11 janvier 1884, cette comédie fut jouée jusqu'au 29 avril 1885 – un succès aussi imprévu qu'éclatant.



Acte II

La scène représente la cour du restaurant de La Lune de Miel. A gauche et à droite, deux berceaux de verdure, séparés par la partie de la cour sur laquelle donne la porte du fond, et ouverts à leur partie antérieure. — A droite et à gauche, en avant des berceaux, portes latérales. — Au fond, la porte d'entrée, à deux battants, la route, et la campagne.

Il commence à faire nuit, et les becs de gaz du restaurant sont allumés.

Scène 1ère

Mitonnart, Troufignol, Scipion, le vieux Mitonnart, Robustine, Monique, Azurine, quelques amis.
Dans le berceau de gauche, la noce Mitonnart est à table — Dans le berceau de droite, la noce Troufignol.

Scène I

~~(Noce de gauche, noce Mitonnart. Noce de droite, noce Troufignol. Installées chacune dans un pavillon.)~~

Mitonnart — (Criant.) Garçon ! Garçon !

Troufignol — (de même.) Garçon ! ~~On meurt de soif.~~

Zéphyr — (Le garçon, favoris bruns, accourant avec un poulet rôti.) Voilà, monsieur ! Boum ! (En passant aux Troufignol.) Mon collègue vous sert.

Troufignol — Son collègue ! (Il bat du tambour avec son couteau.)

Zéphyr — (Posant le plat sur la table des Mitonnart.) Hein ! quel opoponax ! on en mettrait dans son mouchoir (A part.) Pas de temps à perdre. (Il se sauve. On découpe et on sert.)

Troufignol — Si c'est pour demain, on devrait le dire. Nous aurions repassé.

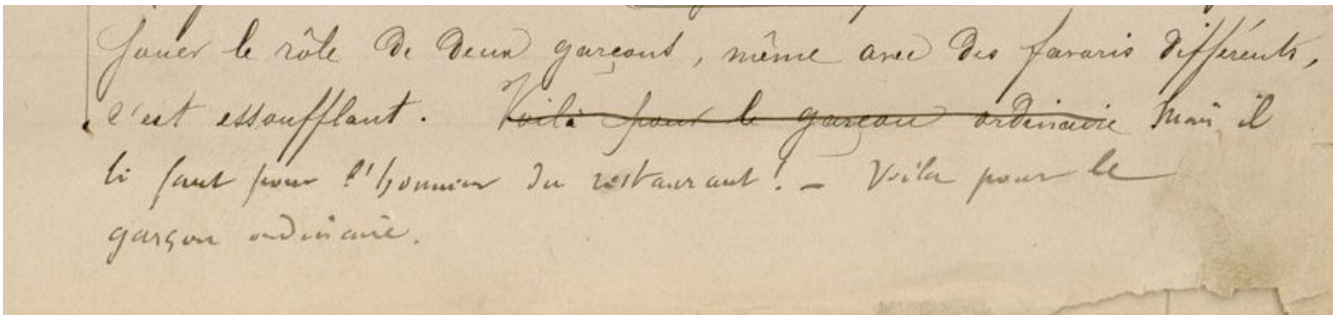
Robustine. — Ce garçon blond est d'un fade ! pouah ! le brun est bien mieux n'est-ce pas, Monique ?

Monique — Je ne l'ai pas regardé, ma tante.

Troufignol — Je crois bien un jour comme celui-ci. (Il minaude avec sa femme.) (Robustine se détourne chastement.)

Zéphyr — (En blond. Une bouteille de vin sous chaque bras.) Ouf ! quel métier ! (Il goûte et faisant claquer sa langue) Jouer le rôle de deux garçons, même avec des favoris différents, c'est essoufflant. ~~Voilà pour le garçon ordinaire~~ mais il le faut pour l'honneur du restaurant ! — Voilà pour le garçon ordinaire.

Première page du mystérieux acte 2 conservé à la Bibliothèque municipale de Nantes



Détail du bas de la première page avec l'écriture de Verne : “Mais il le faut pour l'honneur du restaurant! - Voilà pour le garçon ordinaire.” Les douze premières lignes de texte de cette page sont aussi de la main de Verne

Le 7 février 1884, un deuxième entrefilet relatif à la pièce qui nous intéresse paraît dans *Le Gaulois*: « En présence du grand succès de *Trois femmes pour un mari*, qui terminera certainement la saison actuelle, MM. Emile Abraham et G. Maurens ont prié M. Maurice Simon, directeur du théâtre Cluny, de remettre à l’automne leur comédie en trois actes, *Les Erreurs d’Alcide*, qui devait succéder à la pièce de M. Grenet-Dancourt. » [17]

Théâtre de Cluny (coll. Dehs)

C'est la première fois que le titre de la comédie apparaît – *Les Erreurs d'Alcide* – de même que le nombre des actes. Si le nom de Verne a temporairement disparu, il est substitué par un autre qui n'est pas inconnu des chercheurs verniens, puisque ledit G. Maurens devait être, quelques années plus tard, co-auteur de l'adaptation de *Mathias Sandorf*. Jules Verne est de nouveau indiqué dans deux entrefilets des 13 et 25 juin, annonçant la création de la pièce pour la saison 1884-85, car le Théâtre de Cluny ferma ses portes le 15 juin pour ne les rouvrir qu'à la fin août 1884. Dans son numéro du 20 août *Le Gaulois* affirme de nouveau : « Puis viendra une comédie en trois actes de MM. Emile Abraham, Jules Verne et G. Maurens. Le titre : *Les Erreurs d'Alcide* » [18]. Une semaine plus tard, le 28 août, *Le Gaulois* précise : « La pièce a été présentée à M. Maurice Simon par M. Jules Verne ; elle sera signée Emile Abraham et Gustave Maurens. » [19]

Une fois de plus, d'autres pièces acceptées furent montées avant *Les Erreurs d'Alcide,* et lorsque Maurice Simon fut remplacé à la tête du Théâtre de Cluny, fin 1885, par la direction commune de Léon Marx et Louis Dérenbourg, le théâtre ne jouait plus que des reprises de pièces anciennes, puis changea de répertoire et se consacra aux vaudevilles et aux opérettes. La pièce de Verne-Abraham-Maurens fut alors abandonnée et tomba dans l'oubli : comme les œuvres dramatiques, à cette époque, étaient habituellement conçues par leurs auteurs pour une scène précise, elles avaient peu de chances d'être acceptées par un autre théâtre. Si la direction du théâtre choisi changeait subitement (ce qui se passait souvent), le nouveau directeur ne se sentait pas engagé par les décisions de son prédécesseur.

Les Erreurs d'Alcide n'ont donc jamais connu les feux de la rampe, parce que les pièces qui l'avaient précédé sur la scène du Théâtre de Cluny furent des succès et parce que la direction du théâtre a changé avant que la pièce puisse y être montée.

Cette pièce mystérieuse dont il ne reste que le deuxième acte pourrait-elle être *Les Erreurs d'Alcide* ? Si lesdites « erreurs » peuvent bien se rapporter – entre autres – à la confusion des clés, commise par Poitrineux, aucun « Alcide » ne paraît parmi les personnages. En effet, c'est seulement la dernière réplique de Corniska terminant le second acte qui résout cette énigme, car dans le personnage dudit Poitrineux elle a retrouvé celui qu'elle avait cherché : « Je tiens mon Alcide ! » [20] Donc, aucun doute ne subsiste: le fragment correspond bien à la pièce destinée par ses auteurs dès 1883 au Théâtre de Cluny.

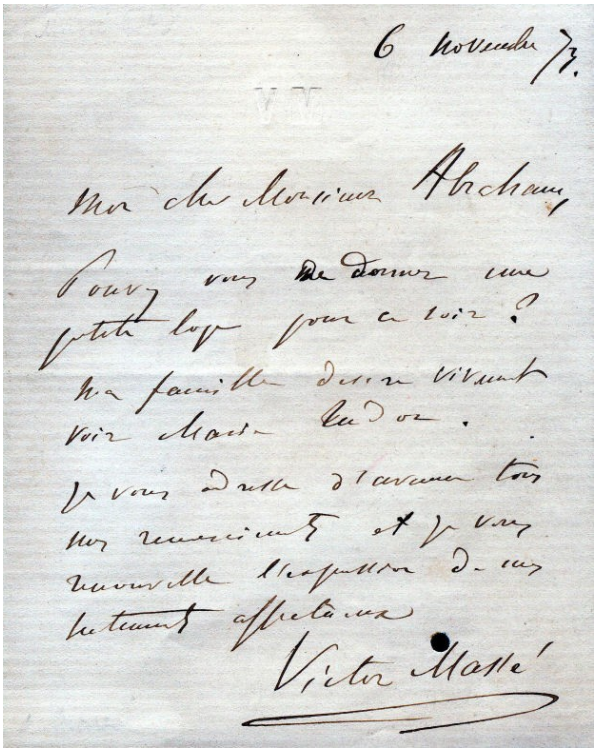
3. Portrait de deux collaborateurs sans visages

Reste à présenter les deux collaborateurs – dont il ne m'a malheureusement pas été possible de retrouver les portraits – et à et éclaircir leurs rapports avec Jules Verne.

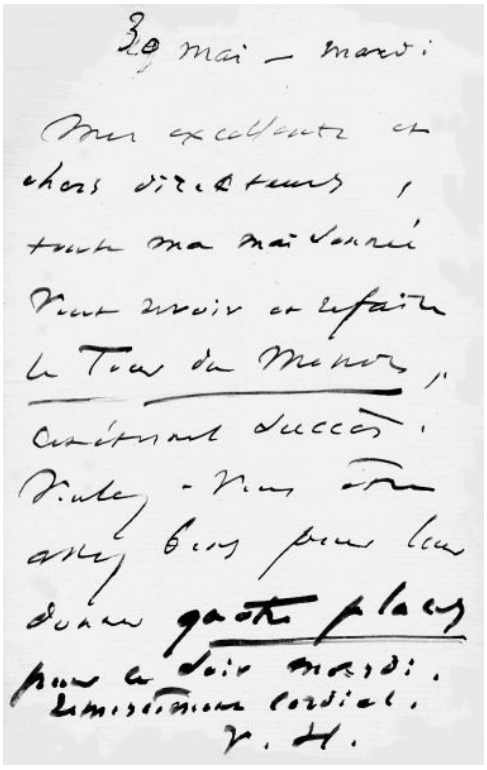
Le premier, Émile Abraham (1833-1907) avait débuté comme chroniqueur dramatique et publié en 1858 un petit volume consacré aux *Acteurs et actrices de Paris*, qui connut 42 éditions jusqu'en 1906. Il est l'auteur d'une quarantaine de pièces, écrites presque toutes en collaboration et jouées entre 1858 et 1879 – bien oubliées de nos jours. Secrétaire à l'Opéra-Comique, il quitte ce poste pour entrer au Théâtre de la Porte-Saint-Martin, encore comme secrétaire, dès son ouverture en septembre 1873. Nul doute que Verne eut l'occasion de faire sa connaissance lors des préparatifs et des représentations de ses pièces à « grand

spectacle » écrites en collaboration avec d'Ennery – depuis *Le Tour du monde en 80 jours* jusqu'au *Voyage à travers l'impossible* – qui furent portées sur cette scène entre novembre 1874 et février 1883.

Dans sa fonction de secrétaire, Abraham distribuait entre autres les places de faveur destinées aux journalistes et personnalités de la vie parisienne, comme en témoignent le document du compositeur Victor Massé adressé à Abraham lors du 40e anniversaire de *Marie Tudor* de Victor Hugo, et aussi la lettre du même Hugo demandant en 1876 à Ritt et Larochelle, alors directeurs du Châtelet, une loge pour voir, le soir même, *Le Tour du monde en 80 jours*. [21] Évidemment, lorsque l'on jouit d'une certaine réputation, on dédaigne de faire la queue comme tout le monde... Vingt ans auparavant, Jules Verne avait reçu de semblables demandes, lorsqu'il avait occupé le poste du secrétaire du Théâtre Lyrique, entre février 1852 et septembre/octobre 1855. [22]



Lettre de Victor Massé à Emile Abraham (6 novembre 1873) : « Mon cher Monsieur Abraham, / Pouvez-vous me donner une petite loge pour ce soir ? / Ma famille désire vivement voir Marie Tudor. / Je vous adresse d'avance tous mes remerciements et je vous renouvelle l'expression de mes sentiments affectueux. / Victor Massé ». Victor Massé (1822-1884) était compositeur et ami de Jules Verne. (coll. Dehs)



Lettre de Victor Hugo à Eugène Ritt et Henri Larochelle (30 mai 1876) : « Mes excellents et chers directeurs, toute ma maisonnée veut revoir et refaire *Le Tour du Monde*, cet étonnant succès. / Voulez-vous être assez bons pour leur donner *quatre places* pour ce soir mardi. / Remerciement cordial. / V.H. » (coll. Margot)

Georges Maurens, de son vrai nom Jules Henry (né en 1854, mort après 1921 [23]), était par contre une connaissance d'Amiens. Conseiller à la Préfecture de la Somme [24], il profita

de ses expériences professionnelles pour publier un roman qui connut un modeste succès lors de sa publication en 1885 : « *Monsieur le préfet*, tel est le titre d'un roman que met en vente l'éditeur Ollendorff. On voit que l'auteur, M. Georges Maurens, connaît à fond le sujet qu'il traite. C'est une photographie des intrigues multiples, qui entrecroisent leurs fils autour d'une préfecture ; mais c'est une photographie mise en couleurs par un jeune écrivain qui allie un réel talent de plume à une grande finesse d'observation. » [25] Ce roman « politique » ne devait toutefois pas nuire à sa carrière, car peu de temps après, il se retrouve à Paris : « M. Jules Henry, qui occupe actuellement les fonctions de chef du secrétariat auprès de M. le Président du Conseil, ministre de l'intérieur, n'a laissé que d'excellents souvenirs à Amiens où il a habité durant plusieurs années. » [26]

Le même article rapporte les antécédents de son adaptation de *Mathias Sandorf*, jouée le 27 novembre 1887 au Théâtre de l'Ambigu-Comique dirigé alors par Émile Rochard [27] : « ami particulier de M. Verne, [il] a tiré de *Mathias Sandorf* le scénario en quinze tableaux et a demandé au romancier du *Temps* l'autorisation de l'écrire. M. Jules Verne y a consenti, mais à la condition que M. Henry, auteur débutant, serait aidé dans ce travail par un collaborateur d'une expérience reconnue. D'un commun accord, on a choisi M. Busnach [28] – qui s'est mis immédiatement à la besogne. » Après une première lecture de quatre actes « entièrement achevés » devant Rochard vers le 20 mai 1887 et avant la lecture devant les acteurs dans les derniers jours d'août [29], *Le Gaulois* rapporta le 15 août : « Les auteurs du drame de *Mathias Sandorf* ont envoyé récemment à Jules Verne le manuscrit de leur pièce. L'auteur des *Voyages extraordinaires* s'est, paraît-il montré très satisfait du travail de ses collaborateurs, MM. William Busnach et Georges Maurens. » [30]

Le succès (relatif) de la pièce qui compta 94 représentations jusqu'au 14 février 1887 paraissait suffisamment établi à Jules Verne pour permettre au même tandem de choisir un autre titre parmi les *Voyages extraordinaires*. [31] Busnach et Maurens envisageaient d'adapter *Le Chemin de France*, probablement en vue du centenaire de la Révolution en 1889, mais le projet échoua sans laisser de traces. Verne lui-même n'en était pas surpris, comme en atteste une lettre à son éditeur : « Je ne crois aucunement à la représentation de cette pièce, dont un directeur ne voudrait que si les passions nationales lui donnaient de l'actualité – ce qui n'est pas à désirer. Seulement, je n'ai pas voulu refuser à Busnach et Maurens l'autorisation d'adapter ce roman au théâtre, et j'ai même travaillé au scénario. » [32]

Aux relations entre Verne et Jules Henry il convient d'ajouter encore un dernier acte puisque le romancier autorisa le 12 janvier 1899 son collaborateur d'adapter son roman *L'Archipel en feu* (1884), ce qu'il devait regretter par la suite. [33] Henry s'associa avec son ami Charles Samson (1859-1913) et intéressa Rochard du théâtre du Châtelet… aux dépens de Verne puisque celui-ci se trouvait alors relégué au second rang avec *Likao*, l'ancienne pièce chinoise remaniée et complétée dont il se proposait de transporter l'action en Perse pour des raisons d'actualité. A la fin ni *Likao* ni *L'Archipel en feu* ne furent montés alors qu'un entrefilet du *Gaulois* devait encore signaler en septembre 1903 : « Il paraît qu'un de nos grands théâtres du boulevard va monter prochainement une pièce à grand spectacle tirée du roman de Jules Verne, *L'Archipel en feu*, par notre aimable confrère Charles Samson. » [34]

La carrière dramatique d'Henry/Maurens se termina en 1909 par une opérette en collaboration avec Samson (musique de Léon Pouget), *Miss Cravache*, jouée seulement à Marseille, domicile de Samson.

Ainsi, les déboires que Jules Verne avait connus à ses débuts comme auteur dramatique, l'ont poursuivi jusqu'à la fin de sa vie. Reste à récupérer les deux actes manquants des *Erreurs d'Alcide* dont le manuscrit complet ne figure malheureusement ni aux archives de la Censure ni au fonds de la Société des Auteurs et Compositeurs dramatiques (SACD). [35] Ceci ne veut pas pour autant dire que le texte soit définitivement perdu, mais il faudra sans doute une forte dose d'intuition et de bonne chance combinées pour retrouver la piste du texte égaré pour qu'on puisse dire un jour, à l'exemple de Corniska : « Je tiens mon Alcide ! »

William Busnach (coll. Dehs)

NOTES

1. Lettre du 16 septembre 1903. *Correspondance inédite de Jules et Michel Verne avec l'éditeur Louis-Jules Hetzel (1886-1914)*. Tome II. Genève : Slatkine 2006, p. 130.
2. Bibliothèque municipale Louis Aragon d'Amiens (abrégée par la suite BMA), JV MS 28, pièces 45 et 83.
3. Xavier Noël : « Lettre d'Honorine Verne à madame de Mauclerc. » In *Cahiers du Musée Jules Verne* n° 13. Nantes : Les Amis de la Bibliothèque municipale 1996, pp. 6-8.
4. Le fait fut relevé à ma connaissance pour la première fois par le journaliste Jean-Bernard : *La Vie de Paris 1905*. Paris : Alphonse Lemerre 1906, p. 109 : « Il songea un moment à prendre la direction de l'Opéra-Comique, quand il eut l'idée d'écrire *Cinq semaines en ballon*. » Le roman était plus précisément à l'imprimeur lorsque Verne posa sa candidature le 16 décembre 1862. Pour la lettre de Verne à Perrin voir V. Dehs : « Ein Brief und seine Geschichte (1). » In *Nautilus.* Zeitung des Jules Verne Clubs (Bremerhaven) n° 14, octobre 2008, pp. 32-35.
5. Ch. Lemire : *Jules Verne* […]. Paris : Berger-Levrault & C^{ie} 1908, p. 145, note 1.
6. Voir Jules Verne : *Salon de 1857*. Texte intégral établi, présenté et annoté par Volker Dehs, p. 24 (www.jules-verne.eu/Salon_1857.pdf).
7. D'après les lettres envoyées à Michel, conservées à la BMA, JV MS 21.
8. Voir les nombreux textes de Robert Pourvoyeur, parus surtout dans le *Bulletin de la Société Jules Verne*, et les récentes synthèses de Jean-Michel Margot : « Jules Verne, Playwright » in *Science Fiction Studies*, vol. 32, #95 (mars 2005), pp. 150-162, et de Volker Dehs : « Die Galerie der ungeschlüpften Eier. Jules Vernes Bühnenwerke » in V. Dehs et Ralf Junkerjürgen (éd.) : *Jules Verne. Stimmen und Deutungen zu seinem Werk*. Wetzlar : Schriftenreihe und Materialien der Phantastischen Bibliothek Wetzlar, vol. 75 (2005), pp. 283-292. Le succès remporté par Verne avec ses oeuvres dramatiques se réflète particulièrement dans les textes présentés par J.-M. Margot : *Jules Verne en son temps vu par ses contemporains francophones (1863-1905)*. Amiens : encrage 2004.
9. Manuscrit MJV B 71, microfilm 88-12.21; Paris, Bibliothèque nationale de France, département des manuscrits, microfilm 3973. Depuis avril 2009, on peut consulter le manuscrit en ligne : http://www.bm.nantes.fr (rubrique Catalogue et ressources / Collections numérisées).
10. Cette relation n'est pas sans rappeler celle entre Ox et la princesse Prascovia dans l'adaptation du *Docteur Ox* par Philippe Gille et Arnold Mortier pour l'opéra-bouffe en trois actes de Jacques Offenbach de 1877. Détail qui suggère une gestation qui est postérieure à cette date.
11. « Pièce sans titre (Acte II) » in Jules Verne : *Théâtre inédit*. Édition dirigée par Christian Robin. Paris : le cherche midi 2005, pp. 999-1032.
12. Ibid., p. 1036.
13. « S^{t} Georges 43 / M^{r} Hennequin / M^{r} Verne à Amiens ».
14 Voir V. Dehs : « Les chroniqueurs du *Gaulois*. » In *Bulletin de la Société Jules Verne,* n° 130 (1999), pp. 31-50.
15. P[ierre]M[illet] : « Informations ». *Le Gaulois* n° 424, 4 oct. 1883, p. 3. *L'Affaire de Viroflay*, comédie en 3 actes par E. Mendel et G. Hirsch, fut jouée au Théâtre Cluny du 1er au 24 octobre 1883.
16. « Après le Cluny, Maurice Simon est passé au Théâtre Déjazet, avant de prendre la direction, en décembre 1888, du Théâtre français de Rouen. Il est mort en 1895. » Guy de Maupassant en collaboration avec William Busnach : *Madame de Thomasson, pièce inédite*. Édition de Marto

Johnston. Publication des Universités de Rouen et du Havre 2005, p. 37, note 1. À remarquer dans ce contexte que le Théâtre de Cluny avait été fondé par un ami de Jules Verne, Henri Larochelle, en 1867. En 1873 y fut montée sa comédie en trois actes *Un Neveu d'Amérique ou les deux Frontignac*, écrite en collaboration avec Charles Wallut, révisée par Édouard Cadol.

17. Nicolet : « Courrier des spectacles. » *Le Gaulois* n° 570, 7 fév. 1884, p. 4.

18. Anonyme : « Courrier du théâtre. » *Le Gaulois* n° 767, 20 août 1884, p. 4.

19. Nicolet : « La Saison théâtrale de 1884-85. Théâtre Cluny. » *Le Gaulois* n° 775, 28 août 1884, p. 4. Il est difficile à dire si le faux prénom – Gustave pour Georges – est à attribuer à une erreur du journaliste ou constitue la première version du pseudonyme définitif. Le même « Gustave Maurens » figure dans le *Journal des débats politiques et littéraires* du 20 août 1884, p. 4.

20. J. Verne: *Théâtre inédit*, p. 1030.

21. *Le Tour du monde en 80 jours* de Jules Verne et Adolphe d'Ennery avait bien été créé à la Porte-Saint-Martin le 7 novembre 1874, mais la première reprise du 1er avril au 1er octobre 1876 eut lieu au Châtelet. Notons en guise d'anecdote que cette même pièce aurait dû succéder en 1873 à ladite *Marie Tudor* – mais dans la première version de Verne et Édouard Cadol, qui ne fut jamais jouée : « On promet des merveilles. Les auteurs, naturellement, vont nous faire passer toutes les latitudes : nous verrons les neiges éternelles des Alpes, les banquises énormes des pôles, les chaudes savanes du Mexique, les steppes de la froide Russie et les riantes collines de l'Asie. La Chine n'aura plus de secrets pour nous, et le Japon, le mystérieux Japon, sera dévoilé à tous. – Cette belle féerie ne comptera pas moins de quinze grandes décorations sur vingt-quatre tableaux. – On ne sait pas encore qui fera la musique. Il ne serait pas extraordinaire pourtant qu'elle fût demandée au lion du jour, au charmant compositeur Lecocq. » (« Théâtres » in *La Presse* du 22 août 1873, p. [3])

22. Voir la lettre du compositeur Jacques-Fromental Halévy à « Monsieur Vernes » [*sic* !] (1855), reproduite in *Revue Jules Verne* n° 24 (2007), p. 98.

23. Je dois cette dernière date à Alexandre Tarrieu que je remercie de cette information et qui se réfère à l'*Annuaire international des lettres et des arts* de Jean-Alphonse Azais (1921). L'adresse d' « Henry-Maurens » était alors 21, rue Fernando, à Nanterre.

24. Ch. Lemire, *op. cit*., p. 136.

25. Anonyme: « Bibliographie. » *Le Gaulois* n° 1073, 23 juin 1885, p. 3. Ce roman, non conservé à la Bibliothèque nationale de France, décrit, dans la première partie, avec une bonne dose d'ironie la vie de la bonne société d'une ville de province pour l'agrémenter, dans la seconde partie, d'un drame amoureux.

26. *Le Progrès de la Somme* n° 5144, 13 avril 1887, p. 2.

27. Émile Rochard (1851-1918) avait monté en 1880 *Michel Strogoff* au Châtelet, avec grand succès comme l'on sait. Après avoir dirigé l'Ambigu-Comique en 1884 et 1895 ainsi que le Théâtre de la Porte-Saint-Martin en 1891, il reprit la direction du Châtelet en 1898.

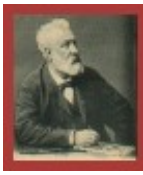
28. William Busnach (1832-1907), ancien camarade de Jules Verne à la Bourse, neveu du compositeur Jacques-Fromental Halévy, parent par alliance de Georges Bizet, fut fondateur en 1867 du Théâtre de l'Athénée et auteur dramatique prolifique à l'exemple de son cousin Ludovic Halévy. Il adapta notamment cinq romans de Zola à la scène et fut considéré comme le créateur du drame naturaliste. L'adaptation de *Mathias Sandorf*, aussi proche qu'elle soit du mélodrame, s'en ressentit. Pour l'histoire de la pièce, voir Robert Pourvoyeur : « Des tréteaux pour Namir, Matifou et Pescade. » In Jules Verne, William Busnach et Georges Maurens : *Mathias Sandorf. Pièce à grand spectacle.* Paris : Société Jules Verne 1992, pp. 1-12.

29. Voir Nicolet : « Courrier des Spectacles dans *Le Gaulois* du 22 mai 1887, p. 3, et du 26 juillet

1887, p. 3.

30. Nicolet : « Courrier des Spectacles. » *Le Gaulois* n° 1812, 15 août 1887, p. 4.
31. Lettre publiée dans le *Figaro* reproduite dans le *Bulletin de la Société Jules Verne* n° 160 (2006), p. 38.
32. Lettre du 8 décembre 1887. *Correspondance…* (voir note 1). Tome I, 2004, p. 74.
33. BMA, JV MS 28, pièce n° 3.
34. Georges Beudin : « Le Théâtre. » *Le Gaulois* n° 4114, 4 septembre 1903, p. 3.
35. Je tiens à remercier la directrice de la bibliothèque de la SACD, Mme Florence Roth, de son patient soutien pendant mes recherches et Mme Agnès Marcetteau-Paul, directrice de la Bibliothèque municipale de Nantes, de l'autorisation de reproduire la page du manuscrit des *Erreurs d'Alcide*.

Volker Dehs (volker.dehs@web.de), né en 1964 à Bremen (Allemagne) se voue depuis 25 ans à la recherche biographique et à l'établissement de la bibliographie vernienne. Éditeur de plusieurs textes ignorés de Jules Verne, il est co-éditeur (avec Olivier Dumas et Piero Gondolo della Riva) de la Correspondance de Jules et Michel Verne avec leurs éditeurs Hetzel (Slatkine, 5 vols, 1999 à 2006). Il a traduit plusieurs romans en allemand et en a établi des éditions critiques. Ses textes sur Jules Verne ont été publiés en français, allemand, néerlandais, anglais, espagnol, portugais, polonais, japonais et turc.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Brunel's *Great Eastern* and the Vernian Imagination: The Writing of *Une Ville flottante*

Timothy Unwin

Abstract

Ships have a privileged place in Jules Verne's work, and none offered him a more spectacular example of the nineteenth century's technological advances than the *Great Eastern*, designed and built by Isambard Kingdom Brunel in the 1850s. This essay examines Verne's response to the *Great Eastern* in his novel *Une Ville flottante* (1870), a story that conveys a new sense of man's relationship to the global space he inhabits, and underlines the excitement (as well as the anxiety) of modern travel. The novel is seen as broadly representative of the stylistic techniques of the *Voyages extraordinaires*, and the hypothesis that it might not have been written by Verne himself is firmly refuted. The essay offers a close analysis of the ways in which Verne negotiates and assimilates factual realities through his textual representations, and argues that there is no simple transcription of the "real" into the "imaginary" in Verne's world. For Verne, as for Balzac, the world is never *not* fiction: the real already has magical, make-believe properties, and in that respect the *Great Eastern* was the perfect site for a story. Far from being a documentary or factual account, Verne's text is intensely stylized and fictionalized, partly because "reality" itself is already so mesmerizing for its author, and partly because his writing is characterized by its verbal energy and exuberance. And while Verne's extraordinary and innovative style matches the invention that he describes, we shall suggest in the latter stages of this essay that the story also offers a nuanced reflection on the future of technology.

Résumé

Les navires occupent une place privilégiée dans l'œuvre de Jules Verne, et le *Great Eastern*, conçu et construit par Isambard Kingdom Brunel dans les années 1850, symbolise plus que tout autre vaisseau les progrès technologiques du XIXe siècle. Cet essai examine l'évocation du *Great Eastern* dans le roman *Une Ville flottante* (1870). Dans ce texte, Verne souligne la nouvelle relation qui existe entre l'homme et l'espace global qu'il habite, tout en exprimant l'enthousiasme (aussi bien que l'inquiétude) que provoque le voyage moderne. Le roman offre d'ailleurs un résumé exemplaire des techniques stylistiques de l'auteur des *Voyages*, et nous refusons fermement l'hypothèse selon laquelle ce texte ne serait pas de Verne. Au cours de notre analyse, nous examinons notamment la négociation et l'assimilation par l'écriture des réalités documentées, et nous soutenons qu'il ne s'agit en aucun cas d'une soi-disant transposition directe du réel dans le monde imaginaire chez Verne. Car, pour Verne comme pour Balzac, le monde n'a jamais existé à l'état *non-fictif*. Le réel possède au départ des propriétés magiques ou féeriques, et dans ce sens le *Great Eastern* fournit le site fictif par excellence. Ainsi, loin d'être un simple compte-rendu documentaire, le texte de Verne est profondément poétique et stylisé, non seulement dans sa vision d'une réalité merveilleuse, mais aussi dans son énergie et dans son exubérance verbale. Si le style extraordinaire et novateur de Verne est bien à la mesure de l'invention qu'il évoque, nous suggérons dans les dernières étapes de notre discussion que ce roman offre également une réflexion nuancée sur l'avenir de la technologie.

1. Introduction: the magic of ships

In chapter thirteen of *Le Rayon vert* (1882), entitled “Les Magnificences de la mer”, the wistful hero Olivier Sinclair makes the following statement to his beloved Helena Campbell in response to her declared admiration for the great navigators of history:

> Oui, Miss Campbell, dans l’histoire de l’humanité, quoi de plus beau que ces découvertes! Traverser pour la première fois l’Atlantique avec Colomb, le Pacifique avec Magellan, les mers polaires avec Parry, Franklin, d’Urville et tant d’autres, quels rêves! Je ne peux voir partir un navire, vaisseau de guerre, bâtiment de commerce ou simple chaloupe de pêche, sans que tout mon être ne s’embarque à son bord! Je pense que j’étais fait pour être marin, et si cette carrière n’a pas été la mienne depuis mon enfance, je le regrette chaque jour! (*Le Rayon vert*: 130) [1]
>
> [Yes, Miss Campbell, in the history of humanity, what could be finer than those discoveries? To be the first to cross the Atlantic with Columbus, the Pacific with Magellan, the polar seas with Parry, Franklin, d’Urville and so many others, what dreams! I cannot watch a vessel leave port, be it a warship, a trading ship or a humble fishing sloop, without feeling that my whole being has embarked with it on its journey! I think that I was made to be a seaman, and if that has not been my career since I was a child, it is something I regret every day.]

The remark strongly echoes Jules Verne’s own well-known fascination with the seas and oceans, and his interest in the great voyages that have been accomplished over them. If the *Voyages extraordinaires* famously evoke the thrill of travel in its most modern forms, the ship remains Verne’s privileged mode of transport, and, ancient as it is, the one that most truly excites his imagination. From his early childhood, Verne acquired a practical knowledge of seafaring that is in evidence throughout the *Voyages extraordinaires*. As he writes in chapter two of *Souvenirs d’enfance et de jeunesse* (1890) when evoking the port city of Nantes in which he grew up: “J’ai vécu dans le mouvement maritime d’une grande ville de commerce, point de départ et d’arrivée de nombreux voyages au long cours” (“I lived amidst the maritime movement of a large trading city, the point of departure and arrival of many long sea voyages”). [2] The excitement that he imparts in his descriptions of modern, nineteenth-century ships comes, in part, from this first-hand experience – something of an exception in his work since, with almost every other form of transport, he works largely through written documentation. If the century has invented new technology of all kinds that is able to shrink the globe dramatically, ships remain for Verne the most magical of all machines.

In fact, ships, boats and other waterborne craft (for example, that massive raft that floats down the Amazon in *La Jangada* [1881]) figure in more of Verne’s novels than any other form of transport, and many of the stories that make up the *Voyages extraordinaires* take place extensively on or in water. A number of Verne’s narratives start out with a description of a vessel leaving port, and proceed to recount a journey that tests or displays that vessel’s technical excellence along with the mettle of her crew. This scenario is established as early as *Voyages et aventures du capitaine Hatteras* (1864) where, in chapter one, the crowds in Liverpool assemble to observe the *Forward* and there is speculation, at moments in almost metaphysical terms, about its possible mission. The *Forward* is, Dr Clawbonny surmises, going “là où il y a à apprendre, à découvrir, à s’instruire, à comparer, où se rencontrent d’autres mœurs, d’autres contrées, d’autres peuples à étudier dans l’exercice de leurs fonctions” (“where there is something to be learned or discovered, instruction to be gained, comparisons to be made, other customs to be encountered, other lands, other peoples who can be studied going about their business”) (*Hatteras*: 25). [3] With variations, the departure

scene will return throughout the *Voyages extraordinaires*. *Les Forceurs de blocus* (1865), which describes the transatlantic crossing made by a merchant vessel during the American Civil War, similarly starts with the launch and departure of a ship (this time down the River Clyde in Glasgow) on a mysterious mission. There is here an interesting additional feature that we should dwell on momentarily, since it has relevance (by virtue of contrast) to the discussion that follows, and that is Verne's view of progress as a combination of individual efforts that produce a collective momentum. In the opening lines of *Les Forceurs de blocus*, the narrator describes the *Delphin* as only one of many vessels of all types and sizes that have established the nineteenth century's claim to be the great era of shipbuilding. Since 1812, he says, the waters of the River Clyde have frothed under the paddle wheels of well over a million steamers, "et les habitants de la grande cité commerçante doivent être singulièrement familiarisés avec les prodiges de la navigation à vapeur" ("and the inhabitants of this great trading city must be singularly familiar with the prodigies of steam shipping") (*Les Forceurs de blocus*: 335). There is a sense here of the incremental nature of progress. Only occasionally are spectacular technical advances made, yet, taken as a whole, the nineteenth century has, in Verne's view, witnessed a massive leap forward. The collective and gradual refinement of these contemporary machines amounts to an achievement of momentous proportions. The ship may be an age-old invention, yet in its modern forms it is also an awesome and magical creature – sometimes, as we shall see, a monster – propelling humanity forwards.

2. Verne, the *Great Eastern*, and the composition of *Une Ville flottante*

Nowhere will the sense of the wondrous quality of modern shipbuilding technology be more apparent than in the short novel *Une Ville flottante* (1870), another of those Vernian texts that start out with a ship's departure from port. However, unlike *Les Forceurs de blocus*, *Une Ville flottante* truly does depict a vessel that was the exception, evoking an engineering achievement that, rather than building incrementally on the previous state of technology, represented a quantum leap towards modern shipbuilding.

The *Great Eastern* had been launched in 1858. She was Isambard Kingdom Brunel's third and final great ship after the *Great Western* and the *Great Britain* (launched in 1837 and 1843 respectively). [4] Brunel died of a stroke soon after the ship had set out on her maiden voyage from Southampton to New York in September 1859, his meteoric career cut short at the age of just fifty-three. His designs for the *Great Eastern* date from the early 1850s when his health was already beginning to fail. [5] The ship's construction then took place at great human and financial cost from 1854 onwards on the Isle of Dogs in the East End of London. The result, at twice the length of any previous ship, would be the biggest ocean-going vessel the world had ever seen. Though dwarfed by the subsequent generation of passenger liners, and positively diminutive by modern standards, [6] the *Great Eastern* remained the world's largest ship until almost the turn of the twentieth century.

Originally named the *Leviathan* after the sea monster of the Old Testament, [7] the *Great Eastern* was intended for voyages to India and Australia, and she was designed to be able to make the round trip without refueling (partly because of a spectacularly erroneous belief among British engineers that Australia had no coal reserves). Though never used for that purpose, the *Great Eastern* was nonetheless the first ship to cruise non-stop under her own power from London to New York. To achieve this range, Brunel introduced daringly innovative

design features, including a cellular style of construction and transverse bulkheads. He used every available space in the hull for the storage of coal, which was packed in so tightly that the crew had to use an iron tube buried within it to move between engine rooms. As for the living areas on board the vessel, Brunel used skylights to illuminate inner compartments, and provided a system of air conditioning through ducts. This enabled him to place cabins more deeply inside the hull of his vast liner, thus freeing up space on deck and in the public areas, with the result that the *Great Eastern* was capable of carrying up to ten thousand passengers. With these and other bold new developments, Brunel brought ocean transport into the modern era. [8]

A vessel of prodigious proportions, the *Great Eastern* also brought one of the nineteenth century's great dreams within tantalizingly close reach: that of effortless travel to the farthest reaches of the globe. The ship was a symbol both of the spectacular engineering progress that had by then become the hallmark of the era (and of which Brunel himself was an iconic representative), and of the related ambition among Western nations to conquer the planet by moving freely around it. Such a vessel could not fail to fire the imagination of the author of the *Voyages extraordinaires*, whose explicit ideology, as described memorably by Macherey in his landmark study, [9] was in the early phase of his career very much in tune with the scientific and colonizing optimism of the age (Verne's later works of course show a darker, more pessimistic vision). Nor could it fail to appeal to his sense of the magic of modern engineering – an attitude that contrasted sharply with that of some of Verne's European contemporaries like Dostoevsky. [10] While Verne saw the ship briefly for the first time in 1859 during his trip to Scotland and England, dismissing it uncharacteristically as "ce monstre des mers qui peut jauger vingt mille tonneaux de vanités" ("this monster of the seas that measures up to twenty thousand tons in vanity") (*Voyage à reculons*: 221), this negative attitude certainly did not last. On his one and only visit to the United States in March–April 1867, Verne himself traveled on the *Great Eastern* from Liverpool to New York in the company of his brother Paul, just as the ship's latest refit had been completed. For Verne, the trip was an interruption to the planning of *Vingt mille lieues sous les mers* (published in 1869–70, but referred to in his correspondence as early as 1866 under the title *Voyage sous les eaux*). It eventually resulted in the publication of *Une Ville flottante* after *Vingt mille lieues* and the second space novel, *Autour de la lune* (1870), had been completed. [11] While on board the *Great Eastern*, Verne kept detailed notes, which, together with the completed text of *Une Ville flottante*, convey his acute sense of the wonder of technology. [12]

The proximity in the conception and composition of *Une Ville flottante* and *Vingt mille lieues* is broadly discernible in the descriptive style of the two novels, and there are many textual echoes between them. For example, Verne's copious descriptions of the effects of light and color through the water in *Vingt mille lieues* reappear in a freshly worked form in *Une Ville flottante* when, in chapter thirty-seven, he describes the enchanting effects of both sunlight and moonlight on the water at Niagara Falls. But there are other similarities too. Both novels deal, in their different ways, with a technologically spectacular "monster of the seas", and both marvel throughout at the superb engineering feats that have enabled the construction of such sophisticated and, in some respects, unthinkable vessels. Both are also first-person narratives recounted by a privileged insider (either captive or willing passenger) on board a vessel whose features and characteristics he describes in detail. Finally, both texts also emphasize at certain points the sinister qualities of the machinery that has been created by man, a point to which we shall return later in this discussion. They are clearly texts from

the same pen and very much the same phase of the author's life.

Partly because the short novel is so quintessentially Vernian in its admiration for the new technology and in the verbal energy that it displays, it is difficult to subscribe to the view put forward by William Butcher (Butcher: 181–82) that Verne may have delegated a major part of the writing of *Une Ville flottante* to his brother Paul. In fact, the suggestion that Paul might have been the author of the novel has only one attested source, this being an unpublished memoir by Verne's nephew Raymond Ducrest de Villeneuve. Quite apart from the vagueness of its references to the journey made by the Verne brothers on the *Great Eastern*, scholars have offered a number of good reasons why this memoir should be treated with caution. [13] Butcher's remarks about the story imply that Paul's collaboration resulted in an uneven text that falls "awkwardly between travelogue and marine novel" (Butcher: 181), mixing technological description, an invented and implausible plot, and observation of manners and lifestyle. Yet many of Verne's texts could be described as mixtures of this kind, and one might suggest, on the contrary, that the polyphonic (and sometimes discordant) qualities of *Une Ville flottante* are precisely what make it so Vernian. In his classic study of description in *Vingt mille lieues*, Alain Buisine emphasizes that difference of register is a fundamental feature of Vernian writing, in which there is a constant hiatus between fictional discourse and didactic or scientific discourse. And Daniel Compère, for his part, argues that hybridity is what renders the Vernian text so rich and fascinating. [14]

Perhaps, though, the most eloquent confirmation that Jules Verne himself exercised consistent ownership over the text of *Une Ville flottante* comes from the manuscript of the novel, now available online at the Bibliothèque municipale de Nantes website (see works cited). Two related observations need to be made about this document: first, that the handwriting throughout is unmistakably Jules Verne's own, except for regular marginalia by Hetzel (most of which have been crossed out) offering comments on specific aspects of the story; and second, that the manuscript is evidently still a working copy with many amendments, excisions and developments in Jules Verne's own hand. One of the more interesting excisions by Verne is a lengthy development at the end of chapter fourteen. Here, the eccentric Dean Pitferge, a doctor who has become the narrator's traveling companion, recounts a macabre anecdote in which he explains that, as a student facing his final examination, he had performed an operation on what he thought was a cadaver, only to discover that it was a living person. [15] The manuscript also shows that Verne had originally given the character of Harry Drake, the villain of the tale, an entirely different surname – Valverde – which is crossed out throughout the manuscript, with the name Drake inserted at each occurrence. There is, throughout this copy, a visible process of authorship in action as well as an obvious dialogue between Verne and his publisher, and there can be no suggestion that this was only a fair copy written up on the basis of another text. There is abundant evidence here of a text still in gestation.

3. A storyteller's dream: cornucopian fiction

While Verne was an enthusiastic admirer of the miracles of modern engineering, he was first and foremost a natural storyteller, and that massive ship that he traveled on in 1867 was a storyteller's dream. Commentators have regularly suggested that fictionalization in *Une Ville flottante* is a secondary feature, and that the text reads more in the style of a documentary or

even a journalistic piece. Herbert Lottman, for his part, argues that the story is "an autobiographical sketch thinly disguised as fiction" (Lottman: 124). [16] What I wish to emphasize here is, on the contrary, that processes of fictionalization are everywhere in Verne's text, indeed that they are never *not* present, and that the very notion of transforming reality into fiction might presuppose a false dichotomy. For Verne, reality *is* the story. It offers a wondrous and miraculous spectacle to the novelist, whose engagement with it is so intense and so verbally productive that the divisions between objective fact and its transposition into text are all but broken down. The *Great Eastern* may be a real invention of modern times, and one that can be objectively represented in terms of its technological characteristics, but the very process of describing this great monster takes it emphatically into the realm of text, story and verbal artifact.

The presence in the story of a minor character, the statistician Cockburn, who in chapter thirty–four of the story tells the narrator precisely how many turns the paddle wheels have completed during the ship's transatlantic crossing, is one small instance of this process of exuberant verbalisation, and it is a reminder that in Verne's world even apparently useless facts can be turned to extravagantly humorous narrative effect. In this case, Cockburn is unwittingly confronting the narrator with a parody of his own statistically obsessive style (which is further parodied on several occasions by the eccentric Dean Pitferge). The episode underlines that Verne is a self-conscious novelist who – sometimes discreetly, sometimes more openly – draws attention to his own medium. Indeed, part of the energy and the momentum of his style comes from the self-reflexive focus on its own quality as narrative. Like Balzac who, some decades earlier, had claimed to find endless anecdotes in the ordinary streets and residential quarters of Paris, Verne too suggests, in quintessentially Balzacian mode, that his own milieu is a cornucopia of potential and actual stories among which he is simply able to pick and choose. And, just as Balzac does at the beginning of *Le Père Goriot*, he might have used the motto "all is true" as his narrative principle, a classic rhetorical device implying that nothing needs to be invented, for reality is itself the strongest and indeed the strangest of all fictions. This conviction (staged though it may be) is at the very heart of both Balzacian and Vernian narrative.

One thus senses everywhere in Verne, and perhaps nowhere more so than in *Une Ville flottante*, the excitement of storytelling and the sense of the abundance of potential narratives. The *Great Eastern*, Verne suggests on the first page of his story, is a rich repository of fiction, not least because it offers a microcosm of humanity, where any attentive observer will discover "tous les instincts, tous les ridicules, toutes les passions des hommes" ("all the instincts, the follies and the passions of human nature") (*Une Ville flottante* [henceforward VF]: 1). Just as Paris fired the imagination of Balzac, this magnificent vessel is presented by Verne as the source of numerous, perhaps endless human dramas. As novelist, he can only begin to scratch the surface by uncovering some of the stories that he claims are present here, but he leaves the suggestion that there are thousands more lurking in the background. Balzac wrote in his 1842 "Avant-propos" to the *Comédie humaine* of "le drame à trois ou quatre mille personnages que présente une Société" ("the drama consisting of three or four thousand characters that a Society offers") (Balzac: 12), and for Verne the process is essentially the same in this different, more technological context. The implication, in both cases, is that stories are ever-present, that they are never *not* there, and that a writer needs merely to seize upon them in passing. This in itself gives a sense of energy and vitality to their writing, as the passing dramas of humanity are drawn from the flux of daily life and fixed in

words. This Balzacian approach is one of many similarities that link Verne with some of the other great novelists of his era, and one of many reasons why, as recent academic scholarship has increasingly recognized, he needs to be read and studied within the context of the nineteenth-century literary tradition in France. [17]

While the basis of Verne's story is, then, the real journey that he and his brother Paul made on the *Great Eastern*, the account is stylized and fictionalized at every stage, and the text is a very long way from being a banal factual account. But before focusing more closely on Verne's rhetorical strategies and stylistic techniques, it is important to lay to rest any residual suggestion that the narrative element of this text is weak [18] This is a story full of drama, surprise and conflict, and is anything but a tale without incident. There are, besides, several immediately visible markers of the fictional process. First and foremost among them is the use of a first-person narrator who – while his real identity is never disclosed – seems to know everyone and to be everyone's preferred confidant on board. It is a wonderfully convenient device, for this garrulous narrator not only sees all and hears all, he also tells all; and in Dean Pitferge he finds a traveling companion who has similar storytelling skills to complement (and subversively mirror) his own. Apparently a tourist among many aboard the vessel, the narrator is evidently on special terms with the captain, who allows him on board in advance of normal embarkation, providing him with much useful information that can be passed on to the reader. This narrator is thus able to see and assess the vessel from a privileged perspective, but at another level he also becomes the conduit of information that is the source of the properly "fictional" structure of the story.

The plot that ensues, playfully contrived and excessive as it is, should be enough to convince the skeptic that this story is at least as fictional as any in the Vernian corpus. Early in his journey the narrator encounters a former military friend just back from India, Captain Fabian Mac Elwin, and it is around Mac Elwin that the central drama unfolds. Mac Elwin, it seems to the narrator, cuts a sadder figure than he remembers, and, because this narrator is the sort who finds out everything, in due course he learns that the woman Mac Elwin was to marry, Ellen Hodges, has been given away by her father to another man, Harry Drake, son of a Calcutta businessman. By another coincidence that is the classic stuff of fiction, Harry Drake also happens (unbeknown to Mac Elwin) to be on board the *Great Eastern* with his newly acquired wife. But while Drake, a rowdy and quarrelsome figure, frequents the gaming saloons, his wife remains locked in her cabin. She appears on deck only late in the evenings, a mysterious and ghostly veiled figure who wanders aimlessly, unable to recognize or respond to anyone, apparently in a state of folly. In due course, the inevitable and fateful encounter between Mac Elwin and Drake occurs, offence is duly given and received, and a duel is fought on deck late one night in stormy weather. At the moment when Mac Elwin has the advantage, in one of those ostentatiously contrived coincidences that are Verne's hallmark, the veiled woman appears. Taken aback at the sight of this strange yet oddly familiar figure, Mac Elwin drops his sword and suddenly finds himself at the mercy of his cruel adversary.

At this point, however, fate plays its reassuring hand, and a bolt of lightning, conducted along Harry Drake's own upheld sword, strikes down this villain. The scene is now set for recognition and recovery. Ellen Hodges, reunited with her former fiancé, begins to recover her reason, a process helped by the continuation of their journey to the Niagara Falls once American soil has been reached. The additional excursion on land is also made by the

ubiquitous and ever-garrulous narrator who, in the company of Dean Pitferge, is able to observe the young woman's gradual recovery and the young man's rediscovered happiness. As is often the case in Verne's fiction, the evil have been dispatched, the good triumph, and we must assume that everyone who deserves to do so lives happily ever after. In a rapid conclusion, the narrator himself returns across the Atlantic to Brest, from where he heads back to Paris.

The actual plot of *Une Ville flottante* is, like so many of Verne's stories, visibly theatrical and bears the clear imprint of his early apprenticeship as a writer of plays whose characteristic features were contrived virtuosity, dramatic confrontations, surprises, reversals and neat *dénouements*. What makes Verne's novels so readable, though, is not that he takes the clichés of popular theatre – he was by no means the only writer to do that – but that he exploits them with such humor and finesse, rarely buying into the sentimentality or pomposity that they might so easily generate. In this respect, the creation of the character of Dean Pitferge, one of those unforgettable Vernian eccentrics, is crucial to the unfolding of the story, since he provides a constant dose of irony and detachment. [19] Verne is, among many other things, offering us a send-up of literary traditions, and Pitferge's role is to puncture the melodrama with his macabre and mordant take on life. And if, for some readers, the unmistakably gothic features of this plot are at odds with the realist evocation of modern technology, part of the point is that the "reality" and the "fiction" must be seen as equally improbable: engineering innovation and literary invention are different but complementary signs of the fantastic excesses of human creativity. But whatever our judgment of the merits or failings of the intrigue that holds *Une Ville flottante* together as a narrative, the outline given above should in itself be enough to remind us that this novel certainly does not lack a fictional structure. On the contrary, the fictional structure is quite deliberately exaggerated, and, like many a Vernian narrator, the figure at the center of this story underlines its implausibility when at the end he professes disbelief were it not for his own notes.

Yet it is also clear that the actual plot, or intrigue, is not even half the story. The real fiction – that self-conscious process of turning the spectacle of this ship into words – begins at a different level altogether, and it comes about through Verne's evocation of the fabulous technology, the wondrous dimensions and capacity, and the sheer miracle of engineering that this majestic new liner embodies. Largely (and perhaps paradoxically) through its focus on fact and detail, Verne's story becomes a paean to the miracle of engineering progress in the nineteenth century, and, like so much of his writing, a kind of scientific poem that expresses awe and amazement at the possibilities it has created. [20] The floating city that he describes is an almost mythical symbol of space and vastness, the very image of the convenience of modern travel. Almost magically, it is seen as providing a seamless connection between land and sea, indeed between the different continents. As the narrator writes on the first page of the story, thereby explaining its title: "C'est plus qu'un vaisseau, c'est une ville flottante, un morceau de comté, détaché du sol anglais, qui, après avoir traversé la mer, va se souder au continent américain" ("It is more than a vessel, it is a floating city, an area of some English county that gets detached, crosses the sea, and joins up with the American continent") (VF: 1). There is something of an echo here of the flying carpet in the *Arabian Nights*: while the traveler sits still, it is as if everything else is in motion. [21] Travel for Jules Verne – or at least that enthusiastic version of travel that he imagines in the earlier phases of the *Voyages extraordinaires* – certainly does not involve the discomfort, the noise, or the overcrowding that is so familiar to the modern traveler.

Taking Verne to task for this, Roland Barthes wrote famously in *Mythologies* that his world was one of enclosure, and that for all his ostensible "openness" he ultimately never left the comfort-zone of confined living spaces. [22] What Barthes failed to emphasize, perhaps, was that part of the excitement of travel in the mid- and late nineteenth century came precisely from this sense of being able to turn a vehicle into a temporary home, living in it as on land, and perhaps to escape the constant awareness of "being moved". [23] After the days of coach travel in confined spaces over rough tracks, steam and rail travel offered new possibilities and an entirely new relationship to movement, indeed the sense that one could travel while not seeming to travel. Many shared the excitement of that development (of which Huysmans will later offer a wicked parody in *A rebours*, when his hero Des Esseintes is able to undertake a journey to London purely in his mind) and it is precisely this sense of novelty that Jules Verne captures in his writing. Moreover, it seems that in stories such as this one Verne is genuinely open to the delight of vastness and to the thrill of cosmopolitan diversity. There is nothing closed or introverted about his depiction of travel.

This new sense of what it means to travel comes across strongly in Verne's enthusiastic evocations of the *Great Eastern*. There is here a feeling of engagement with the world, not withdrawal from it, partly because the world is present in all its variety on board a ship that is, as we have seen, a cornucopia of fictions. Among the vessel's huge throng of passengers there are entire communities, with representatives of many different nationalities. The list itself is dizzying: "C'était [...] des Californiens, des Canadiens, des Yankees, des Péruviens, des Américains du Sud, des Anglais, des Allemands, et deux ou trois Français" ("There were Californians, Canadians, Yankees, Peruvians, South Americans, Englishmen, Germans, and two or three Frenchmen") (VF: 16–17). Even as the ship is moored in the Mersey docks, before the voyage, we read that the numbers of people who have business aboard her are truly fabulous: "Je ne pouvais me croire à bord d'un navire. Plusieurs milliers d'hommes, ouvriers, gens de l'équipage, mécaniciens, officiers, manœuvres, curieux, se croisaient, se coudoyaient sans se gêner, les uns sur le pont, les autres dans les machines…" ("I could scarcely believe that I was on board a ship. Several thousand men – workmen, crew, engineers, officers, deck-hands, lookers-on – all mingled and jostled together without any concern, some up on deck, others down in the engine rooms…") (VF: 6–7). Later, as the narrator discusses the occupants of the grand saloon with Dean Pitferge, the two travelers are again astounded at the variety of people before them, all no doubt with their different life stories.

And among all the Americans returning home, the Europeans heading to America to make their fortune, the newlyweds, engaged couples and others, there is also an amusing snapshot of a Peruvian couple who have been traveling for a year since they were married. As the eccentric and witty doctor puts it, assuming his occasional role as secondary narrator in the story: "Ils ont quitté Lima le soir des noces. Ils se sont adorés au Japon, aimés en Australie, supportés en France, disputés en Angleterre, et ils se sépareront sans doute en Amérique!" ("They left Lima on their wedding night. They adored each other in Japan, loved each other in Australia, put up with each other in France, argued with each other in England, and will no doubt separate in America") (VF: 55). That sequence of past participles – *adorés*, *aimés*, *supportés*, *disputés* – followed by an abrupt switch to the future tense at the end of the sentence is characteristically the device of a writer who revels in the energy of lists, and who knows that it is above all the words themselves, with their juxtapositions and cumulative momentum timed to perfection, that produce the effect. *Une Ville flottante* is full of similar

effects. The cameo appearance made by the Peruvian couple is, moreover, another indication in Balzacian and discreetly self-reflexive mode that in this vast cosmopolitan space of the *Great Eastern*, there are stories aplenty to be picked out. This subtly reinforces the storyteller's own credentials when it comes to finding a good site for drama, and reminds us that this floating microcosm of humanity is a mighty, multitudinous setting.

We might also observe that what is here no more than a fleetingly glimpsed drama will, as so often happens with Verne, turn up in variant forms as a more significant sub-plot elsewhere in the *Voyages extraordinaires*. One notable recurrence of the topos of marriage and divorce in the course of a journey is in *Claudius Bombarnac* (1892) where an eccentric couple, the false-teeth salesman Fulk Ephrinell and the wig merchant Horatia Bluett, decide to marry on board the train in which they are both traveling to China, then later divorce as they are incapable of reconciling their business interests. A further variation on the theme is provided in the posthumous novel *La Chasse au météore* (1908), where Seth Stanfort and Arcadia Walker, who had married on horseback in the first chapter, then divorced, are remarried in the final chapter of the story. Those sub-plots that expand and develop material from an earlier novel are confirmation of the underlying claim in *Une Ville flottante* that there are stories galore between the lines and in the margins of the text. Verne's writing is always suggestive of profusion – which is why the list, in its various forms, is one of his preferred devices – and almost every sub-plot, every little passing sketch, conveys the sense that it could be developed into another story.

4. Extraordinary technology, extraordinary writing

In a further reinforcement of the sense of abundance that is such a strong feature of Verne's writing, the size and physical dimensions of the *Great Eastern* are repeatedly emphasized in the course of the story, giving the sense that there is a whole world in and on this ship. As she is docked alongside New Prince's Quay in Liverpool (nowadays called Prince's Dock), she has the appearance of being an independent land mass, and Verne thus underlines the point made on the first page of his story that this vessel is like a physical extension of the cities and countries it visits: "On eût dit une sorte d'îlot à demi estompé dans les brumes" ("It was like an island rising up through the mist") (VF: 5). But he gives the sense of vastness in various other ways too: through the strategy of enumeration of the liner's different areas and facilities, the stress on measurements, comparisons with other vessels as the ship maneuvers through the Mersey estuary and out to the open seas, and also through a constant strategy of near-personification of this sea-giant.

It is perhaps worth recalling that in *Paris au XXe siècle*, the 1863 text rejected by Hetzel, Verne had fantasized about a twentieth-century version of the *Great Eastern*, which his hero sees docked at the Port de Grenelle in chapter eleven of that story. This ship, called the *Leviathan IV*, echoing the *Great Eastern*'s first name, is described in similarly hyperbolic terms that emphasize the vessel's phenomenal size and power:

> Ce navire était un monde, et sa marche atteignait des résultats prodigieux; il venait en trois jours de New York à Southampton; il mesurait deux cents pieds de largeur; quant à sa longueur, il est facile de la juger par le fait suivant: lorsque *Leviathan IV* était la proue debout au quai de débarquement, les passagers de l'arrière avaient encore un quart de lieue à faire pour arriver en terre ferme. (*Paris au XXe siécle*: 137)

> [This ship was a world in itself, and her speed gave prodigious results; she could get from New York to Southampton in three days; her width was two hundred feet; as for her length, it is easy to judge from the following fact: when *Leviathan IV* was docked with her prow alongside the landing quay, passengers in the stern still had a quarter of a league to cover before they reached dry ground.]

Relativities of size aside, the narrator of *Une Ville flottante* uses precisely the same rhetorical strategy, and his style conveys the sense of the extraordinary and prodigious nature of this new technology. As he takes a walk around the vessel on his arrival, he looks back through the mist from the bow to the stern, which he sees “à une distance de plus de deux hectomètres” (“at a distance of over two hundred meters”), adding: “Ce colosse mérite bien qu’on emploie de tels multiples pour en évaluer les dimensions” (“This colossus indeed requires the use of such multiples in order to judge its dimensions”) (VF: 8).

To capture the reality of such dimensions, and no doubt for the sake also of his French readers, he also resorts to comparison with more familiar sights, pointing out for example that the deck of the ship is one third longer than the length of the Pont des Arts in Paris (VF: 33). Similarly, he observes that the main mast, at 207 feet, is higher than the towers of Notre-Dame Cathedral (VF: 35). As for the ship’s main dining room, “on se serait cru dans un restaurant des boulevards, en plein Paris, non en plein océan” (“you would have considered yourself in a restaurant on some Parisian boulevard rather than on the high seas”) (VF: 32). Comparisons are also made with English landmarks, again with the aim of stressing the hugeness of this ship. As she passes anchored and moving craft in the Mersey, the *Great Eastern* nearly strikes a three-master drifting into her path, after which the narrator compares this other vessel to the toy boats seen in the parks of London: “Je regardai ce navire qui ne jaugeait pas moins de sept ou huit cents tonneaux, il m’apparut comme un de ces petits vaisseaux que les enfants lancent sur les bassins de Green-Park, ou de la Serpentine-River” (“I watched this vessel of some seven or eight hundred tons and it seemed to me like one of those little craft that children launch onto the ponds of Green Park or the Serpentine” (VF: 24). The word “géant”, again echoing the ship’s first name *Leviathan*, also recurs repeatedly throughout the story, and serves to suggest that this massive vessel has a life and a will of its own. The expression “géant des mers”, specifically likening the ship to a sea monster, is twice used in the course of a single sentence early in the story as the vessel reaches the open seas (VF: 33).

Apart from the emphasis on size, the sense of Brunel’s exceptional technological achievement is conveyed through the accumulation of detail about the design of the ship, and by lengthy but precise descriptions of particular features and technicalities. Above all, Verne’s descriptions convey fascination with the machine. An extraordinary sea monster the *Great Eastern* may be, but she is first and foremost, in Verne’s story, a refined and beautiful piece of engineering whose enormous power is complemented by almost fabulous delicacy and precision: “Rien de plus étonnant que de voir ces énormes rouages fonctionner avec le précision et la douceur d’une montre” (“There is nothing more surprising than to see these huge cogs functioning with the precision and the delicacy of a pocket watch”) (VF: 37). This is a nineteenth-century wonder whose innovations are matched by those of Verne’s own writing style, which boldly digresses in order to incorporate technical specifications and which is, in its own way, equally monstrous and larger than life. In chapter seven of the story, as the *Great Eastern* leaves the Irish coast and heads out towards the open Atlantic, the narrator pauses for a while, takes stock, and discusses the structure, design and the features of the

ship on which he is traveling (VF: 34–5). Here he refers at some length to the famous double-hull construction, gives technical information about flotation compartments, and does not even spare us the detail that three million heated rivets were used in the ship's construction.

That proliferation of factual observations that are now made might seem to run counter to the classical rules of good writing, which stressed economy, clarity of structure, and above all "readability". Yet what might have been a cumbersome digression turns out, like those lengthy descriptions of the marine depths in *Vingt mille lieues sous les mers*, to be central to the writing process and to the sense of awe that is generated. This is the poetry of lists, the heady textual realm of facts and statistics, often with technical knowledge and specialist terms thrown in for good measure, that gives Verne's language a rhythm, indeed a life, of its own, and a momentum that commentators have found so captivating. [24] Thus: "La coque du *Great-Eastern* est à l'épreuve des plus formidables coups de mer. Elle est double et se compose d'une agrégation de cellules disposées entre bord et serre, qui ont quatre-vingt-six centimètres de hauteur" ("The hull of the *Great Eastern* can withstand the most violent blows of the sea. It is a double hull made up of a series of cells placed between the edge and the side-stringer beam, each of which is eighty-six centimeters in height") (VF: 34). Naturally, Verne also gives chapter and verse on draft, displacement, the ship's six masts, her funnels, paddle wheels, screw propeller (weighing, as he reminds us, no less than sixty tons and capable of forty-eight revolutions per minute), and the various engines that drive the different pieces of machinery. But it is precisely around such detail that the Vernian imagination works, for the detail is itself dizzying, and the words convey a sense of the fantastic, often through their very superfluity. Verne's style, like the ship it describes, is excessive and extraordinary, and seems to acquire a life of its own.

In this sense, Brunel's monster was ideally suited to Verne's purpose, for the monstrosity of that ship was apparent in almost every feature of its design. It was, of course, normal for passenger steamers of this period to have masts as well as engines, so that sail could supplement or replace steam where appropriate. If the *Great Eastern* was theoretically able to cruise as far as Australia on steam alone, her range, speed and versatility were considerably increased by this double source of power. Yet as Verne notes, the ship not only had the option of both sail and steam, but also a *double* source of steam power: paddle wheels on each side of the hull, as well as an internal screw-propeller driven by a separate engine. The ship might thus be seen as the engineering equivalent of Vernian fiction, which often doubles up its own narrative mechanisms – for example, in the case of *Une Ville flottante*, through the addition of Dean Pitferge as an associate narrator who complements and extends the primary narrator's observations and knowledge. But it should be stressed that paddle wheels were still a standard feature of ship design in the mid-nineteenth century, and that there was lively debate and skepticism about the merits of the recently invented screw-propeller. [25] Brunel himself was at the forefront of this *querelle des anciens et des modernes* which is echoed in Verne's text. In fact, the paddle-wheel design remained a significant feature of shipbuilding until the turn of the century, [26] and it made sense for large ships like the *Great Eastern* to have both systems. Nonetheless, Verne's fascination for this double system is evident, and his narrator specifically points to its advantages when speed is required: "Sous la poussée de ses aubes et de son hélice, la vitesse du *Great-Eastern* s'accéléra" ("Under the pressure of the paddles and the screw, the speed of the *Great Eastern* increased") (VF: 25).

As well as representing a significant proportion of the ship's power system (some forty percent, compared to the sixty percent provided by the screw), [27] the paddle wheels also become a source of amazement and wonder in their own right in Verne's story. But extraordinary engineering requires innovative style, and Verne obliges with an early form of what Barthes would later call "écriture blanche" ("white writing") (see *Le Degré zero de l'écriture*: 108–11), where style is reduced to almost pure information content. Verne writes of the paddle wheels "Quels tonnerres engouffrés dans cette caverne des tambours, lorsque le *Great-Eastern* marchait à toute vapeur sous la poussée de ces roues, mesurant cinquante-trois pieds de diamètre et cent soixante-six pieds de circonférence, pesant quatre-vingt-dix tonneaux et donnant onze tours à la minute" ("What thundering noise within the paddle-wheel cylinders when the *Great Eastern* was sailing at full speed under the pressure of those wheels, each of which measured fifty-three feet in diameter and a hundred and sixty-six in circumference, weighing ninety tons and achieving eleven revolutions per minute") (VF: 6). The exclamatory construction with which the passage opens ("Quels tonnerres…"), the only indication of tone, is rapidly overwhelmed by the flow of information that ensues, and despite the wonder that is implied overall, the purely descriptive style seems deliberately to avoid any further subjective emphasis. This apparently neutral discourse can, though, disconcert and disorientate us with its absence of "readable" signposting, for despite the profusion of factual detail there is, oddly, minimalism in almost every other respect. As it conveys information, Verne's sentence avoids syntactical complexity and erases tonal nuance. But what does this achieve?

As in *Vingt mille lieues* and many other stories, the accumulation of detail in this fashion ends up by having a slightly hypnotic effect in which our attention begins to shift from the content to the sounds of words themselves. Consider, for example, the following highly technical description in chapter two:

> Une cinquantaine d'ouvriers étaient répartis sur les claires-voies métalliques du bâtis de fonte, les uns accrochés aux longs pistons inclinés sous des angles divers, les autres suspendus aux bielles, ceux-ci ajustant l'excentrique, ceux-là boulonnant au moyen d'énormes clefs les coussinets des tourillons. (VF: 8)
>
> [Some fifty workers were spread across the metallic openwork of the cast-iron chamber, some hanging on to the long pistons positioned at different angles, others clinging to levers, these ones adjusting the crank, those ones using enormous spanners to wind the sleeve of pivot pins.]

Passages such as this cause defamiliarization when read aloud. Their effect could be compared to that of Perrault's "Tire la chevillette et la bobinette cherra" ("Pull the handle, and the latch will fall") in *Le Petit Chaperon rouge* (*Little Red Riding Hood*), that famous sentence which still fascinates French children today. While the words are recognized as being those of one's own language, they appear foreign or strange (in Perrault's case, because they are archaic, and in Verne's, because they are technical or because they are numerous, or both). In Verne's longer lists, it becomes almost impossible to give full and equal attention to every detail that is registered, especially when there are unfamiliar terms, and since we are unable to discern shifts of stress and intonation beyond the overall sense of awe, we need to adopt a reading strategy that can accommodate this. A major part of the interest of Verne's style lies precisely in this revolution that it engineers (the word emphasizes the parallel between the technology and Verne's own writing style) through constant but gentle pressure on our habitual reading reflexes and powers of rational cognitive focus.

In this respect *Une Ville flottante* is typical. Even where information remains quite comprehensible overall, the use of technical or nautical terminology and the accumulation of detail create an incipient sense of fragmentation, as well as the sense of being overwhelmed by the multiplicity of representations being offered by the writer. This is clearly quite deliberate, as when in chapter two Verne is describing the preparations on the *Great Eastern* prior to her departure, and expresses the disorientating effect of the whole:

> Ici des grues volantes enlevaient d'énormes pièces de fonte; là, de lourds madriers étaient hissés à l'aide de treuils à vapeur; au-dessus de la chambre des machines se balançait un cylindre de fer, véritable tronc de métal; à l'avant, les vergues montaient en gémissant le long des mâts de hune; à l'arrière se dressait un échafaudage qui cachait sans doute quelque édifice en construction. On bâtissait, on ajustait, on charpentait, on gréait, on peignait au milieu d'un incomparable désordre. (VF: 7)
>
> [Here, flying cranes removed great pieces of cast iron; there, heavy beams were hoisted up with steam-driven winches; above the engine room swung a steel cylinder, a veritable metal trunk; to the fore, the yards creaked as they were hoisted up against the topmasts; aft, there was a scaffold that no doubt concealed some construction in progress. Men were building, adjusting, working, rigging and painting, in the midst of incomparable disorder.]

The scene here is one of hectic confusion and profusion, the coordinating prepositions giving only a minimal indication of objective spatial relations. Verne seeks to capture the sense of proliferating activity in his cumulative style of writing. While there may not here be quite the information overload that is a feature of some of the descriptions of *Vingt mille lieues*, the simple functional value of particular terms begins to blur, as we become more aware of the materiality of language, the sounds of words (*madriers*, *treuils*, *vergues*, *hune*), and their juxtapositions and symmetries (*ajustait*, *charpentait*, *gréait*, *peignait*).

Alongside the profusion of his style, Verne thus foregrounds the fascinating strangeness and, ultimately, the opacity of language itself. In sentences such as the following, we cannot but be aware of language as object (rather than the objects of language), as language itself is extravagantly on display in this little volley of nouns: "Vivres, marchandises, charbon occupaient les cambuses, la cale et les soutes" ("Rations, merchandise and coal filled up the storerooms, the baggage compartments, the hold") (VF: 12). With proliferating nouns yet syntactical sparseness, Verne achieves a purity of style around two symmetrical halves of a sentence, each of them based on a ternary structure that might have made Flaubert envious. With the benefit of hindsight, we could say that, like Brunel, Verne was a long way ahead of his time and that, just as Brunel had brought shipbuilding technology into the modern era, Verne was doing the same with style in the novel.

5. The monster machine: visions of the future

For all its miraculous efficiency, and for all its conduciveness to new forms of writing, modern technology is a potentially menacing monster in *Une Ville flottante* as elsewhere in the *Voyages extraordinaires*. Like the Vernian text itself, perhaps, it is almost always at risk of self-destruction through its very excesses. Large vessels and vehicles will often (and increasingly in Verne's work) remain cruelly indifferent to the human destinies and dreams they carry within them on land, sea, or in the air. In this respect, the choice of the *Great*

Eastern, dogged from the very outset by a legendary series of misfortunes, suits Verne's purpose perfectly. Despite his enraptured appraisal of the ship's design and seafaring properties, his vision is not purely one of a technological utopia, nor is it merely one of some ideal future society that is constructed in the mix of races and nationalities aboard the vast vessel. On the contrary, it is also one that acknowledges danger, concern, and the threat that technology might pose.

The so-called "curse" that accompanied the construction and subsequent career of the *Great Eastern* is thus well documented and well worked into Verne's narrative. Several deaths (apart from the just and well-merited demise of Harry Drake) occur during the journey, four at the outset when a winch cable breaks during maneuvers along the Mersey, and another one when the ship is caught in a storm as she nears the end of her transatlantic crossing. For the narrator, this seems to be a sign of the indifference of the monster machine towards human life. After the first fatalities, the bodies are duly and emotionlessly dispatched back to shore on a tender. The narrator points out that human lives seem, like machine components, to be replaceable elements in the system, no single one of them indispensable: "Ces infortunés, tués ou blessés, n'étaient que les dents d'un rouage que l'on pouvait remplacer à peu de frais" ("Those unfortunate people who had been killed or wounded were no more than the cogs of a wheel that could be replaced quite cheaply") (VF: 22). There is more than an echo, in Verne's story, of that Old Testament leviathan, the huge uncontrollable beast of the seas: "When he raiseth up himself, the mighty are afraid" (*Job*: 41.25).

It is in particular through the character of the eccentric doctor, Dean Pitferge, that Jules Verne is able to suggest the negative and sinister side of this colossus, even though the tone of Pitferge's remarks is often humorously perverse. In an ironic representation of the hermeneutic process, the narrator himself is often at a loss as to how to "read" Pitferge. The doctor has at best a healthy sense of skepticism, at worst a pathological hankering for catastrophe. He claims to have traveled on the *Great Eastern* on a number of previous occasions, in the expectation and the apparently somewhat masochistic hope that he himself will be on board when disaster strikes. When the nonplussed narrator reflects on this strange catastrophe mentality of Pitferge, he concludes (in a remark that very clearly prepares the way for the invention of Phileas Fogg) that it has to be put down to plain old-fashioned English eccentricity: "Tout est possible de la part d'un excentrique, surtout quand il est Anglais" ("Everything is possible on the part of an eccentric, especially when he is an Englishman") (VF: 45). [28] But beyond this lightheartedness, which adds such interest to the blend of registers in Verne's narrative, the doctor is being used to increase the sense of foreboding. His predilection for the macabre gives a Poesque dimension to this extraordinary tale, with echoes for example of Poe's 1844 story "The Oblong Box", in which a narrator meets an old friend on a sea journey and is puzzled by his mysterious behavior on board (he learns subsequently that the friend was traveling with the coffin containing his deceased wife, but had indulged in an elaborate cover-up). [29] Pitferge's recurrent theory is that the ship's engines are not powerful enough for her overall size (e.g. VF: 21), and he is convinced that a major disaster will befall the vessel sooner or later. He takes the various misfortunes that have already befallen the *Great Eastern* as a sure portent of doom.

Through Pitferge, then, Verne is able to introduce the background history of the ship's construction, and of those calamitous events that seem to have marked every stage of her progress. Referring to the failed first launch of the *Great Eastern* in 1857 – a botched attempt

to shift the vessel sideways into the water [30] – Pitferge suggests that this is because the ship “ne voulait pas plus aller à l’eau que l’hôpital de Greenwich” (“had no more wish than did Greenwich Hospital to enter the water”) (VF: 41). Echoing a widespread contemporary belief, Pitferge sees the failed launch as a sign that the ship faces a cruel destiny. He also mentions the various commercial disasters that happened during construction, and points to the number of deaths that occurred, including that of Brunel himself. [31] Finally, he also recalls the well-known legend that during the ship’s construction a riveter and his workboy had been trapped and left to die inside the double hull. Pitferge thus assures his traveling companion that the ship is “un navire condamné, ensorcelé, auquel il arriverait fatalement malheur” (“a cursed and condemned ship, upon which disaster would inevitably fall”) (VF: 69), and this allows the connection to be made between Verne’s enraptured evocation of modern engineering and the gothic intrigue that is unfolding.

An ideal additional opportunity to link the ship’s real-life history and the gothic is seized by Verne when his character suggests that the veiled woman, seen walking late at night on deck, is possibly a ghost, and that this figure may have something to do with the many accidents and mishaps that occurred during the vessel’s construction. Similarly blending fiction and reality, Pitferge tells the story of the fateful 1861 voyage across the Atlantic, during which the ship was severely damaged in a hurricane and her rudder broken (VF: 42–3). [32] Now, Verne is indulging here in a standard storyteller’s trick, increasing the tension and the sense of foreboding in order to heighten the drama of his own tale; but he makes excellent use of the known facts, and the blend of fiction and history is almost seamlessly achieved in Pitferge’s interventions. The result is that we end up seeing the *Great Eastern* as a site of menace, potential catastrophe and even terror. The conflicts of humans are set against the backdrop of broader, more fundamental struggles between man and machine. The macabre dimension of the tale thus sits well with the technological reality that is evoked in the descriptions of the *Great Eastern*, for it underlines the notion that the finest achievements of the modern era might themselves be vehicles of the uncanny and the monstrous. This is, of course, a theme that will become much more pronounced in the later *Voyages extraordinaires*.

Yet it is also through the character of Pitferge that Verne offers a reflection about the possible future uses of such massive and beautiful, yet ultimately unwieldy machines. For Pitferge, the ship may not be fast enough to compete with the smaller vessels that carry passengers on the Atlantic routes, yet its space and comfort have undoubted advantages. Anticipating the idea of the modern luxury cruise liner, he suggests that the best use of it would be to sail the high seas simply for the sake of it, with super-rich passengers on board who would not be in any hurry to reach their destination (VF: 113). The pace of the vessel would be deliberately slowed, and its direction fixed so that it would always be ahead of the wind and never sideways on to the waves. Pitching and rolling would thus be avoided and the passengers assured that seasickness would be an unlikely eventuality. [33]

In fact, this idea of the “playground at sea”, where passengers might almost think themselves on land, will be much more fully developed by Verne in *L’Ile à hélice* (1895), in which one of the characters declares, echoing the title of this earlier story, that “le vingtième siècle ne s’écoulera pas sans que les mers soient sillonnées de villes flottantes” (*L’Ile à hélice*: 8) (“The twentieth century will not pass by without the seas being crisscrossed with floating cities”). In the later novel, which has so many links with *Une Ville flottante*, a vessel the size of an island, with motors and propellers on all sides, travels around the Pacific with

millionaires on board, offering truly fabulous facilities and living conditions. However, in a more sinister turn underlining the change of ideological vision in Verne's work over the two and a half decades that separate these texts, the community of passengers divides into two camps, and deep conflict ensues. The message now is that humanity is, for all its technological achievements, on a course of self-destruction if it cannot get its own house in order first and use its inventions wisely.

However, despite the differences of emphasis in *Une Ville flottante* and *L'Ile à hélice*, and the more dire predictions of the later novel, Verne is also – perhaps even first and foremost – articulating the idea of the modern cruise ship, a luxury vessel on which passengers travel not to get to any particular destination, but to be on the vessel itself, on this seemingly fixed "island" around which the rest of the world moves. He suggests that the pleasure and the purpose of travel is travel for its own sake, even when movement might seem futile or pointless. As Baudelaire had put it so memorably in the fifth stanza of "Le Voyage", [34] travel is after all as much about departing for the sake of departure as it is about reaching any destination:

> Mais les vrais voyageurs sont ceux-là seuls qui partent
> Pour partir; cœurs légers, semblables aux ballons,
> De leur fatalité jamais ils ne s'écartent,
> Et, sans savoir pourquoi, disent toujours: Allons!
>
> [But the true travelers are those only who depart
> For departure's sake, with lightness of balloons in their heart;
> From their own destiny they never sway;
> And knowing not why, they always say: "Away!"]

If Verne's vision of travel is less metaphysical and more resolutely practical than Baudelaire's, it nonetheless shares that sense of restlessness and the hankering for constant displacement. Travel is consistently "away" rather than "towards", and every journey is its own justification. The monster machine, if used wisely, can provide a small island of stability as it moves through a moving world and creates, to use Nemo's motto, "mobilis in mobili".

6. Conclusion

While the more sinister message about the dangers of modern technology is not insistently articulated in *Une Ville flottante*, it is certainly implicit in this novel and occasionally surfaces more explicitly. The masses of assembled passengers from all walks of life live largely separate existences, and they are all at the mercy of this great beast on which they travel. There is isolation and alienation on board the vessel, though a suggestion too that a genuine community spirit can be fostered when Verne describes the makeshift and – to say the least – eccentric entertainments that are arranged in the grand saloon during the crossing.

As we have seen, one of the questions underlying Verne's story is also a more specific yet more pressing one, namely what the best ultimate use of the *Great Eastern* herself might be. The checkered history of the vessel is evoked, and Verne joins in the debate about this problem ship. After being converted into a transatlantic cable-laying vessel, and expensively modified for that purpose, the *Great Eastern* had successfully completed her task in 1866 and, not for the first time, faced the possibility of becoming a white elephant. In 1867, the Great Exhibition in Paris had offered the possibility of a new lease of life to the ship. As

Verne's story tells us in some detail in chapter two (VF: 10–11), the vessel was at this point taken on by a newly constituted French company, the *Société des Affréteurs du Great Eastern*, with the purpose of transporting American passengers to the Exhibition, and was reconverted at great cost into a passenger liner at Liverpool Docks. The first crossing from Liverpool to New York is the one described in the story. The return journey from New York to Brest, briefly evoked in the final stages of the novel, was made with just 193 passengers on board, and was to be the only such crossing before the problem ship was once again converted at vast expense into a cable-laying vessel (this time for the France-Newfoundland cable). Verne's story, even after a three-year delay, is nothing if not topical and relevant. While his narrator is happy to travel in comfort across the Atlantic, the question about the ship's future hangs over the entire story, and the broader question about humanity's handling – both financial and social – of its colossal inventions lurks in the background. A technological utopia the *Great Eastern* may be, but she remains a potential monster in various ways, and in any case, like all utopias, she carries sinister dystopian potential within her. [35]

A reading of *Une Ville flottante* alongside other texts in the Vernian canon, and against the background of its real-life model, tells us much about Verne's approach, his method of working, his sources of inspiration and, above all, about the way in which his imagination worked. Verne finds his verbal energy and his textual momentum not in a parallel, invented universe, nor indeed in a fantasy about the future, but in facts, details, statistics and verifiable realities. While it is true that in a few of his stories Verne envisions the world at a future stage, the reading of texts such as *Une Ville flottante* tells us is that he is above all fascinated by the creations of his own era, and that he is indeed overwhelmingly interested in what is objectively classifiable and describable, for that, precisely, is what frees his pen and unleashes his creativity as a writer. The fact that this is woven into a fictional plot that is exaggerated and unreal is quite appropriate, for in bringing together two realms, fantasy and objective fact, Verne is demonstrating that, if the fictions that come from the writer's pen sometimes appear to be beyond belief, then so too do the inventions of modern engineers. Who, then, can tell where fantasy ends and reality begins? Part of Verne's achievement is to have shown that no line of demarcation can be drawn with certainty. Science is fiction, every bit as much as fiction is a science, and there can be no better source of extraordinary tales than the wondrous inventions of the modern world.

NOTES

1. All translations of extracts cited in French are my own. I should like to express my thanks here to Volker Dehs, Art Evans, Terry Harpold and Derek Offord for helpful suggestions and comments on an earlier draft of this essay.
2. *Souvenirs d'enfance et de jeunesse*: online text (see works cited).
3. This yearning for otherness and the sense of the infinite possibilities of travel is also famously articulated by Baudelaire in the final poem of *Les Fleurs du Mal*, "Le Voyage", a poem whose opening stanzas could well serve as an epigraph to the *Voyages extraordinaires*, conveying as they do the excitement of travel in the imagination. In Verne's case, however, the imagining of other places and other lives does not give way to the same disenchantment or "ennui" that Baudelaire so fully explores later in "Le Voyage", since, as Arthur B. Evans emphasizes ("The Vehicular Utopias of Jules Verne"), travel is so closely linked to the educational project of the *Voyages*. For the text of "Le Voyage", see Baudelaire in works cited.

4. Of the three ships, only the *SS Great Britain* survives today, having become a major visitor attraction in Bristol, the city where Brunel began his career. The *Great Western* was scrapped in 1856 after service as a troop vessel during the Crimean War, and the *Great Eastern* in 1889, having completed her multi-stage existence as a floating billboard and fairground at New Ferry on the Mersey.
5. The first sketches appear in Brunel's notebooks in 1851. By 1852, Brunel was facing a serious, long-term kidney disease. Much useful material relating to the *Great Eastern* can be found in the Isambard Kingdom Brunel archive held in the University of Bristol Special Collections.
6. The gross tonnage of the *Titanic* will be 46,000, compared to the *Great Eastern*'s 22,500. By way of a modern point of comparison, the *Queen Mary 2*, launched in 2004, has a gross tonnage of 150,000. The *Great Eastern* was 698 feet long (compared to 883 feet for the *Titanic* and 1132 feet for the *Queen Mary 2*). She was nonetheless well over twice the length of the *Great Britain* (322 feet), which had earlier held the record as the world's largest ship at her launch in 1843.
7. References are found in *Job*: 3.8 and 41.1–34, *Psalms*: 74.14, 104.24–26, and *Isaiah*: 27. 1.
8. For further details of the ship's revolutionary design, see James Dugan. Much useful information can also be found at the BBC History and Porthcurno Telegraph Museum websites (see works cited).
9. See *Pour une théorie de la production littéraire*: 189–97. Macherey defines Verne's explicit and essential subject as being the conquest of nature through industrial technology, based on the three interconnected themes of travel, scientific invention and colonization. However, in a deconstructionist analysis *avant la lettre*, Macherey goes on to show that this explicit ideology is undermined from within Verne's writing, and that the tension between Verne's ideological program and the increasing sense of its impossibility is what constitutes the point of interest in the *Voyages extraordinaires*.
10. Visiting the International Exhibition in London in 1862, Dostoevsky admitted to feeling overwhelmed in a negative sense by the prodigious spectacle of modern progress: "You feel a terrible force that has united all these people here, who come from all over the world, into a single herd; you become aware of a gigantic idea; you feel that here something has already been achieved, that here there is victory and triumph. You even begin to be afraid of something. No matter how independent you might be, for some reason you become terrified." (*Winter Notes on Summer Impressions*: 37)
11. *Une Ville flottante* was published in the *Journal des Débats* in August–September 1870, then in volume form with *Les Forceurs de blocus* in 1871.
12. There are many accounts of the Vernes' journey on the *Great Eastern*. See especially Dugan: 161–67, Lottman: 121–24, and Butcher: 175–79. Verne's notes on his journey are analyzed by Philippe Scheinhardt in his 2005 thesis "Jules Verne: génétique et poïétique (1867–1877)": 270–94.
13. Extracts from the memoir are given in a posting by Volker Dehs to the Jules Verne Forum on 13 August 2008 (see works cited). Dehs explains that skepticism needs to be exercised since the memoir – never published –, evoking a journey made when Ducrest was nine, was not made available until 1928 / 1929, sometime before his death in 1930, at the age of seventy-two, and that it contains many discernible contradictions.
14. Alain Buisine, "Un cas limite de la description", passim. Daniel Compère, *Jules Verne écrivain*, passim., but see especially "Le Texte qui parle": 11–14, and "Les Voix multiples du XIXe siècle": 57–88.
15. This extract (ff. 41–42 of the manuscript) was published by Olivier Dumas in *Bulletin de la Société Jules Verne* 79 (1986): 34–35. It was clearly removed because it did not meet with Hetzel's approval. The publisher makes a lengthy comment in the margin, crossed out and largely illegible,

but in which the words “cela n’est pas croyable” can be discerned. For a full analysis of Verne’s manuscript from the point of view of Hetzel’s influence on the text, see Philippe Scheinhardt, “Jules Verne sous la tutelle d’Hetzel”.

16. In a posting to the Jules Verne Forum on 10 April 1997, giving useful details of Verne’s journey to the US, Brian Taves similarly argued that there is “only minor fictionalization” in the story.

17. In this instance, as I am suggesting, Verne follows a distinctly Balzacian model. As I have argued elsewhere (Unwin, “Jules Verne: The Problem of the Already Written”) significant similarities can also be found between Verne and Flaubert, particularly on the question of the recycling of material and the issue of the writer’s “originality”. A similarity with Flaubert on a completely different theme – that of the phenomenology of movement – is pointed out in note 21 below. In the context of the present discussion, one can also go beyond the generic boundaries of the novel and see in Verne’s approach something akin to Baudelaire’s exhortation to seize what is most transitory and fleeting, and fix it in durable artistic form. The best-known expression of this aesthetic is Baudelaire’s essay on Constantin Guys, “Le Peintre de la vie moderne”, published in 1863 (see works cited).

18. Lottman, in particular, is highly critical of the fictional and literary qualities of *Une Ville flottante*, which he describes as “a prosaic and predictable shipboard melodrama”, adding: “The mix of uninspired plot and gushing descriptions rendered *A Floating City* as boring as first impressions scribbled on a picture postcard sent to family members” (Lottman: 147). He has clearly missed Verne’s ironic use of stereotypes and the experimental language that offers so many echoes of other Vernian texts.

19. Jules Verne’s notes on his journey aboard the *Great Eastern* show that he had originally envisaged writing *Une Ville flottante* with the central character as the eccentric Englishman, accompanied by his valet. While the eccentric Englishman remains in *Une Ville flottante*, the combination of eccentric English master and his valet will reappear in *Le Tour du monde en quatre-vingts jours* written a year later.

20. The poetic qualities of Verne’s writing have been signalled by many subsequent writers. Georges Perec writes notably of *Vingt mille lieues sous les mers*: “Quand, dans *Vingt mille lieues sous les mers*, Jules Verne énumère sur quatre pages tous les noms de poissons, j’ai le sentiment de lire un poème” (“When Jules Verne lists all the names of fish over four pages in *Twenty Thousand Leagues under the Seas*, I feel as though I am reading a poem”) (Perec: 73).

21. In terms of the perception of movement, there is also an interesting parallel here with Flaubert who, in the opening chapter of *L’Education sentimentale*, describes his hero Frédéric traveling on a steamboat along the Seine and having the impression that it is the landscape, not he, that is moving. As Larry Duffy has written in his study of the phenomenology of movement in the literature of the second half of the nineteenth century, “[Frédéric] cannot perceive his own movement other than in terms of the apparent movement of his surroundings” (Duffy: 51). Duffy sees this as symptomatic of the nineteenth century’s changing relationship to movement, as modern forms of transport alter the awareness of space, place and perspective. Although he does not discuss the case of Verne at length, Duffy suggests interestingly that movement is “an ideal point of access to the evolution of mimetic literature in the late nineteenth century” (Duffy: 16). The sense of being stationary in relation to a moving world is one that occurs repeatedly in the *Voyages extraordinaires*, where vehicles are often seen as islands, havens, cities or otherwise autonomous spaces in which the characters live while the world outside passes by.

22. “Verne ne cherchait nullement à élargir le monde selon des voies romantiques d’évasion ou des plans mystiques d’infini: il cherchait sans cesse à le rétracter, à le peupler, à le réduire à un espace connu et clos” (“Verne made no attempt whatsoever to open out the world through the paths of romantic escapism or mystical quests for the infinite: he constantly chose to diminish it, to inhabit it, and to reduce it to a closed and known space”) (Barthes: 81).

23. For a fuller development of Verne's vision of transportational perfection, see Arthur B. Evans, "The Vehicular Utopias of Jules Verne". Agreeing with Barthes that the sense of enclosure and comfort is a key feature of Verne's travel machines, Evans nonetheless stresses that this is far more than a personal fixation, and that it goes to the heart of the educational project of the *Voyages extraordinaires*.

24. See, for example, Perec's comment quoted in note 20 above.

25. In 1845 the British Admiralty had held a tug-of-war contest between a screw-driven ship, the *Rattler*, and a paddle wheel ship, the *Alecto*. The *Rattler* won, towing the *Alecto* stern-first at a speed of 2.8 knots.The idea of propelling a ship by means of a screw rather than paddle wheels had been considered and developed by various designers since the start of the nineteenth century. Very much aware of the latest technology, Brunel changed his original design of the *Great Britain* to make it into a propeller-driven ship. He also exerted a decisive influence on the Admiralty as it adopted the screw propeller for its ships. On 19 September 1859, in its obituary for Brunel, *The Times* noted: "[Mr Brunel] was the first man of eminence in his profession who perceived the capabilities of the screw as a propeller. He was brave enough to stake a great reputation upon the soundness of the reasoning upon which he had based his conclusions. From his experiments on a small scale in the *Archimedes* he saw his way clearly to the adoption of that method of propulsion which he afterwards adopted in the *Great Britain*. And in the report to his directors in which he recommended it, he conveyed his views with so much clearness and conclusiveness that when, with their approbation, he submitted it to the Admiralty he succeeded in persuading them to give it a trial in Her Majesty's navy, under his direction. In the progress of this trial he was much thwarted; but the *Rattler*, the ship which was at length placed at his disposal, and fitted under his direction with engines and screw by Messrs Maudslay and Field, gave results which justified his expectations under somewhat adverse circumstances. She was the first screw ship which the British navy possessed, and it must be added, to the credit of Brunel, that though she had originally been built for a paddle ship, her performance with a screw was so satisfactory that numerous screw ships have since been added to the navy."

26. By way of example, the *Empress Queen*, a 2,500-ton steamer built by Fairfield shipbuilders in Glasgow and launched in 1897, was propelled by paddle wheels alone.

27. The paddle wheels also provided extra maneuverability since, when rotating in opposite directions, they enabled the vessel to turn around much more sharply. Verne, however, does not dwell on this aspect of the design.

28. For a fascinating account of changing French attitudes towards eccentricity, see Miranda Gill's *Eccentricity and the Cultural Imagination in Nineteenth-Century Paris*. Gill argues that, although eccentricity is linked to a view of quirky Englishness at the end of the eighteenth century, once it migrates across the Channel in the nineteenth century it becomes properly and increasingly "French". This historicisation of the concept would suggest that the view of Dean Pitferge in *Une Ville flottante* is based on a stereotype already well out of date by the time the novel was written – not that this detracts from Verne's lively and humorous representation, which deliberately exploits and dwells on the stereotype.

29. I am grateful to Volker Dehs for pointing out this echo of Poe's story to me.

30. The attempted sideways launch took place on 4 November 1857. The winch designed to control the movement spun out of control, killing one man and injuring four others, while the ship moved only three feet. Various attempts were made in the following months to move the vessel closer to the shoreline, but it was a high tide on 31 January 1858 that finally floated her. The episode was widely reported in the press and held to be a public humiliation for Brunel.

31. During construction of the ship, several workers fell to their deaths. Four days into the ship's maiden voyage in September 1859, an explosion destroyed the forward funnel and filled the boiler

room with scalding steam, killing five men and injuring many others. Brunel, who had had a stroke just before the ship left London, died a few days after receiving news of this latest disaster.

32. During this incident, in addition to the loss of the ship's rudder, both paddle wheels were also torn away, and two huge tanks of fish oil on the ship's deck broke loose and spilled all the way down to the engine rooms. A full account of the disaster can be found on the Porthcurno Telegraph Museum website (see works cited).

33. In a short article written about the *Great Eastern* published in the French shipping journal *Le Paquebot* on 4 May 1867, Jules Verne himself had emphasized that the ship was, on account of her size, resistant to pitching and rolling. This article is reprinted in Marcel Destombes, "Jules Verne et le Great Eastern, 1867".

34. See note 3.

35. For further reflections on the avatars of utopia in Jules Verne, see Unwin, "Vernotopia (utopia, ecotopia, technotopia, heterotopia, retrotopia, textotopia, dystopia)".

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Timothy Unwin (T.A.Unwin@bristol.ac.uk) is Ashley Watkins Professor of French at the University of Bristol (UK). He studied Modern Languages at Pembroke College Cambridge from 1970–73, and did his PhD at the University of Exeter. He subsequently taught in French departments at the Universities of Edinburgh, Queen's Belfast, Western Australia (Perth), and Liverpool where he was James Barrow Professor of French from 1995–2000. In addition to two books on Verne (a critical guide on *Le Tour du monde en quatre-vingts jours* [1992], and *Jules Verne: Journeys in Writing* [2005]) he has written widely on nineteenth-century French literature, with studies in particular of Constant, Flaubert, Baudelaire and Barbey d'Aurevilly. He was editor for *The Cambridge Companion to the French Novel* (1997) and *The Cambridge Companion to Flaubert* (2004). He was founder President of the UK-based Society of Dix-Neuviémistes, and is co-moderator of Francofil, the world's largest discussion list for French studies. He is on the editorial boards of *French Studies* and *Australian Journal of French Studies*.


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Jules Verne et l'avenir

Samuel Sadaune

Abstract

The future does not appear in Jules Verne's novels only under the aspect of anticipation. It is often more immediate, reflecting the hopes and fears of the characters, and may extend from the next season to the year 2082. In this article, we consider particular aspects of Futurism, the future included in other times and hypothetical futures. After defining the concept of time in Verne's works, three faces of the future are presented. First is the real, true future, defined as the most obvious: we see what happens later in a future that is a logical continuation of the past. Then there is the future "swallowed" by another time: it is either taken by a kind of "eternal present" or timelessness, or it participates in a circular time development, so that the future is also the past. Finally, there is the hypothetical or conditional future: a product of dialogs between characters that is sometimes realized in later Vernian works.

Résumé

L'avenir ne se présente pas dans les romans de Jules Verne sous le seul aspect de l'anticipation, bien au contraire. Il est souvent plus immédiat, reflète les espoirs et les craintes des personnages, et peut aller de la saison prochaine jusqu'à l'année 2082. On étudiera plus particulièrement des aspects du futurisme, du futur englobé dans d'autres temps et du futur hypothétique

Introduction. Quel temps chez Jules Verne ?

On pourrait, en lisant ce titre, s'imaginer qu'il s'agit d'évoquer deux questions qui reviennent fréquemment s'agissant de Jules Verne : était-il optimiste ou pessimiste (sous entendu : croyait-il au progrès ?) ? Etait-il un auteur de science-fiction ?

Mais la présence du mot « avenir » dans le titre de cette étude n'a rien à voir avec le progrès et que fort peu avec la science-fiction. Par ce vocable, j'entends m'intéresser à une manière de formuler les choses, de faire bouger une intrigue, de montrer des personnages et, surtout, de représenter un monde, qui ressemble au nôtre mais qui n'est pas (et qui ne se veut sans doute pas) le nôtre. Il ne faut pas oublier que Jules Verne est un enfant du premier tiers du XIXe siècle, une époque où précisément les romans d'anticipation et de science-fiction ne sont pas légion. Il appartient à ce moment très particulier de l'histoire où le temps a

subi une importante mutation. Jusqu'au XVIIIe siècle, on peut considérer que le temps qui comptait était le passé. On vivait selon des coutumes anciennes, on existait selon ce qu'étaient nos ancêtres, on tentait de retrouver ou de reproduire l'âge d'or ou le bon vieux temps. [1]

Avec le XIXe siècle, le futur va peu à peu prendre le dessus. L'histoire ne va plus être une succession de références anciennes, mais au contraire un processus logique qui doit conduire vers un toujours mieux. Bien entendu, une telle transformation des esprits et des habitudes de perception ne s'est pas faite en une journée et n'a pas concerné l'humanité dans son ensemble. Au début du siècle, l'un des genres triomphants est justement le roman historique. Puis, des auteurs comme Balzac et Dickens ont fini par commencer à imposer le présent, ou plutôt à en faire un objet honorable (jusque-là, c'étaient essentiellement les ouvrages à portée satirique ou picaresque, voire comique, qui s'occupaient du présent).

Jules Verne a lui aussi parlé du passé et du présent. Mais l'avenir est lui aussi apparu, sous les formes les plus diverses. D'abord, et principalement, parce que plusieurs de ses premiers romans présentaient des aventures qui ne pouvaient avoir lieu dans le présent, mais qui en même temps présentaient des personnages, du matériel, des situations qui étaient contemporains à Jules Verne, voire même légèrement antérieurs. Ainsi, le roman *Cinq semaines en ballon* nous parle notamment d'une remontée vers les sources du Nil qui est contemporaine du voyage de Fergusson et de ses compagnons. Mais Burton et Speke, les deux explorateurs qui ont sans doute le plus inspiré l'écrivain n'ont pas envisagé (pas plus que d'autres), la traversée de l'Afrique d'est en ouest en ballon et il n'est pas évident que cela eût été possible. [2] Les deux romans suivants, *Voyage au centre de la terre* et *Voyages et aventures du capitaine Hatteras*, représentent des voyages qui s'inscrivent théoriquement dans un futur très lointain, voire utopique, même si l'action est contemporaine à la période où ces romans sont rédigés.

Surtout, les narrateurs (car ils furent nombreux dès le début) de ces romans le firent avec un sérieux dans la voix, un sens du vraisemblable même quand on baignait dans l'invraisemblable, qui éloignait déjà Verne de Poe et, surtout, de la plupart de ces prédécesseurs comme Lucien de Samosate ou Cyrano de Bergerac dont le ton farcesque enlevait toute illusion du réel. Puis, sont venues les prédictions didactiques, les craintes formulées par les personnages, les jeux avec la datation, et les mélanges spatio-temporels près des pôles et du soleil. Les regards des héros, même s'ils continuent d'évoquer le passé et d'appartenir au présent de leur contemporain, sont désormais fixés vers un lieu lointain et obscur, qu'on appelle le futur. Du fermier irlandais qui s'inquiète du retour de l'hiver à l'ingénieur américain qui rêve de voir des machines volantes envahir une Icarie céleste, tous ces enfants de Verne sont tournés vers la même direction. Les *Voyages* ne font plus de remontée dans le temps (comme ça avait pu être le cas avec les deux premiers romans du cycle) : ils se dirigent vers l'avenir. Or, comme pour toutes les fois où il s'intéresse à un mot, Verne en déplie tous les sens possibles et en fait des histoires différentes (qu'on se rappelle ses jeux avec les mots « air » dans le *Voyage en Angleterre et en Ecosse* ou « cataracte » dans *Une ville flottante*). « L'avenir, c'est la grande boîte à surprises de l'humanité », déclare un des personnages de Jules Verne. [3] Et les romans de Jules Verne sont eux-mêmes une boîte à surprises, ou plus précisément une boîte de tous les possibles.

On peut considérer que dans les *Voyages,* le futur suit trois directions :

— Il y a d'abord le futur franc, dans sa définition la plus évidente : on voit ce qui se passera plus tard, dans un avenir qui est une suite logique du passé (ce qu'illustrait le roman non édité du vivant de Verne *Paris au XX^e siècle*).

— Il y a ensuite le futur « avalé » ou « avalant » les autres temps : soit il est pris par une sorte de présent éternel ou d'intemporalité, soit il participe à un développement temporel circulaire, si bien que l'avenir est en même temps le passé (la nouvelle *Edom* en étant le meilleur exemple).

— Enfin, il y a le futur hypothétique ou conditionnel, qui provient plus d'échanges entre personnages, ou de fantasmes, que d'indices sérieux ; ce qui ne veut pas dire qu'un ouvrage ultérieur ne donnera pas raison à ces hypothèses (ainsi, dans le chapitre IV de la deuxième partie du *Pays des fourrures,* Paulina Barnett émet un souhait en apparence fantasque qui se réalisera dans *L'Ile à hélice*).

I. Ce qui se passera plus tard

Le terme d'avenir est bien entendu très variable : il peut s'agir de ce que l'on fera dans une heure, de ce qui risque d'arriver le lendemain, de ce à quoi on souhaiterait parvenir. Si l'on s'arrête à ce niveau du futur, on peut prétendre sans trop de risques que tous les romans de Jules Verne sont concernés, voire même tous les romans de l'histoire de la littérature. Il est donc impossible, voire absurde, de s'arrêter à cette « unité » d'avenir minimale (la prochaine minute, la prochaine heure ou même la prochaine journée), à cette « perspective » d'avenir tout aussi minimale (le fait de souhaiter, d'espérer quelque chose). Le simple fait de penser, de bouger nous fait tendre vers une direction qui est forcément l'avenir, y compris si on espère retrouver quelque chose de l'ordre du passé. [4]

Très souvent aussi, l'avenir représente la fin d'une durée limite qui mettra fin à un enjeu : les quatre-vingts jours du tour du monde de Phileas Fogg ou, moins connu, les vingt-et-un jours dont disposent les héros du *Chemin de France* pour quitter l'Allemagne avant que la validité de leurs passeports prenne fin. L'avenir peut également être concentré sur une date symbolique, telle celle du 5 avril pour maître Antifer, ou plutôt pour son neveu Juhel qui doit se marier ce jour-là et a peur que la monomanie de son oncle ne la lui fasse rater. Il ne s'agit toutefois pas ici de l'avenir dans son terme général mais plutôt d'un événement placé dans un avenir proche, puis de plus en plus proche, à l'issue duquel d'ailleurs il semble subitement ne plus être question d'avenir ! Plus que d'un véritable avenir, on parlera donc plutôt ici d'un présent extensible et limité. On laissera donc de côté ce type d'intrigue et d'enjeu pour s'intéresser directement aux unités d'avenir supérieures. A commencer par celle des saisons.

I.1. Le cycle des saisons

La première perspective d'avenir, dans un grand nombre de *Voyages*, c'est effectivement le changement de saison. C'est un lendemain à peu près certain, et dont les conséquences sont en principe connues, parce qu'il a un rapport avec un passé peu lointain : la saison qui approche a déjà existé l'année précédente. Toutefois, même si ce phénomène a, dans le monde du réel, plutôt à voir avec la circularité, dans les *Voyages*, une saison n'apparaît en général qu'à une seule reprise : peu de romans dépassent en effet le cadre des douze mois (Citons, parmi ces exceptions notables, *L'Ile mystérieuse* et, bien entendu, *Deux ans de vacances*). Mais bien entendu, elle est tout de même supposée être apparue auparavant,

même si le lecteur ne peut la connaître qu'à partir d'une description d'un narrateur ou d'un personnage (et à la condition que celui-ci n'ait pas bougé depuis un an, ce qui n'est pas si courant dans ce cycle de voyageurs). Généralement, la voix narrative emprunte des accents prophétiques pour annoncer les modifications et les conséquences sur le décor, mais aussi sur les personnages, que va déclencher ce changement de saison, souvent de la même manière qu'elle expliquerait un phénomène scientifique compliqué à un lecteur profane. Ainsi dans *César Cascabel* : « Mais encore quelques semaines, et la Californie serait redevenue cette terre généreuse entre toutes, cette mère féconde, où la graine des céréales se multiplie au centuple […] » (CL, 1, iii)

La voix narrative sait bien de quoi elle parle, puisque ce moment dans l'année qu'elle décrit a déjà existé. Sauf que, justement, le changement de saison apporte parfois des surprises. Lorsqu'il s'agit d'une zone polaire, l'arrivée de l'hiver se traduit le plus souvent par un bateau pris dans la glace (cf. *Hatteras* et *Le Sphinx des glaces*). La saison qui approche s'annonce donc comme une date fatidique avant le déclenchement d'une série d'épreuves. La particularité de ce genre d'avenir étant qu'on peut à peu près le dater au niveau des mois de l'année, mais qu'il peut être en retard ou en avance d'une ou plusieurs semaines, ou être plus doux ou plus terrible qu'à l'accoutumée. Finalement, la règle principale que l'on retient des *Voyages extraordinaires* concernant les saisons, c'est que celles-ci semblent être du domaine de la certitude et du familier, mais que la plupart du temps, elles apportent une bonne part d'incertitude et d'inattendu. La conséquence peut-être la plus surprenante de ce destin saisonnier dans un *Voyage* concerne l'Irlande de *P'tit-Bonhomme :* l'arrivée de l'hiver est finalement plus terrible pour le paysan irlandais que pour l'explorateur dans l'Arctique, ce qui fait dire au narrateur de *P'tit-Bonhomme :* « Ah ! l'avenir des tenanciers de l'Irlande, toujours à la merci des caprices climatériques ! » (*PB,* 1, xiii) Parfois, d'ailleurs, la saison n'apparaît pas dans un roman pour elle-même, mais parce qu'elle est une date butoir avant une épreuve : ainsi, dans *Le Volcan d'or,* c'est l'arrivée du printemps qui va signifier pour Summy Skin le début de ce « maudit voyage » vers le Klondyke. Ce n'est sans doute pas un hasard si les deux romans les plus futuristes de Verne, *Sans dessus dessous* et *L'Ile à hélice,* ont pour but, le premier de faire disparaître les saisons, le second de les fuir. « L'hiver ?... […] Connaissons pas ! » déclare Calistus Munbar (*IH,* 1, iv).

I.2. Les craintes pour l'avenir

Si la saison est l'unité temporelle minimale sur laquelle nous puissions nous baser, la crainte semble être le dénominateur commun de bien des personnages (mais aussi de nombreux narrateurs) face à l'avenir, ce qui relativise considérablement l'idée d'un Jules Verne admiratif devant le progrès. Au-delà du changement de saison, le changement climatique fait partie des thèmes qui reviennent souvent. *Sans dessus dessous* l'évoque déjà, dans son célèbre chapitre XV à la tonalité apocalyptique (*L'Apocalypse* et le *millenium* sont largement cités dans le chapitre XIII du même ouvrage) ; moins connu, moins spectaculaire aussi, car elle ne concerne qu'une partie de la planète, cette citation du narrateur de *L'Invasion de la mer,* rapportant que pour de nombreux touaregs, la création d'une mer intérieure provoquerait de l'humidité, alors que « c'est grâce à la sécheresse de l'air du Djerid » que les dattes du pays de Tozeur conservent leur saveur. Au-delà de l'éventuelle catastrophe écologique, c'est également le fruit de la terre qui est menacé (*IR,* vii).

Ces deux exemples sont révélateurs de la nature de la crainte que transmet ici le narrateur vernien. Il ne s'agit pas en effet de la peur de l'avenir en tant que tel ; il s'agit de la crainte de l'avenir que peut provoquer une intervention humaine. Le narrateur vernien ou les personnages font souvent part de leur inquiétude au sujet du changement naturel de saison. Mais généralement, un certain optimisme reste de rigueur, l'esprit combatif est là, y compris dans les régions polaires. Le personnage vernien reste convaincu qu'il réussira, peut-être pas à maîtriser la nature, mais tout au moins à la contrer.

Lorsqu'il s'agit de modifications climatiques dues à l'intervention humaine, les choses sont différentes : le processus ayant une origine humaine, les personnages prennent peur. On n'a plus à faire avec les dures lois de la nature ou de la providence, lois dures mais sûrement justes, mais à l'esprit du mal représenté par l'homme. Ainsi, on se retrouve face à ce paradoxe que les *Voyages* pourraient être une représentation de la lutte entre le bien et le mal, mais également celle d'un monde sans providence où l'homme est seul maître à bord et seul maître de sa destinée, pour le meilleur comme pour le pire. Dans les *Voyages,* les modifications climatiques dues à l'intervention humaine sont un processus proche de la destruction qui suscite la crainte, tandis que les changements saisonniers naturels, si durs soient-ils, même s'ils peuvent susciter la crainte et provoquer la mort, ne provoquent pas de catastrophes irrémédiables (à part tout de même des pertes humaines, en un nombre limité) et, surtout, sont corrigés par la saison suivante. Alors qu'il n'y a bien sûr pas ce genre de correctif dans les catastrophes citées dans *Sans dessus dessous* ou *L'Invasion de la mer*.

Philippe Mustière signalait que le système constituant le récit vernien « semble être systématiquement […] le bouleversement, le soubresaut, la cassure. » [5] On peut ajouter que la chronologie vernienne tend vers cette trinité. Le changement de saison ne peut se faire sans heurt si l'on veut qu'il signifie quelque chose. De même, le passage dans le temps n'a de sens que s'il provoque un bouleversement conséquent. L'avenir n'est pas qu'un simple changement de date. Il est forcément la crainte de la fin d'un état présent qui semblait, sinon idéal, du moins acceptable. Toute la question restant de savoir si cette cassure provient d'un phénomène naturel ou d'une intervention humaine.

Si nous regardons les craintes qui reviennent le plus fréquemment dans le cycle romanesque, c'est bien l'homme qui fait peur à ces congénères. Le thème, par exemple, de la ruée vers l'or est omniprésent. Il a une dimension réellement épidémique (alors que la peur, par exemple, d'une véritable maladie pandémique, comme la peste ou le choléra, est quasiment absente des *Voyages*, comme si, là aussi, on appréhendait plus une épidémie due au caractère de l'homme qu'une maladie *naturelle,* si l'on peut dire). On ne citera que ce passage fameux du *Volcan d'or,* lorsque maître Snubbin le notaire, déclare à Summy Skin et à Ben Raddle, en des termes qui paraissent aussi bien se référer que parodier l'Apocalypse :

> […] je dirai de malades en proie à cette fièvre de l'or qui a fait déjà et qui fera encore tant de victimes ! […] et il en sera ainsi jusqu'au jour du Jugement… je veux dire du gisement dernier ! (*VO,* 1, I)

Autre sujet fréquent de crainte, celle de voir disparaître des races d'animaux. Des romans aussi différents que *Vingt Mille Lieues sous les mers, César Cascabel, Le Sphinx des glaces* ou *Les Histoires de Jean-Marie Cabidoulin* sont remplies d'allusions à l'extinction possible et prochaine des baleines (mais aussi des lamantins dans *La Jangada*) par la faute des hommes. Mais il en est de même de tribus indigènes, comme celle des Tasmaniens : « Il n'en

restera plus un seul à la fin du XIXe siècle ! » annonce le narrateur de *Mistress Branican* (*MB,* 2, i). Le système colonial anglais est largement mis à l'index, mais ce n'est pas le seul motif. Le commodore Simcoë, dans *L'Ile à hélice,* prophétise :

> Mais, fait certain, c'est que l'indigène tend à disparaître. La colonie n'est point en voie de prospérité, ni la population en voie de croissance, et ce qui le démontre, c'est l'infériorité numérique des femmes par rapport aux hommes.
>
> — C'est, en effet, l'indice de l'extinction prochaine d'une race, répond Frascolin, et, en Europe, il y a déjà quelques Etats que menace cette infériorité. (*IH,* 2, viii)

A contrario, les craintes concernant la possibilité d'une terre touchée par la surpopulation sont également fréquentes (particulièrement dans deux romans : *Les Indes Noires* et *L'Ile à hélice*).

Mais la crainte peut-être la plus ancienne dans l'œuvre vernienne, donc avant les *Voyages,* est celle de voir les chiffres remplacer définitivement les lettres. C'est déjà un thème majeur dans *Paris au XX^e^ siècle,* et cette crainte est mise à nouveau en valeur dans *L'Ile à hélice :*

> La vérité est que les élèves ne s'écrasent point aux cours publics, et, si la génération actuelle possède encore quelque teinture des études faites dans les collèges des Etats-Unis, la génération qui lui succédera aura moins d'instruction que de rentes. C'est là le point défectueux, et peut-être des humains ne peuvent-ils que perdre à s'isoler ainsi de l'humanité. (*IH,* 1, vii)

Pour terminer cette énumération, le tout dernier roman achevé écrit par Jules Verne, son fameux *Maître du monde*, contient un type de peur très actuel :

> Enfin, pour épuiser la série des hypothèses, n'y avait-il pas là le cratère d'un volcan, et ce volcan dormait-il d'un long sommeil dont les poussées intérieures le réveilleraient quelque jour ?... Fallait-il redouter en son voisinage les violences du Krakatoa ou les fureurs de la montagne Pelée ?... Dans l'hypothèse d'un lagon, n'était-il pas à craindre que ses eaux, pénétrant les entrailles de la terre, puis vaporisées par le feu central, ne vinssent à menacer les plaines de la Caroline d'une éruption équivalente à celle de 1902 de la Martinique ?... (*MM*, I)

Peur des plus insolites et qui montre à quelle point l'actualité, dans les derniers romans de Verne, rattrape plus pesamment la narration. En effet, si les volcans qui entrent en éruption sont légion dans les *Voyages,* le phénomène était le plus souvent décrit par les narrateurs comme des spectacles enchanteurs, ou comme une nouvelle chance pour les personnages (bien entendu, les personnages eux-mêmes ne ressentent forcément cela de la même façon). Pour la première fois, à mon sens, dans ce cycle où l'homme fait peur à l'homme, ce n'est justement pas quelque chose provoqué par un humain mais un phénomène naturel qui suscite la crainte. Si *Edom* est bien de la main de Verne, on remarquera alors que l'invasion de la terre par l'eau, là aussi plutôt prétexte à d'éblouissantes descriptions (voir *Hector Servadac*), devient la nouvelle peur de demain. Ce n'est plus seulement l'homme, mais la nature qui devient folle dans le crépuscule vernien.

I.3. Futurisme

Lorsque l'on parle du futur ou de l'avenir dans les Voyages extraordinaires, c'est souvent avec en tête, sinon l'idée d'un Verne auteur de science fiction, en tout cas celle d'un Verne auteur d'anticipation. Plus que de futur, c'est donc de futurisme dont il est question.

Lucian Boia, dans un article du *Bulletin de la Société Jules Verne,* écrivait que

> L'œuvre de Jules Verne s'inscrit dans le présent. Il ne parle pas de l'avenir, ou s'il le fait, il s'agit d'un avenir tout proche, et en tout cas très semblable au présent. Ses 'anticipations', ses inventions ne servent pas pour construire une société essentiellement différente de la nôtre. Elles sont plutôt les outils d'une 'évasion' de certains héros exceptionnels […]. [6]

On peut sans doute partager cet avis dans le cadre strict de l'invention, notamment technologique. En revanche, les regards que dirigent des personnages et des narrateurs vers l'avenir est multiple. Simplement, il ne s'agit pas d'un avenir véritablement chronologique. De ce point de vue, on peut retenir l'opinion de Jean-Pierre Picot, lequel, dans un article tentant précisément de répondre à la question « Jules Verne auteur de science fiction ? », parlait d' « une sorte de révolution copernicienne » :

> « ne pas emporter le lecteur dans les temps supposés futurs […] mais au contraire apprendre au lecteur à se familiariser avec l'avenir en train de se faire en son propre présent : rapprocher l'avenir, puisque chacun de nous vit en fait dans l'avenir de son propre passé : tant il est vrai que notre présent quotidien n'en finit pas d'être notre futur d'hier. » [7]

Mais si J.-P. Picot et L. Boia ont sans doute raison de nuancer l'aspect futuriste de l'œuvre de Jules Verne, il faut tout de même rappeler deux choses :

1° L'avenir proprement historique ou chronologique lointain est effectivement absent dans le sens qu'il n'est pas « représenté » par une histoire, encore moins par une intrigue. En revanche, comme tant d'autres choses, et non des moindres, la question du futur apparaît dans la bouche de personnages, voire dans les exclamations lyriques ou les verbiages didactiques de la cohorte des narrateurs, comme cet article s'efforce de le démontrer. A défaut de nous projeter dans le futur tels les voyageurs de Wells ou de Barjavel, Verne s'attache à imprégner le présent de l'histoire, voire même celui de la narration, de ce *plus tard,* de cet *au-delà de cette époque,* voire d'un *au-delà de cette narration, de ce livre !* [8]

2° L'avenir ne concerne pas que des temps lointains et une société entière. La façon dont un être humain appréhende son propre espace temporel est également un élément primordial du chronotope. Juger l'évolution du temps, c'est aussi lire Rousseau se retournant sur son passé pour juger Jean-Jacques.

Il est amusant de constater cette contradiction qui a longtemps été présente dans la définition que l'on faisait autrefois de Jules Verne : un auteur de science fiction qui prévoyait l'avenir. Précisément, un auteur de science fiction présente de la science qui n'existe pas ! En dépit de tout le talent d'un H.G. Wells ou de tout le génie d'un Asimov, il ne semble pas qu'il y ait beaucoup d'hommes invisibles à se promener dans nos rues (en tout cas, on ne les a pas vus, ce qui, il est vrai, ne prouve rien !), ni qu'Harry Seldon et ses psychohistoriens n'aient pu prévoir la crise financière qui vient de nous toucher. Mais précisément, ni Wells ni Asimov n'ont jamais prétendu prédire l'avenir : il est fort douteux que cela ait eu le moindre intérêt pour eux.

Là où Verne se montre original, c'est qu'au lieu de situer ses romans dans le futur (dans son œuvre, *Paris au XX^e^ siècle* est vraiment un cas à part), il cite des événements qui arriveront réellement dans le futur mais qu'il rend contemporains de son époque. Il y a bien sûr le cas d'événements qu'on peut qualifier de « farfelus », tel le fait d'envoyer en 1865 les Américains vers la Lune, mais aussi Hatteras au Pôle Nord en 1860. [9] Si à la rigueur Verne

a pu croire possible l'accès un jour au Pôle Nord, croyait-il réellement que le voyage sur la Lune, ou même simplement autour, était possible ?

Beaucoup moins spectaculaire, mais de ce fait répondant plus à un genre anticipateur, il met souvent en scène des événements qui n'auront lieu que quelques années plus tard (mais que l'on pouvait prévoir). Il y a bien sûr le passage par le sous-marin du capitaine Nemo au canal de Suez en 1867, deux ans avant son inauguration. Ou la découverte de l'épave des navires de La Pérouse par Nemo, qui a en fait été découverte en 2008. Tout au long de la première partie des *Aventures de trois Russes et de trois Anglais,* il est fait allusion à une guerre qui risque d'éclater entre la Russie et l'Angleterre : le lecteur cultivé sait déjà que ce sera la guerre de Crimée et qu'elle va forcément poser un problème parmi les personnages.

Plus malicieuse est cette remarque insolite dans *Kéraban-le-Têtu.* Notre seigneur turc, qui craint le mal de mer, se voit contraint de traverser un fleuve pour accéder à une rive :

> Il était vraiment fâcheux que le seigneur Kéraban ne fût pas né quelque cent ans plus tard ! Si son voyage s'était fait à cette époque, Ahmet n'aurait pas eu sujet d'être inquiet, comme il l'était en ce moment.
>
> En effet, ce détroit tend à s'ensabler, et finira, avec l'agglomération des sables coquilliers, par ne plus être qu'un étroit chenal à courant rapide. Si, il y a cent cinquante ans, les vaisseaux de Pierre le Grand avaient pu le franchir pour aller assiéger Azof, maintenant, les bâtiments de commerce sont forcés d'attendre que les eaux, refoulées par les vents du sud, leur donnent une profondeur de dix à douze pieds.
>
> Mais on était en l'an 1882 et non en l'an 2000, et il fallait accepter les conditions hydrographiques telles qu'elles se présentaient. (*KT,* 1, xiv)

Sans dessus dessous représente le cas peut-être le plus courant de cette manière de présenter l'avenir, à la fois encore inexistant et pas trop lointain. Le narrateur date les événements en 189., donc vers le futur, en tout cas au moment de la rédaction de ce roman qui date de 1889 (autrement dit, il y a au minimum une avance sur un an, mais ce peut tout aussi bien être sur dix ans). Par ailleurs, les événements décrits dans ce roman paraissent invraisemblables au niveau des ***proportions*****.** Il semble difficile d'avoir un canon d'une telle taille et une ambition aussi délirante que celle qui motive les membres du Gun-Club. Toutefois, si on peut parler d'un roman « extraordinaire », il ne s'agit pas à proprement parler de science fiction (seules, encore une fois, les proportions sont invraisemblables, mais il n'y a pas trace d'invention nouvelle), ni de fantastique : pas de paranormal, pas d'hésitation entre le réel et le surnaturel, ce dernier étant totalement absent de cette histoire. On pourrait parler de société fiction, ou d'anticipation sur la façon de fonctionner de la société. La projection sur le futur vient donc moins d'un progrès technique ou d'un renversement des mentalités sociétales, mais bien plutôt de conséquences par rapport à des phénomènes déjà existants dans les années 1880. Ici, le futurisme n'apporte donc pas des éléments nouveaux, mais prend de l'avance sur les conséquences dues à ces éléments déjà anciens. En quelque sorte, Verne accélère un processus historique qui paraît devoir se réaliser de toute façon, mais à plus long terme.

Le dernier chapitre de *Sans dessus dessous* se veut d'ailleurs « très court, mais tout à fait rassurant pour l'avenir du monde ». Grâce à la science, il est possible en effet d'établir qu'on ne peut produire un déplacement de l'axe du globe :

> Il semble donc que les habitants du globe peuvent dormir en paix. Modifier les conditions dans lesquelles se meut la Terre, cela est au-dessus des efforts permis à l'humanité. Il n'appartient pas aux hommes de rien changer à l'ordre établi par le Créateur dans le système de l'Univers. (*SD,* xxi)

C'est donc toute l'ambiguïté de ce roman qui semble si réaliste pour le lecteur du XXIe siècle d'être dénoncé comme irréalisable par un de ses narrateurs. Après avoir fait peur, on cherche à apaiser, ce qui a souvent été le propre de bien des romans futuristes justement : on vous présente un futur effrayant pour vous servir de leçon, et comme justement nous sommes certains que les hommes ont bien retenu la leçon, ce futur que l'on vous a présenté s'avère en fin de compte totalement invraisemblable (quitte à évoquer pour une fois le Créateur comme garantie absolue).

D'autres romans d'anticipation existent, moins cités parce que l'anticipation y est plus discrète, nullement technologique. L'un des plus fameux (et quasiment jamais cité dans cette catégorie) est *Le Testament d'un excentrique* qui nous présente le premier jeu réalité de l'histoire : ou comment des êtres humains, attirés par l'appât du gain (ou se laissant prendre au jeu) acceptent de devenir de simples *pions* et de mettre leur sort entre les mains d'un lanceur de dés : c'est d'après le chiffre qui sera obtenu par les dés que les pions iront, à leurs risques et périls (et à leurs frais) dans tel état des Etats-Unis, chaque état représentant une case d'un jeu de l'Oie géant.

Le cas très particulier des *Indes Noires* est exemplaire car il réunit plusieurs des formules utilisées par Jules Verne. Tout d'abord, la date à laquelle se déroule l'histoire se limite à un 18.. (qui n'apparaît même pas dans le manuscrit, en tout cas dans le premier chapitre dans lequel figure cette date du 3 décembre qui fait suite à la lecture de la première lettre. Le jour et le mois ne seront accompagnées d'un début d'année que dans les versions publiées). Non seulement elle n'est pas complète, mais nous n'avons même pas la décennie. Surtout, ce roman conjugue des regards vers un passé qui semble révolu et qui suscite la nostalgie de plusieurs personnages (au point, remarque Jean Delabroy, que les hommes de progrès deviennent passéistes et que l'ingénieur devient antiquaire [10]) et une situation futuriste en deux temps : tout d'abord, le chapitre prophétique du narrateur encyclopédique qui fait se dérouler à l'intention du lecteur toute l'histoire des houillères et énonce une prédiction :

> La houille manquera un jour, – cela est certain. Un chômage forcé s'imposera donc aux machines du monde entier, si quelque nouveau combustible ne remplace pas le charbon. A une époque plus ou moins reculée, il n'y aura plus de gisements carbonifères, si ce n'est ceux qu'une éternelle couche de glace recouvre au Groënland, aux environs de la mer de Baffin, et dont l'exploitation est à peu près impossible. C'est le sort inévitable. […] cent siècles ne s'écouleront pas sans que le monstre à millions de gueules de l'industrie n'ait dévoré le dernier morceau de houille du globe. (*IN,* iii)

On voit donc le langage prophétique, mais s'appuyant autant que possible sur des arguments scientifiques. Le long discours se termine tout de même par cette précision qui est presque en contradiction avec l'intrigue du roman : « cent siècles ne s'écouleront pas… » Autrement dit, la pénurie est inévitable, mais elle n'est sans doute pas pour demain. Ce qui est une façon de nous conduire du côté du renouveau de la houille d'Aberfoyle qui recèle encore d'un filon inexploité et sans doute pas près d'être épuisé. Ainsi, tout ce qui a lieu dans les premiers chapitres qui servent d'introduction à ce roman semble n'être qu'une sorte d'avertissement de ce qui peut attendre un jour *réellement* et *définitivement* le monde des mines, mais qui leur est pour le moment épargné. A la fin du chapitre IX, une autre

éventualité : « Et qui sait si, dans ces milieux à température constante […] la classe pauvre du Royaume-Uni ne trouvera pas refuge quelque jour ? »

Bien entendu, c'est le fameux chapitre XIII qui correspond le mieux à l'idée qu'on se fait généralement du futurisme. Devenu « Coal-City » dans les versions éditées, ce chapitre s'appelait à l'origine « Une métropole de l'avenir ». Le chapitre version manuscrit montre donc une cité futuriste, mais en décalage total avec le monde d'en-haut, avec l'extérieur qui continue à vivre à son époque. On pourrait songer ici à un procédé renversé du *Voyage au centre de la Terre.* Dans ce roman-ci, le monde du centre vit dans un passé qui n'a pas évolué. Dans *Les Indes Noires,* le souterrain se projette dans le futur. Mais entre les deux, il y a une autre différence fondamentale et qui n'est pas sans marquer l'évolution de la réflexion de Verne. Dans *Voyage au centre de la Terre,* le monde extérieur (*notre* monde) évolue, ne cesse d'avancer. Il y a donc une opposition entre l'extérieur en mouvement continu et le souterrain resté stationnaire dans un passé éternel ou dans un instant temporel. Avec *Les Indes Noires,* le souterrain a fait un bond dans le temps non pas suite à un voyage à travers les temps, mais parce que l'industrie a repris dans des conditions idéales : les personnes qui travaillent dans cette industrie vivent désormais dans ce souterrain. En revanche, l'extérieur, qui semble ne pas particulièrement bénéficier de la reprise de l'industrie, vit toujours dans une sorte de temps immuable, triste, où il fait toujours mauvais, ce qui n'empêche d'ailleurs pas (c'est une des contradictions du livre) la surpopulation de guetter la planète. On sent là (on pouvait le sentir dès *Voyage en Angleterre et en Ecosse*) une fascination de Jules Verne pour les oppositions entre les temps, lesquels seraient marqués par des lieux : Verne a vraiment frôlé le thème des mondes parallèles. A ceci près que pour lui, ces mondes sont parallèles physiquement, mais l'un est forcément en retard sur l'autre au niveau du processus historique.

C'est ce même phénomène qui se met en route dans *Hector Servadac,* lorsqu'il apparaît évident que les Anglais vont continuer à vivre sur le même rythme que celui qu'ils connaissaient sur terre (même si ce rythme est accéléré malgré tout, les journées faisant deux fois moins d'heure : mais il est clair que les Anglais *font semblant*). En revanche, tous les autres représentants des nations, en tout cas les Français et les Russes, vont s'efforcer de s'adapter aux journées plus courtes de la comète.

II. Jeux avec le temps ou les « faux futurs »

Jules Verne ne se borne pas à parler du futur, il va jusqu'à créer des futurs totalement artificiels, où le rapport logique entre passé/présent/futur est particulièrement malmené par notre écrivain. Si bien que cette marche inexorable vers notre propre devenir, qui est le lot de l'humanité, prend des formes très étranges chez notre auteur, par des effets de répétition, de stationnement ou de retours en arrière qui semblent détruire les effets de réalisme de ces romans et leur donner au contraire un caractère poétique et merveilleux.

II.1. Anticipation et retours en arrière

> Le passé n'est pas, mais il peut se peindre,
> Et dans un vivant souvenir se voir ;
> L'avenir n'est pas, mais il peut se feindre
> Sous les traits brillants d'un crédule espoir !
> Le présent seul est, mais soudain s'élance

Semblable à l'éclair, au sein du néant !
Ainsi l'existence est exactement
Un espoir, un point, une souvenance !
(Jules Verne. La Vie) [11]

Jules Verne utilise volontiers un procédé relativement courant qui consiste à placer en début de roman une scène, puis à revenir en arrière dans le chapitre suivant pour nous montrer comment on en est arrivé à cette première scène (Ce sont les fameux « Voici pourquoi… », ou « Six mois plus tôt, en effet… » si fréquents chez Balzac ou chez Hugo, et qui précèdent l'analepse). Par ce procédé, on obtient par moment un effet d'inéluctabilité par rapport à cet événement qui doit forcément arriver. C'est ce qui arrive au début des *Mirifiques Aventures de maître Antifer* et d'*Un Drame en Livonie*, par exemple, mais c'est sans doute avec les *Voyages et aventures du capitaine Hatteras* qu'elle a eu son plus bel accomplissement ; et cet effet est renforcé par la lettre qu'Hatteras écrit à Richard Shandon (1, ii), dans laquelle le temps le plus utilisé est le futur simple (avec, à défaut d'en avoir le mode, un caractère impératif), car il s'agit de dire ce que Shandon devra faire ; et le lecteur sait déjà que cela a été accompli. [12]

Sauf, et c'est là tout le talent et l'astuce de Verne, qu'Hatteras continue tout au long du premier tiers du livre à envoyer des lettres (signées K. Z.) à Shandon, lui indiquant toujours la route à tenir dans un proche avenir. Or, non seulement il s'obstine à ne pas indiquer à son second le but de ce voyage (donc à se propulser dans un avenir plus lointain, dépassant les quelques jours prochains), mais de surcroît le lecteur ne peut plus savoir cette fois si ces directives se réaliseront. Pourtant, du fait que ces lettres ne cessent d'apparaître de façon invraisemblable, aux moments les plus insolites, les personnages et le lecteur peuvent avoir l'impression que tout est programmé, prévu et va se réaliser selon les désirs de ce capitaine fantôme. Celui-ci semble jouer sur deux registres à la fois : narrateur omniscient et personnage invisible. [13] Lorsque finalement Hatteras fera son apparition, l'avenir changera définitivement de statut. Alors que tout semblait prévu et programmé par une force supérieure, subitement la progression dans le temps et l'espace se fait dans la terreur, l'incertitude, l'ignorance. Plus que tout autre roman parmi la cinquantaine qui va suivre, *Voyages et aventures du capitaine Hatteras* relie l'inconnu mystérieux avec l'avenir incertain. Pourtant, l'avancée en direction du Pôle Nord pourrait faire songer à une quête des origines, comme l'est totalement *Voyage au centre de la Terre,* comme l'est en grande partie *Vingt Mille Lieues sous les mers.* L'arrivée sur l'île Victoria avait quelque chose de la redécouverte du Paradis perdu par les survivants de l'expédition, dignes des Titans des temps anciens. C'est une interprétation parfaitement plausible et raisonnable. Mais j'y vois bien au contraire une dimension inverse. D'abord, par le nombre de références à des expéditions précédentes, qui ont échoué (dans tous les sens du terme) : cette expédition ne revient pas vers des lieux disparus (genre Atlantide) ou vers des sources historiques (une période antédiluvienne ou les sources du Nil) mais va au contraire vers un lieu qui n'a jamais été violé par quelque humain que ce soit auparavant. Hatteras et ses pairs sont les premiers. La science fait un bond *en avant,* l'histoire progresse dans le temps, d'autant que seuls ceux qui auront résisté jusqu'au bout verront le Pôle Nord. Mais en même temps, à peine touché, ce pôle, représenté par un volcan, disparaît. L'avenir ne saurait être borné à un lieu géographique. Une dizaine d'années plus tard, Verne récidivera avec *L'Ile mystérieuse,* longue remontée dans le temps : au moment d'atteindre notre époque, voire même de la dépasser par le perfectionnement qu'atteint la société de l'île Lincoln, le maléfique volcan temporel se mettra en route : la route

de l'avenir sera de nouveau bloquée. Rappelons-nous que dans la nouvelle *Edom,* c'est également alors que d'éminents représentants de la société du XIXe siècle se gargarisent sur les derniers progrès du savoir et considèrent que ce progrès est illimité (ce qui est une manière de *tuer* l'avenir : il n'y a plus aucune incertitude pour un homme omnipotent, ayant évacué le divin et envahi tous les espaces) que la terre va subir cette monstrueuse montée des eaux, eaux qui vont engloutir le passé, le présent et l'avenir.

C'est ce désir d'empêcher une prise de possession de l'avenir (soit représenté par un lieu géographique, soit signifié par la maîtrise totale du savoir) qui fait sans doute que *Voyages et aventures du capitaine Hatteras* ne dispose pas d'une narration interne : on aurait bien vu Clawbonny occupant ce rôle qui semble un temps avoir été privilégié par Verne. C'est le cas des voyages sous la terre et sous les mers mais qui sont précisément une remontée dans le passé, l'avenir étant finalement représenté par l'instant de la narration. En laissant à Clawbonny la simple dimension d'un personnage parmi d'autres, ne donnant même pas son nom au titre du roman (bien qu'il me paraisse plus héroïque à tous égards que l'ennuyeux Hatteras), Verne a voulu s'assurer que l'avenir garde bien son aspect mystérieux et insaisissable, que ce soit géographiquement ou narrativement. Cette situation de l'avenir représenté par le récit lui-même et non par ce qui peut arriver à l'humanité ou aux personnages est très ironiquement illustré dans un des romans les moins célèbres de notre auteur. Dans *Le Chemin de France,* en effet, on trouve ce moment très surprenant où Natalis Delpierre écrit :

> Evidemment, puisque je vous fais moi-même ce récit, puisque je l'ai écrit de ma main, c'est que j'en suis réchappé. Mais ce qui allait être le dénouement de cette histoire, quand j'aurais eu toute l'invention d'un conteur, il m'eût été impossible de l'imaginer. Vous le verrez bientôt. (*CF,*xxiii)

Rien n'est en effet plus intéressant (mais en même temps plus usité) qu'un personnage narrateur qui raconte un événement qui est forcément au passé par rapport au moment où il en parle (où il l'écrit) mais se projette dans le futur quant aux conséquences qu'auront ces événements. Ainsi, lorsque le professeur Aronnax déclare, dans *Vingt Mille Lieues sous les mers* : « […] on comprendra l'émotion produite dans le monde entier par cette surnaturelle apparition. » (*VL,* 1, I)

Là encore, Verne a fait preuve d'originalité avec le cas plus particulier de J.-R. Kazallon, dans *Le Chancellor,* qui rédige son journal. Dès le début (premier chapitre), il écrit :

> Ai-je bien ou mal fait ? Aurai-je à me repentir de ma détermination ? L'avenir me l'apprendra. Je rédige ces notes jour par jour, et, au moment où j'écris, je n'en sais pas plus que ceux qui lisent ce journal, – si ce journal doit jamais trouver de lecteurs. (*CR,* I)

Comme s'il écrivait toujours *en direct,* son carnet en permanence dans la main, son stylo-plume de l'autre, au fur et à mesure que les événements se déroulent, sans avoir la moindre idée de ce qui va arriver dans la minute suivante. Posture invraisemblable, mais que l'illusion romanesque finit par suggérer fortement.

II.2. Le temps qui n'en finit pas ou le présent éternel

Que penser de ces unités de temps qui n'ont pas évolué et dont l'exemple le plus célèbre est le centre de la Terre ? Elles correspondent le plus souvent à un lieu particulier qui est

celui de la création. C'est un espace spatio-temporel (un chronotope) qui représente le geste artistique gratuit : ce micro-espace, bien souvent, ne participe en rien de l'action, ou alors y joue un rôle, mais de « bloqueur ». S'agissant du premier cas, l'exemple de loin le plus représentatif est sans aucun doute cette île surprenante que rencontre Hector Servadac, qui semble être sortie tout droit d'un bel emballage, tant son métal et ses formes semblent à la fois parfaites et totalement inexploitables : ce site ne peut être qu'observé, admiré, mais en aucun cas exploré ni colonisé. Le temps n'a aucune prise sur ce lieu, car il ne suit pas le temps historique, ni celui de la narration. L'objet est comme en suspens entre les deux, le narrateur a l'air fier de l'avoir inventé et de le montrer à présent à son personnage. Sauf qu'il semble qu'il ait oublié que son personnage se retrouvait face à quelque chose venu d'une autre dimension et qui n'avait en principe rien à faire avec lui, rien à faire dans cette histoire. Bien des lieux quasi-féeriques semblent avoir le même statut dans les *Voyages*.

On a vu comment Verne jouait dans *Voyages et aventures du capitaine Hatteras* entre le temps de l'histoire (le fameux passé simple censé représenter le présent pour les personnages) et celui employé par Hatteras pour ses directives (le futur à caractère impératif). A ce va-et-vient constant entre ce qu'il est nécessaire et prévu dans les jours qui suivent et ce qui est accompli dans le présent s'ajoute également un passé, celui des voyages du passé, sur les mêmes routes, narrés par le docteur Clawbonny aux membres de l'équipage. Comme le centre de la terre, le Pôle Nord est donc un voyage dans le temps. Sauf qu'alors que *Voyage au centre de la terre* et *Cinq Semaines en ballon* sont plutôt une remontée vers le passé, *Hatteras* est un voyage vers un avenir incertain et qui semble toujours fuir, cependant que le passé a lui aussi disparu de ces contrées. Mais « l'imagination du docteur » « croyait entrevoir sous les arceaux glacés de la banquise les pâles fantômes de ceux qui ne revinrent pas. » (*AH,* 1, xiii) [14]

Le lieu le plus représentatif d'un de ces *instants bloqués* est ce sphinx contre lequel les voyageurs trouvent le pauvre Pym mort, enchaîné du fait du métal de son fusil. Déjà, Pym se trouve enfermé dans un temps situé entre deux romans : il est à la frontière entre *Les Aventures d'Arthur Gordon Pym* jamais achevées d'Edgar Poe et *Le Sphinx des glaces* supposé en être la suite. En même temps, bien que retrouver Pym soit en principe le but de cette histoire, il paraît évident que celui-ci s'est comme détaché de tout temps, n'offrant aucun lien avec celui des voyageurs du *Sphinx des glaces*. D'ailleurs, lorsque finalement Jeorling et son équipe retrouvent le corps de Pym, ils sont déjà sur le chemin du retour, autrement dit cette découverte ne joue plus aucun rôle dans l'histoire, c'est un supplément qui survient à un moment de l'histoire où il n'a guère plus d'importance.

D'une autre façon, on peut dire qu'un personnage peut se retrouver dans une sorte de « point zéro » (ou en être devenu un lui-même) au milieu d'un monde dans lequel le passé ne cesse de se cogner contre le futur. C'est l'impression que ressent Joe dans *Cinq semaines en ballon* :

> […] tout d'un coup il fut pris de vertige ; il se crut penché sur un abîme ; il sentit ses genoux plier ; cette vaste solitude l'effraya ; il était le point mathématique, le centre d'une circonférence infinie, c'est-à-dire, rien ! (*CS,* xxv)

Comme si, subitement, Joe n'avait plus, l'espace d'un instant, figuré dans un temps continu, mais s'était retrouvé isolé à l'intérieur d'une *fracture temporelle.*

A contrario, Axel, lui, semble faire une remontée spectaculaire à travers toutes les époques dans *Voyage au centre de la terre* :

> Toute la vie de la terre se résume en moi, et mon cœur est seul à battre dans ce monde dépeuplé. Il n'y a plus de saisons ; il n'y a plus de climats ; la chaleur propre du globe s'accroît sans cesse et neutralise celle de l'astre radieux. […] Les siècles s'écoulent comme des jours ! Je remonte la série des transformations terrestres. […] je suis entraîné dans les espaces planétaires ! Mon corps se subtilise, se sublime à son tour et se mélange comme un atome impondérable à ces immenses vapeurs qui tracent dans l'infini leur orbite enflammée ! (VC, xxxii)

Comme souvent, Jules Verne reprend une idée ainsi ébauchée pour en faire une version plus carnavalesque. Que penser en effet de Kéraban-le-Têtu, dans le roman éponyme, dont tous les actes semblent tendre à défier l'avenir en s'accrochant sur le passé pourtant déjà disparu : bref vivant dans un présent tourbillonnant au point que le narrateur peut dire de lui : « un homme capable de partir avant même d'être arrivé ! » (*KT,* 1, x)

II.3. Le temps circulaire ou le retour vers le futur

« Tout ce qui a commencé a forcément une fin en ce monde », déclare le professeur Aronnax. (*VL,* 2, vi) Pourtant, l'ensemble des *Voyages extraordinaires* (y compris d'ailleurs *Vingt Mille Lieues sous les mers*) ne cesse de contredire cette parole d'un de ses plus éminents héros. En fait, ces voyages ne semblent jamais avoir commencé à un moment précis, il semble qu'il y ait toujours eu quelqu'un pour devancer les autres, lesquels savent que forcément quelqu'un marchera sur leurs pas et ira plus loin qu'eux. De même, les lieux ne paraissent jamais être nés à un moment précis et sous une forme définie. Tout ce monde, cet univers décrit par Verne est fait d'instabilité, de mouvements, de métamorphoses, de rassemblements, de désagrégements, d'émergences et d'immersions. Un groupe d'îles peut devenir un continent, un continent peut être englouti sous les eaux, une civilisation peut disparaître tandis qu'une autre recommencera le processus historique jusqu'à sa disparition. On songe bien entendu à ce fameux « Eternel retour » déjà cité par Nietzsche, dont *Edom* représente le paroxysme. Bien entendu, on se garderait bien de citer ce procédé temporel si cette nouvelle en était la seule illustration, la question de son attribution posant toujours d'importants débats au sein de la recherche vernienne. Mais des romans tels qu'*Hector Servadac* ou *L'Ile mystérieuse* avaient déjà abordé le sujet, même sans aller aussi loin que cette ultime œuvre. Dans *L'Ile mystérieuse,* les naufragés sont obligés de repartir du point zéro de l'histoire de l'humanité jusqu'à ce qu'ils parviennent à mettre en place une petite colonie disposant de technologies. Mais l'éruption du volcan et la disparition de l'île Lincoln montre que jamais, en dépit de ses progrès techniques, une civilisation ne peut être assurée d'avoir prise sur les événements terrestres. On a souvent parlé à ce sujet de l'influence nietzschéenne (ou platonicienne). René Pillorget y a vu également la trace de la vieille cosmologie mexicaine (et précisément, ces hommes du progrès qui discutent sont mexicains). [15] Sans doute ne faut-il pas négliger non plus le traumatisme que fut, un siècle auparavant, le tremblement de terre de Lisbonne qui marquât fortement les esprits.

Mais dans ces scènes d'aller-retour, est-il possible que le passé et le futur finissent par se rencontrer ? N'est-ce pas le véritable sens qu'il faut voir dans cette étonnante scène de raréfaction dans *Cinq Semaines en ballon* (la scène des deux ballons qui sont en fait tous deux le *Victoria,* ch. xxv). S'agit-il d'un effet d'optique, transformant l'atmosphère en un vaste miroir… ou le passé et l'avenir se sont-ils rencontrés l'espace de quelques secondes ?

Le passé peut ressusciter de diverses façons. Par exemple, un personnage peut constamment revenir sur les traces d'un autre, tels le capitaine Hatteras sur les traces de Franklin, mais surtout de Kane, ou encore nos voyageurs russes et anglais qui ne cessent de se retrouver dans des lieux déjà visités par le docteur Livingston. Ce sont aussi les traces d'une civilisation disparue qui réapparaissent, comme dans *Vingt Mille Lieues sous la mer,* avec l'Atlantide rencontrée sous les eaux. Mais une fois de plus, Verne apporte à ces procédés dont il n'est pas l'inventeur, mais le *systématiseur,* une variante originale. Dans *Autour de la Lune,* en effet, le passé est représenté par une (hypothétique) brillante civilisation sélénite, qui aurait peut-être été en avance sur nous. A contrario, nous les rattraperons dans l'avenir :

> « Si donc les Sélénites existent depuis des centaines de mille ans, si leur cerveau est organisé comme le cerveau humain, ils ont inventé tout ce que nous avons inventé déjà, et même ce que nous inventerons dans la suite des siècles. Ils n'auront rien à apprendre de nous et nous auront tout à apprendre d'eux. » (*AL,* v)

Quant au voyage initiatique de Nell dans *Les Indes Noires,* on peut s'interroger sur la question de savoir si son voyage à l'extérieur de la mine correspond à un retour vers un passé idéal, dans lequel elle pourrait se réfugier, loin des incertitudes de la Cité futuriste souterraine, si au contraire les rayons solaires qu'elle a le plaisir de découvrir annonce les Lumières du Progrès en opposition à l'aveuglement dans les ténèbres souterraines. Il n'est pas certain que Verne ne provoque pas volontairement cette ambiguïté.

III. Les choses qui arriveront… peut-être

III.1. Un monde d'hypothèses

Les Voyages extraordinaires ne sont ni manichéens (y compris pour ce qui est des personnages : il y a des méchants très méchants et des gentils trop gentils, mais il y a beaucoup de personnages ambigus), ni dogmatiques. Les narrateurs exposent des avis qui ne sont jamais censés être celui de Verne (ou alors, c'est l'homme le plus versatile, voire le plus grand schizophrène de l'histoire de la littérature). Non, ce cycle d'une richesse extraordinaire est une exposition universelle de théories, appartenant au passé, au présent et même au futur, où le fixisme voisine le darwinisme, où l'hélice et le ballon sont tous deux magnifiés, où le Pôle Nord est un volcan et le Pôle Sud un sphinx, où le neptunien et le plutonien sont finalement obligés de faire bon ménage. Cet agrégat de romans est surtout une mine d'hypothèses digne de la mine de diamants de *L'Etoile du Sud.* C'est le carrefour de tous les mondes possibles, de tous les futurs probables, de toutes les prévisions délirantes, s'appuyant aussi bien sur la tradition que sur la superstition, sur le calcul géodésique comme sur les statistiques.

C'est par exemple, dans *L'Ile à hélice,* ce moment où le narrateur dit :

> Et d'ailleurs, qui sait si la terre ne sera pas trop petite un jour pour ses habitants dont le nombre doit atteindre près de six milliards en 2072 – à ce que, d'après Ravenstein, les savants affirment avec une étonnante précision ? Et ne faudra-t-il pas bâtir sur la mer, alors que les continents seront encombrés ?... (*IH,* 1, v)

Parfois, c'est un personnage qui s'exprime : toujours dans *L'Ile à hélice,* Yvernès déclare qu'« A son opinion, le vingtième siècle ne s'écoulera pas sans que les mers soient sillonnées

de villes flottantes. » (*IH,* 1, viii) Ou Robur qui affirme que « […] cette Icarie aérienne que des milliers d'Icariens peupleront un jour ! » (*RC,* vi) Ou bien encore le capitaine Nemo :

> Et je concevrais la fondation de villes nautiques, d'agglomérations de maisons sous-marines, qui comme le *Nautilus* reviendraient respirer chaque matin à la surface des mers […] (*VL,* 1, xviii)

On voit qu'il existe un type de personnages prophétiques chez Verne. Dean Pitferge a lui aussi de beaux projets :

> « Savez-vous, mon cher monsieur, ce que je ferais du *Great Eastern* s'il m'appartenait ? Non ? Eh bien, j'en ferais un bateau de luxe à dix mille francs la place. Il n'y aurait que des millionnaires à bord, des gens qui ne seraient pas pressés. » (*VF,* xxv)

De même, Paulina Barnett qui fait aussi des projets finalement pas si utopiques que cela :

> Puis, quel charme ce serait de voyager ainsi avec sa maison, son jardin, son parc, son pays lui-même ! Une île errante, mais j'entends une véritable île, avec une base solide, insubmersible, ce serait véritablement le plus confortable et le plus merveilleux véhicule que l'on pût imaginer. On a fait des jardins suspendus, dit-on ? Pourquoi, un jour, ne ferait-on pas des parcs flottants qui nous transporteraient à tous les points du monde ? (*PF,*2, iv)

Paulina fait une prédiction métatextuelle, puisqu'elle annonce tout simplement le programme de *L'Ile à hélice* ! De même les personnages de *La Maison à vapeur,* qui présagent déjà le scénario de *Maître du monde* :

> Une maison roulante ! s'écriait-il, une maison qui est à la fois une voiture et un bateau à vapeur ! Il ne lui manque plus que des ailes pour se transformer en appareil volant et franchir l'espace !
>
> — Cela se fera un jour ou l'autre, ami Hod, répondit sérieusement l'ingénieur.
>
> — Je le sais bien, ami Banks, répondit non moins sérieusement le capitaine. Tout se fera ! Mais ce qui ne se fera pas, ce sera que l'existence nous soit rendue dans deux cents ans pour voir ces merveilles ! La vie n'est pas gaie tous les jours, et, cependant, je consentirais volontiers à vivre dix siècles – par pure curiosité ! (*MV,*1, viii)

A contrario, on s'interroge dans *Le Testament d'un excentrique* sur une possibilité qui a déjà vu sa réalisation dans un roman antérieur (c'est-à-dire dans *Voyage au centre de la terre,* rédigé trente ans plus tôt) : « […] ne découvrira-t-on pas un jour tout un monde extraordinaire dans les entrailles du globe terrestre ?... » (*TE,* 2, v) [16]

Le questionnement hypothétique représente souvent la parole finale d'un roman, tel *Autour de la lune* :

> « Et maintenant, cette tentative sans précédents dans les annales des voyages amènera-t-elle quelque résultat pratique ? Etablira-t-on jamais des communications directes avec la Lune ? Fondera-t-on un service de navigation à travers l'espace, qui desservira le monde solaire ? Ira-t-on d'une planète à une planète, de Jupiter à Mercure, et plus tard d'une étoile à une autre, de la Polaire à Sirius ? Un mode de locomotion permettra-t-il de visiter ces soleils qui fourmillent au firmament ? » (*AL,* xxiii)

Mais si on veut avoir une idée complète de tous les registres que Verne est capable d'aborder sur ce thème, on ne peut que recommander la lecture d'*Hector Servadac,* deuxième partie, onzième chapitre intitulé : « Dans lequel le monde savant de Gallia se lance,

en idée, au milieu des infinis de l'espace ». Là aussi, Verne est bien plus proche de l'anticipation ou science fiction ou tout ce qu'on voudra en matière de science hypothétique et de demain, en considérant que dans ce voyage interplanétaire, l'avenir peut offrir toutes sortes de possibles. Temps du récit (passé simple) et de la certitude (imparfait) sont rejoints par les temps du possible (futur antérieur et conditionnel). Timascheff et Servadac regardent vers l'avenir avec une certaine sécurité, se plaisent à imaginer (non sans une certaine appréhension peut-être ?) ce qui se serait passé dans un autre scénario, et en même temps doivent prendre au sérieux quelques dangers qui menacent leur comète. Quelques pages auparavant, d'ailleurs, le regard de ces personnages, beaucoup moins pétris de certitudes, allaient en voguant dans ces espaces illimités où rien n'est jamais joué, ceci dans une belle envolée narrative :

> Quand, parfois, ils considéraient la partie comme perdue, le retour à la terre comme impossible, ils se laissaient alors aller à scruter cet avenir qui les attendait dans le monde solaire, peut-être même dans le monde sidéral. Ils se résignaient d'avance à ce sort. Ils se voyaient transportés dans une humanité nouvelle et s'inspiraient de cette large philosophie qui, repoussant l'étroite conception d'un monde fait uniquement pour l'homme, embrasse toute l'étendue d'un univers habité. (*HS,* 2, ix)

Dans un article récent, Philippe Scheinhardt a précisé les modifications que Verne a apportées à son manuscrit : à l'origine, la possibilité d'un non-retour vers la terre est beaucoup plus prégnante. De ce soudain manque d'audace (si l'on peut parler ainsi s'agissant d'un roman qui multiplie les fantaisies), P. Scheinhardt pose cette question qui relativise le phénomène : « Comme tant d'autres, Jules Verne n'a-t-il pu être confronté au problème de la ramification des possibles temporels des personnages de sa chronique galienne avec le désir ou la crainte d'un choix parmi les nombreux avenirs envisageables […] ? » [17]

III.2. Un avenir apocalyptique

S'il y a des personnages verniens, en général des profanes comme Paulina Barnett ou Yvernès ou Nemo, qui émettent beaucoup d'hypothèses, d'autres, presque toujours des savants, ont au contraire un langage purement prophétique et se montrent formels dans leurs prédictions. Le docteur Fergusson, dans *Cinq Semaines en ballon,* indique le passage du conditionnel à la prédiction pure et simple. Il commence en disant :

> Et sait-on, répliqua le docteur, si quelque jour cette contrée ne deviendra pas le centre de la civilisation ? Les peuples de l'avenir s'y porteront peut-être, quand les régions de l'Europe se seront épuisées à nourrir leurs habitants.

Puis, quand Kennedy s'étonne, le docteur, pris dans son enthousiasme verbal, devient purement affirmatif, voire prédicatif : « Vois la marche des événements ; considère les migrations successives des peuples, et tu arriveras à la même conclusion que moi. » La prédiction n'est pas de la divination, mais le résultat d'un exercice de logique, à partir d'une observation du passé.

Mais plus intéressante encore est alors la réaction de Kennedy :

> …ce sera peut-être une fort ennuyeuse époque que celle où l'industrie absorbera tout à son profit ! A force d'inventer des machines, les hommes se feront dévorer par elles ! Je me suis toujours figuré que le dernier jour du monde sera celui où quelque immense chaudière chauffée à trois milliards d'atmosphères fera sauter notre globe ! (*CS,* xvi)

Kennedy devient lui aussi prophète, mais c'est parce que l'auteur de ses jours, qui fait preuve dans ce roman d'un certain optimisme, a mis dans la bouche de Fergusson la voix de l'avenir progressif et dans celle du pessimiste Ecossais le ton du futur apocalyptique. Ferguson est quasiment le seul savant du cycle vernien à montrer un éternel optimisme dans ses propos. Déjà, Aronnax annonce que « […] la terre sera un jour ce cadavre refroidi. Elle deviendra inhabitable et inhabitée comme la lune, qui depuis longtemps a perdu sa chaleur vitale. » (*VL,* 2, vii) Déclaration importante, qui me semble confirmer mon impression que l'astre d'*Autour de la Lune* est le miroir de la terre, ou plutôt le reflet de son avenir. On remarquera au passage la contradiction qui semble apportée ici à l'idée cyclique exprimée en II.3. Sauf bien entendu si les Terriens sont appelés à l'avenir à prendre la place des Sélénites.

La prophétie qui semble revenir le plus couramment dans les *Voyages* est celle qui apparaît pour la première fois à nouveau dans la bouche d'Aronnax. Il prédit en effet, au sujet de l'archipel de Pomotou dont les îles sont coralligènes, qu'

> un soulèvement lent, mais continu, provoqué par le travail des polypes, les reliera un jour entre elles. Puis, cette nouvelle île se soudera plus tard aux archipels voisins, et un cinquième continent s'étendra depuis la Nouvelle-Zélande et la Nouvelle-Calédonie jusqu'aux Marquises.

Dans *Le Chancellor,* J.-R. Kazallon fait exactement la même prédiction concernant l'archipel bermudien :

> « D'ailleurs, il est destiné à s'accroître, et probablement sur une vaste échelle. Avec le temps – ce principe du travail de la nature -, cet archipel, déjà composé de cent cinquante îles ou îlots, en comptera un plus grand nombre, car la madrépores travaillent incessamment à construire de nouvelles Bermudes, qui se relieront entre elles et formeront peu à peu un nouveau continent. » (*CR,* 5)

Et on renchérit à ce sujet dans *L'Ile mystérieuse* :

> « Et je crois bien que, les siècles succédant aux siècles et les infusoires aux infusoires, ce Pacifique pourra se changer un jour en un vaste continent, que des générations nouvelles habiteront et civiliseront à leur tour. » (*IM,* 1, xxi)

C'est Yvernès qui va le plus loin, en prédisant « dans un élan de prophétique enthousiasme » que « sur ces parages actuellement sillonnés par les voiliers et les steamers, fileront à toute vapeur des trains express qui relieront l'ancien et le nouveau monde… » (*IH,* 1, xii)

Mais il est bien difficile de faire des prédictions dans un monde aussi instable, comme le remarque à nouveau dans *Le Chancellor* André Letourneur :

> « — Qui sait s'il ne disparaîtra pas bientôt par suite d'un phénomène semblable à celui qui l'a produit ? répond André Letourneur. Vous le savez, monsieur Kazallon, ces îles volcaniques n'ont souvent qu'une durée éphémère, et quand les géographes auront inscrit celle-ci sur leurs nouvelles cartes, peut-être n'existera-t-elle déjà plus ! » (*CR,* xviii)

Autre prédiction, celle de Pencroff dans *L'Ile mystérieuse* :

> « […] nous ferons de cette île une petite Amérique ! Nous y bâtirons des villes, nous y établirons des chemins de fer, nous y installerons des télégraphes, et un beau jour, quand elle sera bien transformée, bien aménagée, bien civilisée, nous irons l'offrir au gouvernement de l'Union ! » (*IM,* 1, xi)

Mais c'est toujours dans *L'Ile mystérieuse* qu'apparaît la prédiction la plus détaillée, de la bouche de Cyrus Smith, sur le devenir de la planète (*IM,* 1, xxi). Prophète parmi les prophètes, Cyrus en prodigue d'ailleurs une autre concernant cette fois le devenir des ressources naturelles (2, xi).

Beaucoup plus cynique est le ton du dialogue suivant entre le capitaine Nicholl et Michel Ardan :

> « — Alors, demanda Nicholl, qu'arriverait-il donc si la Terre s'arrêtait subitement dans son mouvement de translation ?
>
> « — Sa température serait portée à un tel point, répondit Barbicane, qu'elle serait immédiatement réduite en vapeurs.
>
> « — Bon, fit Michel, voilà un moyen de finir le monde qui simplifierait bien les choses. » (*AL,* vi)

Et que penser de ces réflexions, dans *L'Invasion de la mer* ?

> — Eh bien, mon cher Hardigan, ne vous plaignez pas trop, car si tout le Sahara eût été encore d'un niveau inférieur à celui de la Méditerranée, soyez sûr que nous l'aurions transformé en Océan depuis le golfe de Gabès jusqu'au littoral de l'Atlantique ! comme cela a dû exister en certaines périodes géologiques.
>
> — Décidément, déclara en souriant l'officier, les ingénieurs modernes ne respectent plus rien ! Si on les laissait faire, ils combleraient les mers avec les montagnes et notre globe ne serait qu'une boule lisse et polie comme un œuf d'autruche, convenablement disposée pour l'établissement de chemins de fer ! (*IR,* vi)

III.3. L'avenir est dans le livre

Si les *Voyages extraordinaires* nous donnent de magnifiques aperçus d'avenirs possibles (et certaines des hypothèses que nous avons rencontrées se sont vérifiées – hélas, pour certaines d'entre elles !), on ne doit jamais oublier que ces voyages sont, précisément, « extraordinaires ». Ils proposent plusieurs lectures du monde réel, mais ils finissent, au fil des tomes, par créer un véritable univers proche du nôtre, mais tout de même parallèle, ne serait-ce que par sa tendance à emprunter au lointain passé, au présent (il faut bien sûr songer au XIXe siècle) et au futur (dont nous sommes en partie les représentants). De plus, l'étendue de l'écriture de ce cycle (quarante ans) fait qu'il crée des origines et des devenirs à la fois à ses divers narrateurs et à l'histoire qu'il raconte.

Bien plus à mon sens que les machines ou les explorations, ce qui fait la modernité des *Voyages*, c'est son caractère métatextuel. Bien avant les surréalistes et les nouveaux romanciers (bien après Scarron, Diderot et Sterne), Verne n'a cessé de se mettre en scène de façon déguisée dans son œuvre et de laisser entendre que cet univers était d'abord *le sien.* De ce fait, l'avenir présenté dans ces histoires est aussi celui de l'ouvrage dans lequel elles sont présentées. Ou pour être plus exact, la narration et le volume sont les bornes à la fois physique et temporelle des *Voyages.* Ceci est sans doute logique pour le lecteur… mais est également exprimé par les personnages. L'avenir pour nombre d'entre eux est en effet représenté de deux façons. D'abord par un discours qui annonce quel sera le programme de l'ouvrage ; ensuite par ce moment particulier où quelqu'un lira leurs aventures. [18]

S'agissant du premier cas, le discours programmatique peut être proféré par un narrateur ; tel celui de *La Jangada* qui nous prédit quelle sera la réaction de Yaquita selon la manière d'agir de son époux, Joam Garral (*JA,* 1, v). Cette sorte de parole omnisciente qui prévoit tous les cas de figure est largement usitée en ce siècle de Balzac et de Hugo. Plus particulier à Verne, cette manière dont un des personnages annonce aux autres ce qui va arriver selon si les choses continuent en l'état, ou si elles se passent comme on le souhaite. D'une certaine manière, le personnage annonce la suite du livre et fait saliver aussi bien ses compagnons que le lecteur. L'un des meilleurs exemples est cette déclaration du capitaine Nemo :

> Laissez-moi donc vous dire, monsieur le professeur, que vous ne regretterez pas le temps passé à mon bord. Vous allez voyager dans le pays des merveilles. L'étonnement, la stupéfaction seront probablement l'état habituel de votre esprit. Vous ne vous blaserez pas facilement sur le spectacle incessamment offert à vos yeux. Je vais revoir dans un nouveau tour du monde sous-marin – qui sait ? le dernier peut-être – tout ce que j'ai pu étudier au fond de ces mers tant de fois parcourues, et vous serez mon compagnon d'études. A partir de ce jour, vous entrez dans un nouvel élément, vous verrez ce que n'a vu encore aucun homme […] (*VL,* 1, x)

Le personnage qui « fait le programme » peut se tromper du tout au tout, comme Matakit, dans *L'Etoile du Sud,* qui se prédit un avenir qui ne se réalisera pas (*EO,* vii). Ou encore M. Perry, le régisseur des Burbank dans *Nord contre Sud,* qui déclare, au sujet des Noirs, que « Si on les livre à leur seule volonté, ils dépériront, et la race en sera bientôt perdue. » (*NS,* 1, vi). On peut même dire qu'à la longue, on nous permet de juger d'un personnage par sa propension à être bon ou mauvais prophète et il est certain que Matakit et Perry sont plutôt des êtres ridicules. En revanche, beaucoup plus prophétique est le propos, toujours dans *Nord contre Sud,* de James Burbank :

> Je crains que le Sud ne marche à des désastres qu'il aurait pu éviter, et c'est dans son intérêt même que j'aurais voulu le voir suivre une autre voie au lieu de s'engager dans une guerre contre la raison, contre la conscience universelle. Vous reconnaîtrez un jour que ceux qui vous parlent, comme je le fais aujourd'hui, n'avaient pas tort. Quand l'heure d'une transformation, d'un progrès moral a sonné, c'est folie de s'y opposer. (*NS,* 1, vii)

L'avenir est également vu selon la façon dont la narration de toutes ces aventures va être lue. *Cinq Semaines en ballon* s'achève par une allusion à la lecture qu'on fera du compte-rendu de ce voyage. [19] Dans *Vingt milles lieues sous les mers,* Nemo remet un ouvrage au professeur Aronnax en lui déclarant solennellement :

> Voici, monsieur Aronnax, un manuscrit écrit en plusieurs langues. Il contient le résumé de mes études sur la mer, et, s'il plaît à Dieu, il ne périra pas avec moi. Ce manuscrit, signé de mon nom, complété par l'histoire de ma vie, sera renfermé dans un petit appareil insubmersible. Le dernier survivant de nous tous à bord du *Nautilus* jettera cet appareil à la mer, et il ira où les flots le porteront. (*VL,* 2, xix)

Pour Nemo, l'avenir se résume désormais en ce manuscrit. Or, tout ceci nous est rapporté par Aronnax qui est, comme on le sait, le narrateur interne de cette histoire. C'est donc un autre manuscrit (dans lequel celui de Nemo est mis en abyme) qui présente les limites temporelles de toute cette épopée finalement très limitée dans le temps (une bonne année), qui pose beaucoup de questions pour le futur, mais qui en même temps semble considérer ce futur en suspension du fait même de renvoyer aux lecteurs de l'histoire.

Plus subtil encore (ou plus ironiquement prétentieux), Kazallon fait des projections sur l'avenir à partir des enseignements que ses lecteurs tireront de la lecture de ses écrits :

> Que l'on me pardonne ces détails ! Je ne dois rien cacher de ce que les naufragés du *Chancellor* ont souffert ! On saura, par ce récit, tout ce que des êtres humains peuvent supporter de misères morales et physiques ! Que ce soit l'enseignement de ce journal ! Je dirai tout, et, malheureusement, je pressens que nous n'avons pas encore atteint le maximum de nos épreuves ! (*CR,* xl)

Tout au long des *Voyages,* on se soucie donc à la fois de savoir comment se terminera l'aventure, mais aussi comment elle sera appréciée par les lecteurs. Dans *Le Village aérien,* Max et John semblent très soucieux de ce que penseront les lecteurs du récit rédigé par John. Or, cette interrogation se produit dès le premier chapitre, alors qu'il ne leur est rien arrivé. Comme pour s'excuser auprès des lecteurs de déclencher des aventures peu ordinaires. Pour ne citer que cet exemple (car le phénomène est récurrent), à plusieurs reprises, dans *Le Volcan d'or*, il est fait allusion à « un grand livre de la destinée » qui décide du sort du malheureux Summy Skin. On songe au « grand livre » de *Jacques le Fataliste ;* on songe surtout que ce « grand livre de la destinée », c'est le scénario élaboré par Verne lui-même, qui a le délicieux privilège de pouvoir décider du futur au moins pour son propre univers. Lui qui a été jusqu'à représenter l'avenir pour l'univers en suspension d'un autre créateur (je fais allusion bien entendu au *Sphinx des glaces,* « suite » des *Aventures d'Arthur Gordon Pym* de Poe). Au fond, peut-être Jules Verne ne s'est jamais exposé comme auteur dans un de ses romans autant que lorsque Jeorling, narrateur interne du *Sphinx des glaces,* déclare :

> Me voici donc lancé dans les aléas d'une aventure qui, selon toute probabilité, dépasserait en imprévu mes voyages antérieurs. Qui aurait cru cela de moi ?... Mais j'étais saisi dans un engrenage qui me tirait vers l'inconnu […] Et, cette fois, qui sait si le sphinx des régions antarctiques ne parlerait pas pour la première fois à des oreilles humaines ?... (*SG,* 1, ix)

Au tout début du *Château des Carpathes*, le narrateur a cette formule : « Si notre récit n'est point vraisemblable aujourd'hui, il peut l'être demain, grâce aux ressources scientifiques qui sont le lot de l'avenir […] » Si les deux mondes, celui du réel et l' « univerne » restent parallèles, l'avenir n'a cessé et ne cessera de leur réserver de plus en plus d'interconnexions.

NOTES

1. Quoique datés, les travaux de Mickhaïl Bakhtine sur ce sujet, et notamment sur le « chronotope », me semblent toujours être un objet de référence. Cf. pour l'édition française, Mickhaïl Bakhtine, *Esthétique et théorie du roman,* Paris, Gallimard, 1978.
2. Dans son *Encyclopédie*, Pierre Versins qualifie *Cinq semaines en ballon* de « légère conjecture ». Selon la définition de Versins, la science-fiction est « l'ensemble des conjectures romanesques rationnelles ». Le roman de Verne – donnant les détails de la découverte des sources du Nil par Fergusson et ses deux compagnons – a été publié plus de trois mois avant l'annonce à Londres de la découverte – réelle – des sources de ce même Nil par le capitaine anglais John Hanning Speke (1827–1864). Si Speke atteint les sources – l'exutoire du lac Victoria – le 28 juillet 1862, ce n'est que le 30 avril 1863 que le télégramme envoyé d'Alexandrie parvient à Londres, annonçant le retour de Speke à Khartoum.
3. Il s'agit du lieutenant Villette, *L'Invasion de la mer,* chapitre VIII.

4. On trouvera bien entendu cette savoureuse exception que représente *Le Tour du monde en quatre-vingts jours* avec son « jour fantôme ». Au fur et à mesure de sa progression vers l'est, Fogg, s'il avance spatialement, s'il avance également dans la chronologie, fait toujours vingt-trois pas en avant, un pas en arrière (si l'on veut bien remplacer les heures par des pas). Sur ce sujet, voir Daniel Compère, « Le jour fantôme », in *Jules Verne 1,* « Le Tour du monde », Paris : Minard, Lettres modernes, 1976, pp. 31–51.
5. Philippe Mustière, « Jules Verne et le roman-catastrophe », in *Bulletin de la Société Jules Verne* n° 47, 3e trim. 1978, p. 205.
6. Lucian Boia, « Un écrivain original : Michel Verne », in *Bulletin de la Société Jules Verne* n° 70, 2e trim. 1984, p. 91
7. Jean-Pierre Picot, « Jules Verne est-il un auteur de science-fiction ? », in *Jules Verne cent ans après,* Actes du Colloque de Cerisy, éd. J.-P. Picot et C. Robin. Rennes : Terre des brumes, 2005, pp. 453–454.
8. Dans le même article, Jean-Pierre Picot remarque qu' « il y a régulièrement confusion entre la réalité du texte vernien, texte objet d'un souvenir lointain et non relu de fraîche date, et *un souvenir déformant.* Ce souvenir déformant comble des lacunes restées ouvertes dans l'horizon d'attente du lecteur d'autrefois […] » (*Ibid,* p. 437) On ne peut que partager cette opinion, mais j'ajouterai que Verne fait tout pour qu'il en soit ainsi, suggérant, frôlant, entrouvrant toujours la porte et laissant dépasser un pied dans le corridor de tous les possibles, sans jamais vraiment entrer, mais laissant aux lecteurs respirer des parfums d'horizons lointains dans l'espace et dans le temps, hommes préhistoriques, années-lumière ou XXe siècle.
9. On pourrait être tenté de considérer également *L'Ile à hélice* comme un autre roman futuriste, de la même manière que *Paris au XXe siècle*. En réalité, ces deux romans sont très éloignés l'un de l'autre. Même s'il paraît tourné en apparence vers l'avenir, *L'Ile à hélic*e montre plutôt une sorte d'ilot futuriste détaché du reste du monde qui ne vivrait pas du tout de la même façon que lui. On ne doit pas oublier que les Français sont très étonnés de ce qui se passe dans *Standard-Island*, preuve que les choses sont différentes sur la terre ferme. Le futurisme dans ce roman consiste surtout en gadgets et en matériaux haute technologie acquis par des gens fortunés mais dont les mentalités restent très dix-neuvième siècle. Dans *Paris au XXe siècle*, en revanche, toute la société et les mentalités de ceux qui constituent cette société sont futuristes.
10. Jean Delabroy, « La pierre du dernier salut. *Les Indes noires* », in *Jules Verne 5,* « émergences du fantastique », Paris : Lettres modernes Minard, 1985, p. 46.
11. Jules Verne, « La Vie », in *Poésies inédites,* éd. C. Robin, Paris : Le Cherche Midi éditeur, 1989, « La Bibliothèque Verne », p. 176. Je remercie Volker Dehs de m'avoir rappelé l'existence de ce poème.
12. Le procédé a d'autant plus de saveur que le premier chapitre est situé en 1860, que le retour en arrière est daté de 1859, mais que les premiers lecteurs en auront connaissance en 1864, ce qui me paraît poser la question de la date de rédaction : j'ai toujours cité, comme tout le monde à ma connaissance, l'année 1863, à la suite de *Cinq Semaines en ballon ;* j'émettrai désormais les plus grandes réserves à ce sujet pour cette raison et pour d'autres motifs qui n'ont pas leur place ici.
13. On sait qu'une variante de ce procédé sera utilisée dans *L'Ile mystérieuse.* Des événements mystérieux qui laissent supposer qu'un personnage vit caché quelque part dans l'île et veille sur les faits et gestes des naufragés, leur apportant de l'aide, allant finalement jusqu'à leur écrire un message.
14. En revanche, je ne vois pas *Hector Servadac* pouvoir être considérée comme une œuvre futuriste. Il s'agit d'un chef-d'œuvre à la fois fantastique, poétique et satirique, avec des héros à qui il arrive une aventure totalement invraisemblable (et qui n'a donc rien d'anticipateur) mais qui, dans leur

façon d'être, se comportent exactement comme des citoyens des années 1870. Il n'y a aucune évolution d'enregistrée dans ce roman, ce serait même plutôt l'inverse.

15. René Pillorget, « Optimisme ou pessimisme de Jules Verne », in *Europe* n° 595–596 spécial Jules Verne, nov.–déc. 1978, p. 26.

16. Ce sujet a fait l'objet de deux articles fondateurs, beaucoup plus détaillés : voir Volker Dehs, « Prélèvement et remploi dans l'œuvre vernienne », *Bulletin de la Société Jules Verne* n° 79 (1986), pp. 27–31 ; et Daniel Compère, « Reflets et projections dans l'œuvre vernienne », *Bulletin de la Société Jules Verne* n° 82 (1987), pp. 9–17.

17. Philippe Scheinhardt, « Allers et retours de la plume. Sur les pages du brouillon de *La Comète* », in *Europe* n° 909–910 spécial « Jules Verne », janv.–févr. 2005, p. 168.

18. On ne peut que renvoyer, pour ce qui concerne le phénomène métatextuel, à l'ouvrage de Daniel Compère, *Jules Verne écrivain.* Genève : Droz, 1991. Plus particulièrement au chapitre intitulé « Le ludotexte », pp. 89–121.

19. Simone Vierne a minutieusement relevé ce moment où la voix narrative « se fait de plus en plus distante, de plus en plus officielle », « passage du récit direct aux récits des journaux, puis au récit de Fergusson », « et un dernier paragraphe éloigne encore le narrateur, et la participation des lecteurs, de ce qui a été raconté ». « Ainsi, Jules Verne ne joue pas jusqu'au bout le jeu du 'récit véridique parce qu'il a été rédigé d'après des notes de voyage', ou du moins il rend ce jeu ambigu. » (*Jules Verne. Une vie, une œuvre, une époque.* Paris, Balland, 1986, pp. 134–135)

ABRÉVIATIONS

AH = Voyages et aventures du capitaine Hatteras (Paris : Hetzel, 1866)

AL = Autour de la Lune (Paris : Hetzel, 1870)

CC = Le Château des Carpathes (Paris : Hetzel, 1892)

CF = Le Chemin de France (Paris : Hetzel, 1887)

CL = César Cascabel (Paris : Hetzel, 1890)

CM = La Chasse au météore (Paris : Hetzel, 1908)

CR = Le Chancellor (Paris : Hetzel, 1875)

CS = Cinq semaines en ballon (Paris : Hetzel, 1863)

EO = L'Etoile du Sud (Paris : Hetzel, 1884)

FN = Famille-sans-nom (Paris : Hetzel, 1889)

HS = Hector Servadac (Paris : Hetzel, 1877)

IH = L'Ile à hélice (Paris : Hetzel, 1895)

IM = L'Ile mystérieuse (Paris : Hetzel, 1874–75)

IN = Les Indes Noires (Paris : Hetzel, 1877)

IR = L'Invasion de la mer (Paris : Hetzel, 1905)

JA = La Jangada (Paris : Hetzel, 1881)

KT = Kéraban-le-têtu (Paris : Hetzel, 1883)

MB = Mistress Branican (Paris : Hetzel, 1891)

MM = Maître du monde (Paris : Hetzel, 1904)

MV = *La Maison à vapeur* (Paris : Hetzel, 1880)

NS = *Nord contre Sud* (Paris : Hetzel, 1887)

PB = *P'tit-Bonhomme* (Paris : Hetzel, 1893)

PF = *Le Pays des fourrures* (Paris : Hetzel, 1873)

RC = *Robur le conquérant* (Paris : Hetzel, 1886)

SD = *Sans dessus dessous* (Paris : Hetzel, 1889)

SG = *Le Sphinx des glaces* (Paris : Hetzel, 1897)

TE = *Le Testament d'un excentrique* (Paris : Hetzel, 1899)

VA = *Le Village aérien* (Paris : Hetzel, 1901)

VC = *Voyage au centre de la Terre* (Paris : Hetzel, 1864)

VL = *Vingt mille lieues sous les mers* (Paris : Hetzel, 1869–70)

VO = *Le Volcan d'or* (Paris : Hetzel, 1906)

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Samuel Sadaune (samuel.sadaune@wanadoo.fr) est écrivain. Ses livres sont publiés principalement aux éditions Ouest-France et aux éditions Millefeuilles. Il est membre de la Société Jules Verne à Paris et du Centre international Jules Verne à Amiens. Pour le compte de ce dernier, il a participé à l'organisation et animé plusieurs colloques, notamment le Mondial Jules Verne 2005, les Rencontres internationales 2007 spécial Editions Jules Verne en ligne et les Rencontres internationales 2009 spécial Maître Zacharius. Il a rédigé une trentaine d'articles sur Jules Verne et a plusieurs fois coordonné la Revue Jules Verne du CIJV. Deux ouvrages publiés chez Ouest-France concernent Jules Verne : l'édition des Contes et nouvelles de Jules Verne (Ouest-France, 2003) et Les Soixante Voyages extraordinaires de Jules Verne (Ouest-France, 2005). Enfin, il est l'auteur d'une thèse, soutenue en 2001, ayant pour titre : L'hygiène dans l'œuvre de Jules Verne.

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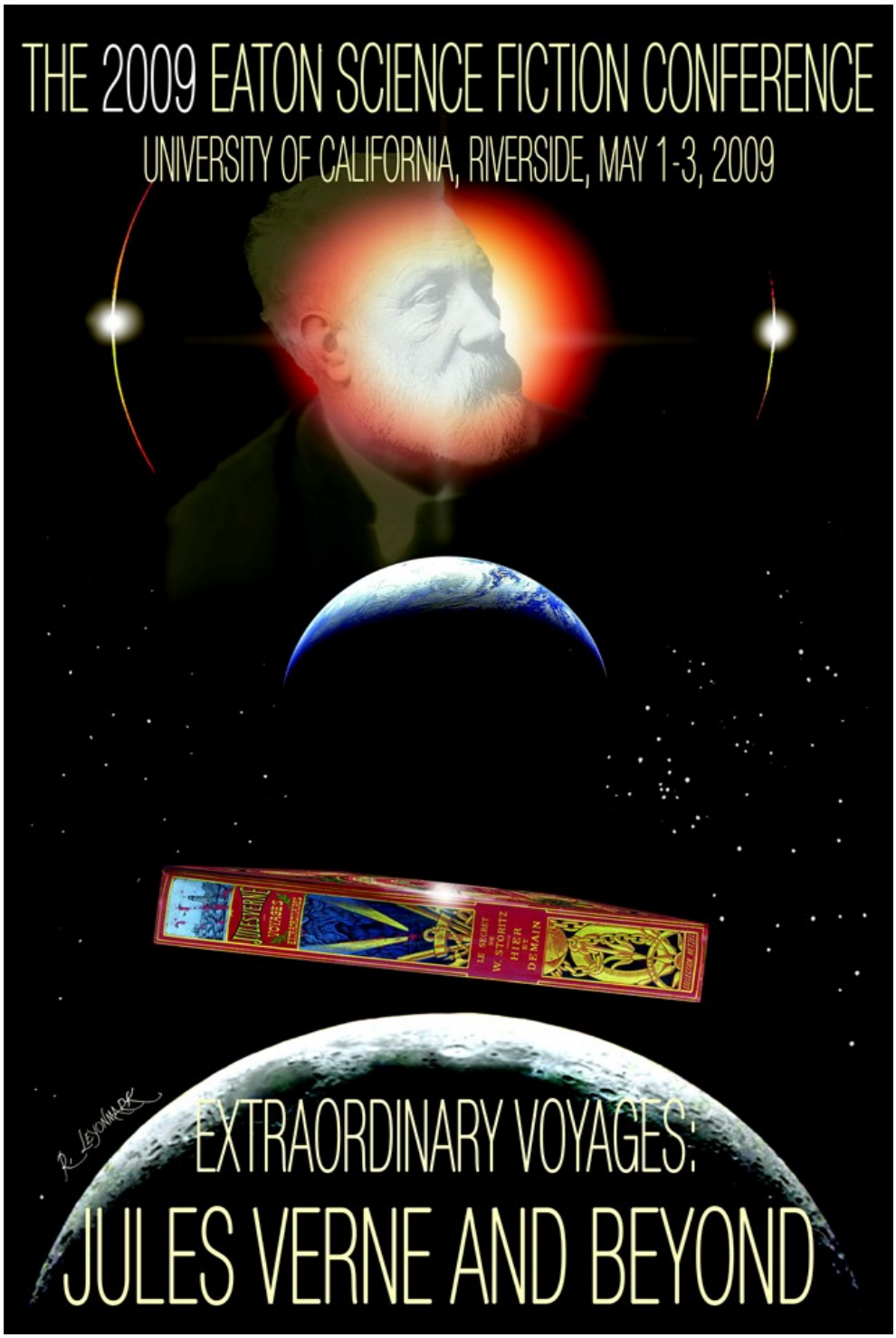

The 2009 Eaton Sequence

Arthur B. Evans – Terry Harpold – Rob Latham – George Slusser

Housed in the Tomás Rivera Library of the University of California, Riverside, the J. Lloyd Eaton Collection of Science Fiction, Fantasy, Horror and Utopian Literature (http://eaton-collection.ucr.edu/) is the largest cataloged collection of its kind in the world and the premier academic research center for science fiction scholarship in North America. Founded in 1969 with the donation of the private collection of J. Lloyd Eaton, an Oakland, California physician and book collector, the Collection has grown from an initial 7500 books to some 125,000 volumes and many thousands of films, comic books, manga, and pulp magazines in more than a dozen languages. The Eaton's outstanding collection of science fiction fanzines numbers more than 90,000 issues, making it one of the most complete and authoritative archives of this important, ephemeral literatures.

Since 1979, the Eaton Collection has developed in a symbiotic relationship with the Eaton [Science Fiction] Conferences (http://eaton-collection.ucr.edu/TheEatonConference.htm), which have included participation by many of the foremost authors, artists, and scholars of science fiction and fantasy. Usually focused on a specific theme, collegial but also pathbreaking, many of the Conferences have represented breakthrough moments in the emergence of science fiction studies as a respected and influential academic field. They have generated thirty edited collections of science fiction scholarship, as well as special issues of *Science Fiction Studies* and *Extrapolation.* In 2009, McFarland Press has published two Eaton-related books: *The Science of Fiction and the Fiction of Science*, the collected Eaton essays of Frank McConnell, and Gary Westfahl and George Slusser's *Science Fiction and the Two Cultures*, essays from the 1999 Eaton Conference, issued on the 50th anniversary of C.P. Snow's famous lecture. A volume from the 2008 Eaton Conference, *Chronicling Mars*, is in preparation; it features essays and comments by Ray Bradbury, Kim Stanley Robinson, Fredrik Pohl, Greg Bear, Joe Miller, Eric Rabkin, Geoff Landis, and other Martian visionaries.

The theme of the 2009 Eaton Conference, held at Riverside in early May, was "Extraordinary Voyages: Jules Verne and Beyond." The Conference was cosponsored by the North American Jules Verne Society (http://www.najvs.org), and funded by UC Riverside's College of Humanities and Social Sciences and the Rivera Library. The Conference featured three plenary lectures by John Rieder, Walter James Miller, and Marie-Hélène Huet; five panel discussions (on *The Emergence of Modern Science Fiction*; *The Two Jules Vernes*; *Extraordinary Revision, Repetition, and Pastiche*; *Collecting Verne*; and *Steampunk and Extraordinary Voyages*); and 22 papers by North American and European scholars, archivists, and science fiction authors. The topics of the papers and presentations ranged widely within the traditions of the extraordinary voyage; not surprisingly, Verne's signal role in and lasting influence on those traditions, and on much of modern speculative fiction and art, was central to the discussions.

All the events were well attended, with the audience peaking during Saturday afternoon's awards ceremony, which included the bestowal of the R.D. Mullen Research Fellowships to graduate students doing work in the Eaton archive, the student short story awards, and the second annual Eaton Lifetime Achievement Award (given to Frederik Pohl). An illness prevented Pohl from attending, but he recorded a warm and funny acceptance speech that was screened for the assembly. Authors who did participate in the weekend's events included Greg Bear, Gregory Benford, Kathleen Ann Goonan, Howard Hendrix, Tim Powers, and Rudy Rucker. By general consent, the level of discussion sustained over the three days was remarkably high, and the audience came away with a deeper appreciation for Verne's literary skill, his political acumen, his sophisticated humor, his engagement with scientific discourses, and his importance for subsequent science fiction.

As significant, the conference served to facilitate a much-needed rapprochement between two important but estranged domains of literary scholarship – Verne studies and Anglo-American science fiction studies. During the past several decades, as both fields have become more sophisticated and specialized, they seem to have often lost sight of each other. As courses on science fiction began to multiply in British and North American universities, sf scholars often brought new critical perspectives to the field: women writers (feminism), "dime novels" and the American pulp genres (cultural studies), the ideological foundations of social identity (Marxism), the role of the popular science fiction film (media studies), or the evolving understanding of the real in Western technoculture (postmodernism). Verne's role in the emergence of modern imaginative fiction was often minimized or ignored altogether. Many sf scholars avoided Verne for one of two reasons: 1) he was considered to be simply a writer of children's stories and not "serious" enough to warrant inclusion in literary sf; or 2) his novels – and, until recently, most of the worthwhile criticism on them – were available only in French: many "Anglo-Saxon" sf scholars can read only English, and know only the grotesque Victorian mis-translations of Verne they read as children. Even as complete, accurate, and graceful English translations of Verne's novels have become available, it is still unusual for Verne to be taught with any depth in British and North American universities.

For their part, Verne scholars have resisted associating Verne with the genre of science fiction. They have focused instead on enhancing his status as a recognized author of world literature, on publishing improved translations of his works, and on working to shed his stereotypical reputation as "the man who invented the future" or "the father of sci-fi." Verne scholars have argued long and loudly that Verne *is not and never has been* a writer of "sci-fi" because his texts include no aliens, A.I.s, or warp drives. The Anglo-American treatment of Verne as an icon of futurism undercuts and trivializes his importance as a mainstream 19th-century author.

The 2009 Eaton Conference marked a watershed moment in the exchanges between these factions. The growing momentum of new and excellent English-language Verne scholarship can no longer be ignored in the sf community, which is coming to recognize the achievement of a forebear. Vernians are coming to appreciate that Verne can be *both* one of the founders of modern sf *and* a major voice in 19th-century French and world literatures. These are the conditions of a genuine and productive dialogue, and a new way forward for Verne and sf studies alike.

This Eaton Special Sequence of Verniana collects many of the best papers from the 2009 Conference in which the work and influence of Verne was a principal focus. Taken as a whole, this body of scholarship represents a major contribution to modern Verne Studies, and demonstrates the new diversity, depth, and vitality of Verne scholarship in North America, which is in several respects distinctive from – but no less rigorous or original than – Verne scholarship in other national traditions. The success of the 2009 Eaton Conference reaffirms the evidence of other national and international congresses of recent years: in the 21st century, Verne's status as a world author is assured.

Guest Editors of the Eaton 2009 Special Sequence

- Arthur Evans, Professor of French, DePauw University

- Terry Harpold, Associate Professor of English, Film & Media Studies, University of Florida

- Rob Latham, Associate Professor of English, University of California, Riverside

- George Slusser, Curator Emeritus, Eaton Collection of Science Fiction, Fantasy, Horror, & Utopian Literature; Professor Emeritus of Comparative Literature, University of California, Riverside

A Note re the papers collected in the Special Sequence

Verniana publishes texts accepted by its Editorial Board when editing and production of each text is complete. Thus, the papers in the Special Sequence will be published in the journal irregularly, over the next several months, as they readied. These papers have been selected by the Guest Editors for inclusion in the Sequence:

Terry Harpold (University of Florida) “Professor Lidenbrock and the Mole Men”

William B. Jones, Jr., “From *Michael Strogoff* to *Tigers and Traitors*: The Extraordinary Voyages of Jules Verne in Classics Illustrated”

Kieran O’Driscoll (Dublin City University), “Taking the Child Reader on an Extraordinary Journey to the Center of the World of Verne”

Peter Schulman (Old Dominion University), “*The Secret of Wilhelm Storitz*: Fathers and Sons at Work”

Matthew Snyder (University of California, Riverside), “Oceans of Noise: Archetypal Readings of Jules Verne in *The Abyss*”

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La suite Eaton 2009

Arthur B. Evans – Terry Harpold – Rob Latham – George Slusser

Logée à la Bibliothèque Tomás Rivera de l'Université de Californie à Riverside, la collection J. Lloyd Eaton de littérature de science-fiction, de “Fantasy”, d'horreur et d'utopie (http://eaton-collection.ucr.edu/) est la plus importante collection cataloguée de ce type au monde et le centre le plus important de la recherche académique en science-fiction en Amérique du nord. Elle débuta en 1969 par le don de la collection privée de J. Lloyd Eaton, médecin à Oakland (Californie) et collectionneur de livres. La collection a grandi, passant des 7500 volumes du début aux 125.000 livres actuels, accompagnés de plusieurs milliers de films, bandes dessinées, manga, et périodiques pulps en plus de douze langues. L'exceptionelle collection Eaton de fanzines comprend plus de 90.000 exemplaires différents. Ce sont les archives de référence les plus complètes de ce type important de littérature éphémère.

Depuis 1979, la collection Eaton a développé une collaboration symbiotique avec les Conférences Eaton de SF (http://eaton-collection.ucr.edu/TheEatonConference.htm), auxquelles ont participé de nombreux auteurs, artistes et spécialistes de premier plan dans les domaines de la science-fiction et de la “Fantasy”. Généralement axées sur un thème central, aussi bien classique que de pointe, nombreuses de ces conférences ont constitué des moments importants dans l'émergence des études de SF comme une discipline académique respectée et influente. Elles ont donné lieu à trente collections publiées d'études de science-fiction et sont à l'origine de numéros spéciaux de *Science Fiction Studies* et d'*Extrapolation*. En 2009, McFarland Press a publié deux ouvrages liés étroitement à Eaton: la collection des études Eaton de Frank McConnell *The Science of Fiction and the Fiction of Science*, et l'ouvrage de Gary Westfahl et George Slusser *Science Fiction and the Two Cultures*, études de la conférence Eaton de 1999, commémorant le cinquantième anniversaire de la fameuse conférence de C.P. Snow. Le volume de la conférence 2008 est en préparation; il contiendra des études et commentaires de Ray Bradbury, Kim Stanley Robinson, Fredrik Pohl, Greg Bear, Joe Miller, Eric Rabkin, Geoff Landis, et autres visionnaires martiens.

Le sujet de la Conférence Eaton 2009 – qui s'est déroulée à Riverside (Californie) au début de mai – était : *Voyages extraordinaires: Jules Verne et au-delà* (“Extraordinary Voyages: Jules Verne and Beyond”). La conférence était soutenue par la Société Jules Verne nord-américaine (“North American Jules Verne Society”, NAJVS – http://www.najvs.org), et financée par l'Ecole des humanités et sciences sociales et la Bibliothèque Rivera de l'Université de Californie à Riverside. La conférence a tenu trois sessions plénières avec des conférences de John Rieder, Walter James Miller et Marie-Hélène Huet, a réuni cinq groupes de discussions sur l'*Emergence de la science- fiction moderne*, *Les Deux Jules Verne*, *Révision, répétition et pastiches extraordinaires*, *Collectionner Verne* et *Le “Steampunk” et les Voyages extraordinaires*, et a programmé vingt-deux conférences par des spécialistes, savants et auteurs de science fiction d'Europe et d'Amérique du nord. Les sujets traités par les conférenciers et participants aux discussions touchaient largement au thème traditionnel des voyages extraordinaires et de l'influence de Verne aussi bien sur les thèmes traditionnels que sur la littérature et l'art moderne de science fiction.

L'audience fut nombreuse à toutes les sessions, culminant lors des cérémonies de remises de prix le samedi après-midi. Des bourses du R.D. Mullen Research Fellowship furent décernées aux étudiants gradués travaillant aux archives Eaton, des prix distribués aux étudiants auteurs de nouvelles, et le deuxième “Eaton Lifetime Achievement Award” décerné à Frederik Pohl. La maladie empêcha Pohl d'être présent, mais il avait enregistré un discours d'acceptation chaleureux et plein d'humour, suivi avec attention par l'assistance. Les auteurs Greg Bear, Gregory Benford, Kathleen

Ann Goonan, Howard Hendrix, Tim Powers et Rudy Rucker ont participé à la plupart des sessions de la conférence. D'un avis général, le niveau des présentations et des discussions se succédant pendant trois jours fut d'un niveau remarquablement élevé et l'assistance put apprécier (et pour beaucoup) découvrir les qualités littéraires de Verne, sa perspicacité politique, son humour sophistiqué, son talent à présenter des sujets scientifiques, et son influence sur la science-fiction.

De manière plus significative encore, la conférence a permis un rapprochement devenu nécessaire entre deux domaines importants d'études littéraires, mais étrangers l'un à l'autre – les études verniennes et les études anglo-américaines de science-fiction. Les deux domaines sont devenus plus sophistiqués et spécialisés au cours des décennies passées, et ils semblent s'être perdus de vue. Au fur et à mesure que l'enseignement de la science-fiction commença à fleurir dans les universités anglaises et américaines, les spécialistes de SF ont souvent fourni de nouvelles perspectives critiques : le féminisme grâce aux auteurs femmes, les “dime novels” et les romans populaires à travers les “pulps” américains, le marxisme et les fondements idéologiques de l'identité sociale, l'influence du film populaire de science-fiction, ou le postmodernisme de l'évolution changeante de la technoculture occidentale. L'influence de Verne dans l'émergence du romanesque imaginaire moderne a été souvent minimisée ou simplement ignorée. La plupart des spécialistes ont évité Verne car, considéré simplement comme un écrivain pour enfants, Verne n'était pas suffisamment “sérieux” pour mériter d'être inclus dans la littérature de SF, ou parce que ses romans – et jusqu'à récemment, la critique sérieuse de son oeuvre – étaient disponibles uniquement en français (en effet, la plupart des spécialistes anglo-saxons de SF lisent uniquement l'anglais et ils ne connaissaient que les grotesques et criminelles pseudo-traductions verniennes de l'époque victorienne lues pendant leur enfance). Même avec la publication de traductions anglaises complètes, fidèles et plaisantes, Verne est rarement enseigné en profondeur dans les universités britanniques et américaines.

De leur côté, les spécialistes de Verne ont évité d'associer Verne à la science-fiction. Ils ont plutôt mis en évidence son statut d'écrivain mondialement reconnu en publiant des traductions de meilleure qualité de son oeuvre. Ils ont combattu sa réputation stéréotypique de “romancier qui inventa le futur” ou “de père de la science-fiction”. Les spécialistes verniens ont proclamé haut et fort que Verne *n'est pas et n'a jamais été* un écrivain de SF, car ses textes ne contiennent pas d'extraterrestres, d'intelligence artificielle (robots) ou de “warp drives” permettant une vitesse supérieure à celle de la lumière. L'approche anglo-américaine de Verne comme symbole – icône – souligne et trivialise son importance comme un auteur incontournable du dix-neuvième siècle.

La conférence Eaton 2009 fut un moment historique dans les relations entre ces deux courants des études littéraires. Les spécialistes de SF ne peuvent plus ignorer le succès croissant des récentes et excellentes recherches verniennes anglo-saxonnes, qui, de plus en plus, rendent hommage au pionnier que fut Verne. Les spécialistes verniens commencent à considérer que Verne peut être à la fois un des fondateurs de la science-fiction moderne et un des auteurs majeurs de la littérature française et mondiale du dix-neuvième siècle. Ce sont les bases d'un dialogue original et productif, et une nouvelle direction d'études pour la recherche vernienne comme pour la SF.

Cette Suite Eaton 2009 de Verniana réunit la plupart des meilleures présentations de la Conférence 2009 dont le sujet était l'oeuvre et l'influence de Verne. Pris comme un tout, cet ensemble d'études représente une contribution majeure aux études verniennes modernes et démontre la nouvelle diversité, profondeur et vitalité de la recherche sur Verne en Amérique du nord, qui, par bien des aspects, se différencie – sans pour cela être moins rigoureuse ou originale – des autres recherches mondiales. Le succès de la Conférence Eaton 2009 s'aligne avec évidence sur ceux des récents congrès nationaux et internationaux des années passées : le statut de Verne comme auteur mondial est assuré pour l'ensemble du 21e siècle.

Comité de rédaction de la "Suite Eaton 2009"

Note à propos des textes réunis dans cette "Suite Eaton 2009"

Verniana publie des textes acceptés par son comité de rédaction lorsque la mise en forme et l'écriture de chaque texte sont terminées. Les articles faisant partie de cette "Suite Eaton 2009" vont être publiés de manière irrégulière au cours des prochains mois, dès qu'ils seront prêts pour leur publication. Les textes sélectionnés pour cette "Suite Eaton 2009" sont les suivants:

Terry Harpold (University of Florida) "Professor Lidenbrock and the Mole Men"

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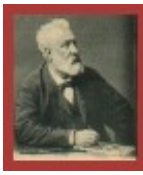
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Verne Among the Punks, Or "It's Not All Just a Victorian Clockwork"

Howard V. Hendrix

Abstract

Much of the critical discussion of the steampunk school in English-language science fiction and science fantasy rightly focuses on several Victorian roots of steampunk, but this focus should not eclipse the importance of Jules Verne to the development of steampunk. Given Verne's broad and deep infiltration of Anglophone popular culture, I argue that the memes and motifs of the Verne corpus are at least as essential to the development of both steampunk and the extraordinary voyage as anything originating in nineteenth or early twentieth century English or American sources. Through this tracing of memes and motifs, I move beyond simply describing writers of Jules Verne pastiche who also happen to belong to the steampunk school – to defining, in a concrete way, what has long been presumed to be the "amorphous" influence of Verne on steampunk.

Note to the readers (from the Editors): the concept of steampunk is well defined at http://en.wikipedia.org/wiki/Steampunk.

Résumé

La majorité des discussions critiques de l'école anglophone de "steampunk" en science-fiction et en science "fantasy" met correctement l'accent sur les différentes racines victoriennes du "steampunk", mais cette focalisation ne doit pas éclipser l'importance de Jules Verne dans le développement du "steampunk". Etant donné la large et profonde influence de Verne dans la culture populaire anglophone, je prétends que les thèmes et les motifs du corpus vernien sont au moins autant essentiels au développement du "steampunk" et des voyages extraordinaires que tout ce qui est issu des sources du dix-neuvième ou du début du vingtième siècles anglais ou américain. En retraçant les thèmes et motifs, je vais au-delà des pasticheurs de Verne qui appartiennent aussi au "steampunk", afin de décrire de manière concrète ce qui a été longtemps considéré comme une influence "amorphe" de Verne sur le "steampunk".

Note des éditeurs aux lecteurs: le concept de steampunk est bien décrit dans http://fr.wikipedia.org/wiki/Steampunk.

Let us take a short flight of whimsical fancy and imagine that, instead of wherever we may be, we are in fact sitting in overstuffed armchairs in the brass, oak, leather, port, brandy, and cigar-smoke environs of the palatial 53rd Thursday Club for the Advancement of Science and Society. Originally a gentleman's establishment, it is perhaps not so very different from the

Reform Club from which Phileas Fogg departs and to which he returns in Around the World in Eighty Days. The 53rd Thursday Club, however – in recognition of the contribution of thinkers like Ada Lovelace and Mary Shelley – will have long since admitted women to its ranks, something the actual Reform Club, filmic versions featuring female invasion notwithstanding, did not do until 1981. That, at least was the earliest such change by any of the old Pall Mall clubs in London, and considerably earlier than the older and more conservative club in opposition to which Reform was formed, Brooks's Club, which did not admit women until the 1990s.

Founded by Jules Verne, the 53rd Thursday Club always and only meets for official business on the last day (Thursday) of every year which begins on a Thursday, and of every leap year which begins either on Wednesday or Thursday – and thus in which a red-letter 53rd Thursday also occurs. The Club never meets for official business at any other time, but is always open as a social club for use by its members.

The officers and members of the 53rd Thursday Club (among whom have been such occasionally contentious luminaries as H.G. Wells, Sir Arthur Conan Doyle, Mark Twain, Nikola Tesla, and Madame Curie) do not find the official requirements of membership particularly burdensome. The odds that a given non-leap year will begin on a Thursday is only one in seven, while the odds that a leap year begins on either a Wednesday or Thursday is two in seven, but since leap years occur only once every four years, the circumstance that a leap year is also a fifty-third Thursday year occurs, by the odds, about once every fourteen years.

Given the calendrical and chronological rubric under which it meets, it comes as no surprise that the 53rd Thursday Club's main conference room, in its roofed-atrium saloon, is presided over by a large and vastly intricate steam-powered and gear-driven simulacrum of the solar system as celestial chronometer. Dedicated to the study and advancement of knowledge concerning space and time, the Club's activities and discussions range, in both its official and unofficial proceedings, from the more theoretical realms of mathematics and physics to more immediately practical advancements in energy and transportation.

I give you the preceding uchronian (if not necessarily utopian) scenario not because it echoes steampunk elements in *The League of Extraordinary Gentlemen* series or *The Five Fists of Science*, or because I'm trying to hammer out an overall metaphor for science fiction generally which is steampunkish particularly — or even because the year in which I write this, 2009, is itself a 53rd Thursday year. Rather, I wish to highlight that, although the steampunk subgenre generally presents itself as clubby British Victorian, steampunk is in fact a London gentleman's club founded by a French author, a British Victorian Phileas Fogg as puppeteered by a Frenchman, Jules Verne.

If we get beyond its top-hat, goggle and waist-coat trappings to its steam and gear guts, we quickly see that steampunk moves by clockwork (even more so in its sub-sub-genre known as clockpunk) and that it is particularly in its focus on steam engine time — on the gears running everything from pocket watches to locomotives to the cosmic clockwork — that steampunk is most distinctly Vernian in its memes, themes, and motifs.

In Verne's *Extraordinary Voyages*, one need look no further than the titles — summarizing phrases often imposed *post facto* by the publishing house, it's true — to see evidence of Verne's obsession with clockwork, with time, time-keeping, and duration even in travels

through space: *Five Weeks in a Balloon* (1863), *From the Earth to the Moon: Passage Direct in 97 hours and Twenty Minutes* (1865), *Twenty Thousand Leagues Under the Sea* (1870), *Around the World in Eighty Days* (1873), *Eight Hundred Leagues on the Amazon* (1881), even his *Paris in the Twentieth Century* (written in 1863, published in 1994). Steam power too is also everywhere in Verne, perhaps nowhere more prominently than in *The Steam House* (1880).

Gears and steam are significantly less prominent in the work of that other great "prototyper" or early "maker" of what will one day be called science fiction, namely the properly British and Victorian H.G. Wells. Further, Verne's clockwork spatio-temporal obsession precedes Wells's different version of that same obsession, whether in Wells's short story "The Chronic Argonauts" (1881) or novella *The Time Machine* (1895). In works as different as *Time Machine* and *When the Sleeper Wakes*, Wells is more concerned with spatio-temporal *dis*continuity, in contradistinction to the clockwork spatiotemporal continuity generally highlighted by Verne. Verne emphasizes travel-time while Wells focuses on time travel, but machines for measuring the time one has been on one's travels necessarily pre-date machines for travelling through the time so measured.

Around the World in Eighty Days is Verne's quintessential travel-time book. Its hero, Phileas Fogg — the cool, collected, cash-heavy, aloof, somewhat Aspergerish and OCD hero, simultaneously phlegmatic and engaged in a breakneck race — is a clockwork Victorian, a gentleman-cipher who is himself obsessed with time, odds, and mathematics, even before he sets out on his quest to conquer the world and its spaces.

Described as "an enigmatic figure about whom nothing was known, except that he was a thorough gentleman and one of the most handsome figures in the whole of high society" and as a "bewhiskered Byron, an impassive Byron, who might live for a thousand years without ever growing old" (*Days* 7), he is also said to be "the least communicative of men" (8). His days are utterly scheduled and invariant. His only pastimes, we are told, were reading the newspapers and playing whist — a game he played "for playing's sake" not so as to win, a game "he found perfectly suited his character because it was for him a challenge, a struggle against a difficulty, but one that required no action, no travel, and no fatigue" (8-9). It is also a game the winnings from which he always gives to charity.

On the day when his well-regulated daily orbit suddenly expands — Wednesday, October 2nd — Fogg has just fired his sole domestic, James Forster, because "the fellow had made the mistake of bringing in [Fogg's] shaving-water at eighty four degrees Fahrenheit rather than the statutory eighty six" (10). Awaiting the arrival of Forster's successor, Fogg is described as "seated squarely in his armchair, both feet together like a soldier on parade, hands firmly on knees, body erect, head held high, steadily watching his clock, a complicated apparatus that showed the hours, minutes, seconds, days, dates, and years" (10). We are told that, "in himself, this gentleman gave the impression of being perfectly balanced in all his parts, weighted and poised, as flawless as a chronometer by Leroy or Earnshaw . . . precision personified" (12). Even his well-organized and perfectly comprehensive wardrobe is calendrical: "each pair of trousers, shoes, vest, coat bearing an order number. This number was marked on a register of incoming and outgoing items, showing the date on which each garment was to be worn, depending on the time of the year" (14). The person whose job it is to lay out that calendrical wardrobe is the new domestic, Jean Passepartout, who, after a life of much wandering, many jobs, abundant spontaneity and chaos, is only too glad to settle in

with the well-regulated, mechanical-industrial clockwork man his new master Phileas Fogg appears to be.

Then of course — because at the Reform Club's whist table a discussion about a bank robbery leads in turn to a discussion about flight and hiding, and the world getting smaller, and how long it would take to circumnavigate the globe, and Fogg's bet of 20,000 pound sterling with his fellow whist-players that he can go around the world in eighty days or less, i.e. in 1920 hours, or 115,200 minutes (20), as he himself describes it — all hell breaks loose, at least from Passepartout's point of view.

From Fogg's point of view, however, it does not seem to do so. I have belabored the opening chapters of the book here in order to emphasize how Fogg's story is all about what chaoticians and complexity theorists have called "sensitive dependence upon initial conditions." Fogg himself, the epitome of order and mathematical certainty, believes in an utterly deterministic world. When he quietly but confidently declares in Chapter Three that "The unforeseen does not exist" (20), this clockwork man shows himself to also be a Newtonian-Laplacian fantasy man of the highest order, fully in agreement with Pierre Simon de Laplace's faith in a mechanistic and mathematically predictable universe, so clearly enunciated in his statement (in *A Philosophical Essay on Probabilities*) that a powerful enough intelligence — a brainy demon, or great clockwork computer, say — would "embrace in the same formula the movements of the greatest bodies of the universe and those of the lightest atom; for it, nothing would be uncertain, and the future, as the past, would be present to its eyes" (Laplace 4). As Graham Collins notes in his article "Impossible Inferences," in the March 2009 issue of *Scientific American*, "give the computing demon the exact positions and velocities of every particle in the universe and it will compute every future state of the universe" (Collins 19) — the unforeseen does not exist.

Yet, in 1873 — decades before Einsteinian relativity displaces the Newtonian notion of absolute space and time, before quantum theory and Heisenbergian uncertainty displace the Newtonian and Laplacian dreams of utterly controlled measurement processes, before Godel's incompleteness theorem, Turing's halting incomputabilities, and chaos and complexity theory all displace the Laplacian fantasy of linear-deterministic predictability — before *any* of that, Jules Verne, in *Around the World in Eighty Days*, conducts a novel-length thought experiment on what happens when a deterministic and determined clockwork man interacts with a nonlinear, chaotic, and messy world.

That "interacts" is, for much of the book, an overstatement about Fogg says much about the inadequacy of linearly deterministic approaches to the describing of that messy world he moves through. Although his "highly methodical travel-plan . . . included everything, and Mister Fogg always knew if he was ahead or behind," he has very little curiosity about the space he is moving through, "being of that breed of Britons who have their servants do their sightseeing for them" (34) — "a person rarely seen on deck who made little effort to observe this Red Sea, so redolent in memories and the theatre of the opening scenes of human history" (39). Later we are told Fogg "wasn't travelling, he was describing a circumference, and that "he constituted a heavy body moving in orbit around the terrestrial globe, following the rational laws of mechanics" (48). Although his fellow passenger, Brigadier General Sir Francis Cromarty, "was an educated man, who would willing have provided information about the customs, history, and political system of India if Phileas Fogg had been the sort of man to ask for it, Phileas Fogg is not that sort of man, and requested nothing" (48).

Yet it is precisely here in India, specifically in Bundelkhand (also the home province of Prince Dakkar/Captain Nemo), that clockwork Fogg begins to interact more with the world around him, specifically when he decides to rescue the young, "white as a European" (60), and English-educated Parsee woman Aouda from suttee-death on her (formerly aged and now recently deceased) husband's funeral pyre. Turning to Cromarty, Fogg says,

> “What about saving this woman?”
>
> “Saving this woman, Mr. Fogg?” exclaimed the Brigadier-General.
>
> “I’m still twelve hours ahead; I can use them that way.”
>
> “I say, you do have a heart!”
>
> “Sometimes,” he replied. “When I have the time” (62).

This is that same brand of understated assertion we saw earlier attached to "The unforeseen does not exist." Yet the rescue of Aouda is precisely something Fogg never indicates he has foreseen; it is, *she* is, the complexity in the heartbeat, the chaos that is not randomness, the Other not so otherly that the Self cannot recognize itself in it, the woman both exotic and domestic who proposes marriage to him, the noble woman who risks all to save the man she owes everything to (195). If Fogg in his circumnavigation had not crossed India overland unnecessarily in the first place, he could not have saved her, and been saved by her when she suggested marriage — with the result that Passepartout was sent to the Reverend Samuel Wilson's, where was learned the error that determined and linearly deterministic Fogg had made by *not* taking into account the emergent property arising out of the interaction of abstract clockwork and actual world, namely that

> “By heading toward the east, Phileas Fogg had gone toward the sun, and consequently his days were four minutes shorter for each degree of longitude covered in this direction. Now there are 360 degrees on the Earth’s circumference, and this 360, multiplied by 4 minutes, makes exactly 24 hours – in other words the day gained unconsciously. . . And this was why, on that very same day, Saturday, and not Sunday as Mr. Fogg believed, [his colleagues] were waiting for him in the drawing-room of the Reform Club” (201).

Along similar lines, Bruce Sterling suggests — in his introduction to a 2004 edition of *Around the World in Eighty Days* — that Verne

> “always favors broken, fragmented characters. He divides them into operational trios of ‘Head, Heart, and Hand’ . . . Superego, Id, and Ego: a brainy overlord, a sentimental favorite, and some capable type who can get things done” (xiii).

Nonetheless, as apt as this idea may be, it is still not enough merely to say, as Sterling does, that "Aouda plays the Heart role" (xiv). Aouda is not only the one who suggests the tying of the knot of marriage but also is herself the knot of Complexity in which Heart, Other, Anima, Emergent, and Unconscious are all tied together, and who — in her domesticated-exotic yet unforeseeable self — makes possible the tying off of the loose ends of the novel.

To win Aouda and all she represents Phileas Fogg "must give and hazard all he hath" (2.9.21), as Bassanio also must do, to win Portia in *Merchant of Venice* — with the important distinction that, unlike Bassanio, Phileas Fogg doesn't know until his journey is over what he was really hazarding *for*. The narrator tells us that

> "So Phileas Fogg had won his bet. He had completed the journey round the world in 80 days. To do so, he had used every means of transport: steamship, train, carriage, yacht, cargo vessel, sled, and

> elephant. In all this the eccentric gentleman had displayed his marvellous qualities of composure and precision. But what was the point? What had he gained from all this commotion? What had he got out of his journey? Nothing, comes the reply? Nothing, agreed, were in not for a lovely wife, who — however unlikely it may seem — made him the happiest of men (202)!"

Like Bassanio, Fogg, as a result of his circumnavigation experience, inverts the question of Matthew 16:26. For him, the issue becomes not what it will "profit a man to gain the whole world if he loses his soul," but rather the soul he will gain by losing, or at least hazarding, the whole world. And this is true not only for man but also for woman — for Aouda, who likewise risks all.

Just as Passepartout's nickname and its meaning of skeleton key is appropriate to his Handy role in the novel, and Detective Fix (the other Hand) is appropriately an embodiment of the idee fixe, it is not beyond the realm of the possible that "Phileas Fogg" is a tag name and a pun too: "Phileas" having its roots in the Greek word for "lover" and "Fogg" punning not only on the fact that the character is a Londoner but also on the French "brouillard/brume" or "vapeur" — fog, mist, haze, *steam*.

Fogg, in the early going, is not just a lover of steam, another "Steam Man of the Prairie," but in fact the would-be Steam-master of the Planet. He is the original, archetypal steampunk who, initially, is in Laplacian-demonic rebellion not so much against the stodginess of his Reform Club fellows, but against the restraints of that messy physical universe — space, time, and chance themselves. "The unforeseen does not exist," as he quietly but importantly tells us, early on — and his journey is initially intended to be a triumph of that will. He begins as a Don Quixote tilting (just as madly as that literary precursor, but ultimately more successfully) not at windmills but at the windmilling hands of the clock. Curiously, Fogg's Sancho Panza, Passepartout — trickster-clown servant to Fogg the master of order —refuses to alter the time on his pocket watch to match the changes in time zones through which he and his master pass. Passepartout thereby stubbornly insists on the arbitrariness and unreality of the real time which his master Fogg so firmly believes in — and so firmly believes he can best and control, until Fogg learns from Passepartout that, in keeping such careful track of minutes and hours, Fogg has lost a full day. (Curious too is the fact that the Mexican comic Cantinflas played both Passepartout and Sancho, very nearly back to back in his film career.)

Unlike Quixote, however, in the end Fogg gets his Dulcinea. He overcomes the enchanters and obstacles and Fixes by understanding in time his own delusions about time, his own errors in looking at the world — particularly in his ultimately realizing that not only does the unforeseen exist, but it is arguably what makes existence meaningful. As the Handdara Foreteller Faxe (a professional foreseer) puts it to Genly Ai in Ursula LeGuin's *Left Hand of Darkness*,

> "The unknown, the unforetold, the unproven, that is what life is based on. If it were proven that there is no God there would be no religion. But also if it were proven that there is a God there would be no religion. . . What is known? What is sure, predictable, inevitable the one certain thing you know concerning your future, and mine?"
>
> "That we shall die."

> "Yes. There's really only one question that can be answered, and we already know the answer... The only thing that makes life possible is permanent, intolerable uncertainty: not knowing what comes next (71)."

On the level of chronology, Fogg and his story manifest the unforeseen, arising as they do out of "a truly surrealist act, a spontaneous, senseless decision to personally conquer the world" (xiv) as Sterling puts it in his introduction. It is an irruption of a what-comes-next, post-Victorian future into a Victorian present, both as imagined by a French author — while much of steampunk, in contrast, is an irruption of the post-Victorian (and postmodern) present into a Victorian past, most often as imagined by American authors.

Both *Around the World in Eighty Days* and steampunk more generally, to the extent that either or both are punkish, rebel essentially against a frustrating present. Verne's book generally expresses a yearning for an improved very-near-future to be achieved through a fuller human control of energies and complexities, both cultural and natural; Steampunk expresses a yearning for an improved past, a nostalgia for a more human scale in the energies we now control, the complexities we now recognize.

Yet so many works of both Verne and his steampunk descendants are always really only about the present: every yesterday's tomorrow and every tomorrow's yesterday is always really only today. Verne's *Around the World in Eighty Days* and the stories of so many of his literary descendants dwell in the tension between linear determinism and complexity, in the awareness that all our systems of knowledge, all our inference devices and difference engines must ultimately fail to fully capture the meaning of the world. At the deepest levels, such stories confront the paradox that we have been post-human for as long as we've been human — ever since we made that first tool or spoke that first word.

Phileas Fogg appeals to us because he *is* us. He may be different from us in degree — richer from some unknown source, more obsessed, perhaps — but he is not different from us in kind. Our daily adventure too is racing against the clock. Fogg, with his daily recording of his itinerary and schedule, with his pocket almanac and red-bound copy of *Bradshaw's Continental Railway Steam Transit and General Guide* is the harbinger of who *we* are — with our Blackberries, iPhones, and travel blogs — and the world in which we increasingly live.

Based on his travels, Fogg would no doubt be at least a charter member in that 53rd Thursday Club (founded by Verne) with which I began this discussion. The novel in which Fogg occurs, and his creator too, have already been so apotheosized, appropriately in our day: In 2007, a hotels group based in Barcelona proposed the construction of a Galactic Suites Hotel, an orbiting resort which would offer its guests the opportunity to go around the world in eighty minutes and featured, as part of its proposed accommodations, something called a Jules Verne package.

Perhaps the ultimate apotheosis of Jules Verne thus far, however, may be that "Jules Verne" is the name of the European Space Agency ATV (automated transfer vehicle), an orbital cargo freighter which uses the world's most advanced space autopilot system. On the last day of March 2008 (according to Stephen Clark's post on the *Spaceflight Now* website, entitled "Jules Verne Practices Close Approach to Space Station"), the "robotic spacecraft *Jules Verne* hit all its marks on time as it traveled to the International Space Station" and performed, as NASA and ESA officials put it, "like clockwork."

The Phileas Fogg of the beginning of *Around the World in Eighty Days* would be proud of that. The Phileas Fogg of the end of *Around the World in Eighty Days*, however — the Phileas Fogg who has come to realize his need for the exotic Otherness of Aouda and the trickster-Otherness of Passepartout and Detective Fix, the Phileas Fogg that has come to realize his predictions about the world are fundamentally constrained by himself being a part of the world he is predicting — *that* Phileas Fogg would be even more impressed if he *hadn't* foreseen it.

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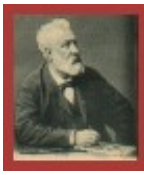
Howard V. Hendrix (howardh@cufresno.edu) holds a BS in Biology (Xavier University, 1980), as well as an MA and a PhD in English Literature (1982 and 1987, respectively, both from University of California, Riverside). Hendrix's first four published novels appeared from Ace Books (Penguin Putnam): *Lightpaths* (1997), *Standing Wave* (1998), *Better Angels* (1999), and *Empty Cities of the Full Moon* (2001). His fifth and sixth novels, *The Labyrinth Key* and *Spears of God*, appeared from Ballantine Del Rey in April 2004 and December 2006, respectively. Many of his previously published shorter works from the 1980s and 1990s are gathered in the collections *Testing, Testing, 1, 2, 3* (EOTU Press, 1989), and *Mbius Highway* (Scorpius Digital Books, 2001). More recently, his short fiction has appeared in *Aeon*, in *Analog*, in *Asimovs*, in the DAW Books anthology *Microcosms*, and republished in electronic format by Tek-No Books. His literary criticism includes a book-length study of apocalyptic elements in English literature from Langland to Milton, *The Ecstasy of Catastrophe* (1990). His more recent science fiction criticism appears in *Projections* (2004), *YLEM Journal* (2006), and *Science Fiction and the Two Cultures* (Greenwood Press, 2009).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The Creation of Scientific Wonder : Jules Verne's Dialogue with Claude Bernard

Danièle Chatelain & George Slusser

Abstract

This essay reconstructs a speculative but inevitable dialogue between writer Jules Verne and French scientist Claude Bernard. This dialogue results, in Verne's seminal novel *Voyage au centre de la Terre* (1864-1867), in the creation of a genuinely *scientific* adventure whose essential quality is what later SF calls "sense of wonder." In contrast to the classifying sciences of his time, Claude Bernard, in his writings and courses at the Collège de France, defined experimental science as itself an adventure, a passionately conducted scientific voyage through the physical unknown, a voyage of wonder. Claude Bernards's ideas were widely circulated and published in the 1850s and Verne must have known them. They were codified in Caude Bernard's *Introduction à l'étude de la médecine expérimentale* (1865). This work was a literary event, and there is evidence Verne read it between revisions of his novel.

Verne was mandated by his editor Hetzel to create a narrative that was both an extraordinary adventure and a vehicle to give young readers the desire to pursue scientific careers. Claude Bernard appears to provide Verne with the means of recasting the extraordinary voyage narrative as the adventure of science. For Claude Bernard, scientific discovery "is only a flash that briefly illuminates other horizons, toward which our ever-unsatisfied curiosity drives us on with passion. This is why in science... the known loses its attraction, while the unknown is always full of wonder." For Verne, this sense of wonder provides the key to a genuinely scientific adventure.

But how does Verne adapt Claude Bernard's vision to the adventure novel? For the sake of adventure, he could not make his protagonist a real scientist. Instead he seizes on Claude Bernard's flawed scientists. Lidenbrock is Claude Bernard's theorizer; center of the earth is already known to him. His apprentice Axel is over-emotional, yet still open to contact with the unknown. His a Verne makes Axel his narrator; sense of wonder is generated by his encounters with the physical unknown. But Verne not only creates wonder, he uses it for rhetorical effect. Out of the interaction between the raw facts of an unhuman landscape, and Axel's inadequate but all too human reactions, Verne develops a rhetoric of wonder, whose effects are directed at the reader. Axel's encounters with the unknown leave the reader alternately charmed, awed, or terrified. At the same time, the incomplete nature of Axel's engagement with the physical unknown incites the reader to further curiosity and awe, to re-imagine the scientific adventure. Verne's dialogue with Claude Bernard did more than fulfill Hetzel's need for adventure that inspired young readers to take up scientific careers. His scientific wonder and its literary uses will become an essential element in twentieth century SF.

Résumé

L'éditeur Hetzel avait demandé à Jules Verne d'écrire pour de jeunes lecteurs des voyages d'aventures extraordinaires où ils puissent découvrir de nouvelles visions scientifiques qui les passionnent et leur donnent envie de poursuivre des carrières dans les sciences. Or, une relecture du *Voyage au centre de la Terre* à la lumière des écrits du physiologiste Claude Bernard, contemporain de Jules Verne, montre une influence profonde de la vision des sciences du savant sur l'auteur des *Voyages extraordinaires*. Dans ses cours au Collège de France dans les années 1850, et dans son *Introduction à l'étude de la médecine expérimentale* (1865), livre retentissant à l'époque, Claude Bernard, à la différence de bien des savants français de son temps, ne conçoit pas la méthode scientifique comme l'élaboration d'un système clos mais plutôt comme un voyage passionnant à travers l'inconnu du monde physique, exploration faisant naître émerveillement, doute, curiosité, ce que les anglo-saxons appellent "sense of wonder". Or, ce voyage est infini puisque d'expérience en expérience l'inconnu devient le connu, révélant de nouvelles zones inconnues, et ceci ad infinitum. En effet, le connu "n'est qu'un éclair dont la lueur nous a découvert d'autres horizons vers lesquels notre curiosité inassouvie se porte encore avec ardeur. C'est ce qui fait que dans la science même le connu perd son attrait, tandis que l'inconnu est toujours plein de charmes".

Nous avons cherché à démontrer dans cet article que Jules Verne a transposé dans son *Voyage au centre de la Terre* le "sense of wonder" scientifique dont parle Claude Bernard, afin d'attirer le lecteur vers les "charmes" de la recherche scientifique. Il le fait en utilisant comme narrateur du voyage le jeune Axel, élève du professeur Lidenbrock. Axel est sans expérience scientifique sérieuse, mais du même coup il est ouvert à l'inconnu, à la différence du professeur enfermé dans ses théories et pour qui le centre de la terre n'a rien d'inconnu. Le récit d'Axel raconte sa perception d'un monde plein de beautés, mais effrayant, incompréhensible et indifférent, ce qui suscite en lui toute la gamme des émotions du "sense of wonder": émerveillement, extase, frayeur, curiosité, "charmes" sans cesse renouvelés au cours du voyage.

Jules Verne a donc accompli la tâche que lui avait assignée Hetzel. Mais en transposant la vision de Claude Bernard dans un récit de voyage extraordinaire, Jules Verne a créé avec le "sense of wonder" scientifique une des dimensions fondamentales de la science fiction du XXe siècle, en particulier celle qu'on appelle "hard SF."

The term "sense of wonder" is seen by many as a phenomenon unique to SF, indeed as a defining element of the genre. Yet the words used to describe it, from the vague terms "amazing" and "astounding," to suggestions by critics like Peter Nicholls and Cornel Robu that it is a modern form of the "sublime," all point to effects and areas outside SF, to aesthetics, philosophy, religion in general. [1] The dictionary gives us, as definition of "wonder," general words like "curiosity," "surmise," "doubt," "awe" and "marvel." Indeed, wonder has been associated to literary tales of travel since the Greek "Indian wonder" tales and the voyage of Odysseus. It applies to the imaginary voyages of Cyrano, Swift, and others. But if we can speak of a form of wonder specific to SF, then science would somehow have to be the element that sets it apart. This new sense of wonder would arise from a meeting of the wonders of the humanist tradition with a new form of wonder, one generated specifically by scientific activity. We would like to locate the origin of scientific wonder in a single event, Jules Verne's *Voyage au centre de la Terre.* The creation of wonder in Verne's work occurs at the intersection of two vectors: Claude Bernard's vision of experimental science, and Verne's need to create a new kind of adventure fiction, where the adventure is that of science, and the result something we can call, perhaps for the first time, *science*-fiction.

Science Meets Fiction

If Verne's *Voyage au centre de la Terre* represents a fusion of science and fiction, what then were the cultural conditions that allowed such a fusion to take place? What conditions existed that might favor a convergence of the realms of science and of fiction. By the nineteenth century, materialist science reaches a prominent position in human thought, such that it appears to challenge, if not contradict, the views of Western humanist culture, which are traditionally those of "fiction" in its various forms: epic, tragedy, comedy, novel. The nature of this relationship, however, plays out differently in England and in France. In England, we see the Romantic poet Wordsworth's attempt to join poetry and science rejected by the physician-poet John Keats. For Keats, "cold philosophy" (science) is the enemy of poetic wonder: "Philosophy will clip an Angel's wings,/Conquer all mysteries by rule and line,/Empty the haunted air, and gnomed mine... (*Lamia*, II, 234-36). Frankenstein's experiments are judged an abomination against humanity and the human form divine. Indeed, except for an apostle of scientific advancement like Tennyson, experimental science and poetic wonder remain apart throughout the century. The triumph of experiment, in Darwin's theory of evolution, only serves to widen the distance, to create a "two cultures" gap.

On the contrary however, in nineteenth-century France in general, writers and thinkers are active in bringing together science and the humanities. The rise and rapid development of the sciences in nineteenth century France, their growing prestige and the new ways of conceiving of mankind's relation to nature that they offered, strongly impacted the world of letters. History, in the works of Hippolyte Taine and Ernest Renan, aspired to scientific rigor. Sainte-Beuve, in the realm of literary criticism, strove to be scientific in his portraits and biographies, where he sought to establish "des familles d'esprit." Balzac, in the "Avant-propos" to his *Comédie humaine* (1842), claimed as organizing principle for his novels Geoffroy Saint-Hilaire's theory of the influence of "milieu" as cause that generates differences between zoological species. Gustave Flaubert wrote, in a letter of 1853, that "la littérature prendra de plus en plus les allures de la Science. [increasingly literature will take on the forms of science]" [2] From the point of view of the poet, this fusion was clearly in place by the end of the century. Here is the young Paul Valéry, in his first essay "Sur la technique littéraire" [On Literary Technique] (1889), describing the difference between the romantic poet and the modern poet: "Ce n'est plus le délirant échevelé, celui qui écrit tout un poème dans une nuit de fièvre, c'est un froid savant, presque un algébriste, au service d'un rêveur affiné. [The modern poet is no longer the dissheveled madman, who writes an entire poem in a single feverish night, he is a cold scientist, almost an algebraist, but now at the service of a refined dreamer]" [3]

We see, in Valéry, the poet becoming a scientist. But does the scientist, on the other hand, have the same desire to merge with the poet? It would seem, at first glance, that the dominant scientific vision of nineteenth century France, "positivism," would wish to conquer the wonders of nature by rule and line, moving to classify phenomena, to subject them to taxonomical control. By the middle of the century, however, a new form of "experimental science" was developing. Its major spokesman was the physiologist Claude Bernard, who outlined his experimental method in courses at the Collège de France, and elaborated on its implications in his *Introduction à l'étude de la médecine expérimentale* (1864). Reino Virtanen calls this book an "event" in French culture, one that had a profound influence on Émile Zola, Henri Bergson and others at the end of the century. [4] Bernard's central idea is that scientific

activity itself, in its constant pursuit of the unknown, generates wonder. Here he describes scientific discovery: “Ce n’est qu’un éclair dont la lueur nous a découvert d’autres horizons vers lesquels notre curiosité inassouvie se porte encore avec ardeur. C’est ce qui fait que dans la science même le connu perd son attrait, tandis que l’inconnu est toujours plein de charmes. [It is only a flash, that briefly illuminates other horizons, toward which our ever-unsatisfied curiosity drives us on with passion. This is why in science itself the known loses its attraction, while the unknown is always full of wonder]” [5] When Claude Bernard describes the physical unknown—the object of scientific experiment—as something “plein de charmes,” he is stating not only that the inexplicable is attractive, but that this attraction—wonder—is what sustains the scientist’s desire to pursue its mystery. Such a statement seems to point the way to a confluence of science and fiction in a shared sense of wonder. He seems to be suggesting nothing less than the creation of a science-fiction, a form of fiction that would recount the *voyage extraordinaire* of scientific discovery itself.

But the same seems true of the *voyage extraordinaire* as was true of sense of wonder: the literary form Verne chooses is simply another example of the age-old narrative of travel and exploration, with examples from *The Odyssey* to the real-life voyages of Captain Cook. What we are talking about, however, in the context of France in the second half of the nineteenth century, is the specific fusion of modern science with a particular narrative form. Significantly, Claude Bernard uses the language of the travel narrative to describe the “adventure” of experimental science. He speaks of a *point de départ*, and presents science itself in terms of a never-ending voyage. Discovery may advance, but there is never absolute knowledge; there is always more to discover, its pursuit generates ever more sense of wonder. As if in response to this, Verne appears to create, for the first time perhaps in literary history, what is a specifically *scientific* extraordinary voyage. By this we mean a voyage whose motivation, course, and resolution are concretely set by the tenets of experimental science.

To bolster our argument, we hope to demonstrate that Verne’s narrative is *scientific* in four precise ways. First, travel and adventure in the novel are motivated essentially by scientific experiment—the verification or refutation of Humphry Davy’s theory of volcanic origins—and not by more conventional reasons for exploration—gold, colonial acquisitions, pure adventure. Saknussemm’s claim to have made the journey is a “fact” to be verified; it opens the possibility that the earth is hollow. But the only scientific way to prove or disprove both the theory and the claim is to go there physically. Second (and corollary), the adventure here is primarily travel to a place where there are no human beings, no marks of human culture, however primitive. Axel says he sees a giant “herdsman,” but he is seeing through the eyes of Vergil and Homer, and the reader never knows what this being is, or if it even exists. Otherwise, there are neither cultures nor peoples to study beneath Verne’s earth. It is a place where mankind encounters Descartes’s *res extensa* in all its otherness. Third, as the protagonists penetrate the earth, increasingly they encounter phenomena that not only cannot be incorporated into humanist patterns of thought, but *would never be perceived at all* were it not for ways of inquiry that are specifically science-based. Despite attempts by the explorers to “get their bearings,” to plot their course in relation to known landmarks of surface geography, the material landscape they enter, void of all human markers except the questionable “runes” of Saknussemm, is increasingly seen as a-human. The voyagers face an unknown that obeys no human agency; they engage what later SF will call “the cold equations.” Finally, the sense of wonder found throughout Verne’s narrative is an effect generated, specifically, from the encounter of human beings with landscapes revealed by the

activity of experimental science. Moreover, Verne uses the wonder that results from these brushes with the material unknown for a clear rhetorical purpose. For as Verne's explorers confront, but fail to grasp, the unknown, the reader is enticed—by a concomitant sense of curiosity, doubt, and awe—to revisit the place of encounter in imagination, to redo the experiment, in short to rise to the challenge of wonder. A close analysis of the workings of Verne's text will show this rhetoric of wonder at work.

Verne and Claude Bernard: The Genesis of Wonder

Up to now we have been talking about a general intellectual and cultural climate in the second half of the nineteenth century in France, and specifically about the fusion of science and humanities in Claude Bernard's pronouncements and Jules Verne's seminal novel *Voyage au centre de la Terre*. But we are not dealing here simply with a shared cultural milieu, or with synchronicity. There is at least speculative evidence of a specific connection between the scientist and the writer, a connection that occurred at this particularly seminal moment in the latter's career. Bernard's *Introduction à l'étude de la médecine expérimentale* [Introduction to the Study of Experimental Medicine] appeared in 1865, a year after Verne published the first version of his novel. Even so, there is, in the material added in three chapters (37-39) in the 1867 edition, both mention of a current crisis in experimental science (the so-called Moulin-Quignon Man), and a heightening of the level of unknown encounters and wonder that could reflect a reading of Claude Bernard's seminal book.

Such speculations are not necessary however. For many of the reflections on experimental method in *Introduction à l'étude de la médecine expérimentale* are merely elaborations on statements made previously by Claude Bernard, during a decade of public courses at the Collège de France, and in publications that reproduced these lectures, such as the 2-volume *Leçons de physiologie expérimentale appliquée à la médecine* [*Lessons in Experimental Physiology as Applied to Medicine*], published by Baillière in 1855-1856. [6] The majority of these lectures detail experiments on the pancreas, the body's production of sugars, and diabetes, all of which represent major breakthroughs in medical science. Each set of lectures however is prefaced with general statements of method, where Claude Bernard, again and again, contrasts what he calls the theoretical scientist, whose deductive approach loses sight of the material fact in endless "scholastic" disputations, with the experimenter, who generates hypotheses from active observation of raw material from the laboratory or hospital. We know that Verne, during this same decade (1851-1861), the one that preceded the publication of his first novel *Cinq semaines en ballon* (1862), spent many hours each week in libraries like the Bibliothèque nationale, doing research on science and technology, and writing popularizing articles for journals like the *Musée des Familles.* Throughout this decade, Claude Bernard was increasingly recognized as spokesman for the new experimental science. His statements of method are highly readable. It would seem quite unlikely that they did not draw Verne's attention.

But drawing attention is not enough. There has to be some element or event that catalyzes a relationship. And indeed, there is another aspect of Claude Bernard's remarks on the experimental method that would seem to make them especially memorable to Verne at the time he began to write for Pierre-Jules Hetzel. Arthur B. Evans emphasizes the interest Hetzel and his colleagues had in pushing for reform in the French education system, notably in the

teaching of science: “Hence, the central position of science pedagogy in the thematic makeup of Hetzel’s post-1850 publications and the persistent moralizing tone of these texts are the direct result of his personal views concerning the society of his time—what he saw as the crippling political and educational policies of the Second Empire... ” [7] Claude Bernard addresses precisely this question of science education in the first of his lectures, semestre d’hiver 1854-1855: “Tout le monde sait que l’enseignement du Collège de France est d’une autre nature que celui des facultés... Ici, le professeur, toujours placé au point de vue de l’exploration, doit considérer la science, non dans ce qu’elle a acquis et établi, mais dans les lacunes qu’elle présente... Dans les facultés, au contraire, le professeur, placé au point de vue dogmatique, se propose de réunir, dans un exposé synthétique, l’ensemble des notions positives que possède la science, en les rattachant au moyen des liens que l’on nomme théories, destinées à dissimuler... les points obscurs et controversés qui troubleraient l’esprit de l’élève qui débute. [Everyone knows that the method of teaching at the Collège de France is totally different from that of the universities... Here [the Collège de France] the professor, always considering things from the point of view of exploration, has to see science, not in terms of what it has acquired and established, but in terms of what is lacking, what remains to be discovered... On the contrary, in the universities, the professor, taking a dogmatic view of things, gives himself the goal of reuniting in a synthetic structure the body of positive notions acquired by science, linking them together by means of theories that are intended to hide... the various murky and controversial points that would otherwise trouble the mind of the beginning student]” (2) We note here that, as early as 1854, Claude Bernard explicitly associates this new science and method with the pursuit of the unknown: “Le professeur du Collège de France... doit avoir les yeux tournés vers l’inconnu, vers l’avenir. [The professor at the Collège de France... must have his sights turned toward the unknown, toward the future]” (2) For Verne, the future author of the *Voyages extraordinaires*, a number of strands would seem to merge here. He would sees that both physical exploration and scientific pursuit share a common goal: the unknown. What is more, he would realize that, to the degree that the new fictional combination of adventure and science envisioned here *mirrors* the method of experimental science itself, as Claude Bernard describes it, the story itself can be the means of doing what editor Hetzel required: teaching science. This is not just science “fact,” the old science of the faculties, but it is science in action, the new, open-ended search for knowledge Claude Bernard calls for.

Verne, during his years of research, was apparently working on the idea of writing a new kind of novel, a *Roman de la Science.* [8] Claude Bernard’s remarks, cited above, could indeed give Verne a powerful set of elements to work with. For if, as Claude Bernard emphasizes, the object of any scientific experiment is the unknown, might not any story of travel and adventure be made into a story of scientific pursuit? In the first novel he published with Hetzel, *Cinq semaines en ballon* (1863), Verne seems not to have fully grasped this fact. Despite descriptions of balloon technology, *Cinq semaines* remains a conventional travel narrative. Many of Verne’s readings during the 1850s, if we judge from the articles he wrote, dealt with contemporary travel and technologies of travel. *Cinq semaines en ballon* gives us English adventurers exploring Africa. They use a form of transportation—the heavier-than-air balloon—that was hardly new at the time, merely untested for long-range travel. At the very best, this adventure qualifies as a positivist mapping of the center of Africa, a place already being explored at the time. Verne may have sensed that his comments on balloons would be proven wrong by future developments. In like manner, keeping the “heart of darkness” dark, a

place unknown, seems here more a defensive tactic on Verne's part. Were the author to make too-specific statements about a place soon to be known, he would run the risk of errors that render a piece of fiction totally obsolete for future readers. Verne we could say, in his first novel, shows a nascent sense of the power of the unknown. But here the "unknown" is little more than the stuff of Captain Cook and the colonial explorers. It has nothing to do with science.

An indication that Verne was not satisfied with English explorers and the conventional adventure formula for his "scientific novel" is the submission of *Paris au XXe siècle* to Hetzel as subsequent novel. Hetzel rejected this novel with the following comment: "C'est à cent pieds au-dessous de *Cinq semaines en ballon*. [This one's a hundred feet below *Five Weeks in a Balloon*]" [9] Hetzel's reason, no doubt, was that he liked neither the vision of a technocratic future where science has become mechanics and money (things he found stifling in Second Empire France), nor a protagonist who looks backward, as a classicist, to the retrograde educational system that Hetzel would hope to modernize. Verne was possibly bringing to the table a problematic closer to the remarks of Claude Bernard. Bernard's scientist, in his constant pursuit of the unknown, could suggest a romantic figure. Verne's future Paris then opposes a protagonist of decidedly late-romantic temperament to a world (very much like his own) where all romantic sentiments are being crowded out by utilitarian practices in science and technology. These of course are practices admirably served by the entrenched classifying sciences of Claude Bernard's "facultés." Hetzel of course wanted something quite different from Verne: an adventure that somehow teaches the methods of the new experimental sciences. Even so Verne, in his search for a protagonist to function in this world, will remember his romantic anti-classifier Michel.

The refusal of Michel Dufrénoy as protagonist may have led Verne to rethink the role both of science and the humanities in his age. The 1850s in France saw a number of poems by late-romantic writers that stress a very different relationship between mankind and nature than the early romantics. In works like Leconte de Lisle's "Midi" (1852) and Victor Hugo's *Les Contemplations* (1856), nature no longer resonates to human desires and emotions, but has become indifferent to them. In the wake of scientific discoveries in all domains (the sciences concerned are, specifically, geology, paleontology, and medicine), the problem itself has shifted away from a Michel Dufrénoy and his plight among the philistines. It is no longer the materialist classifiers that are the adversary; it is material nature itself. This new context would make Verne even more receptive to Claude Bernard's statements about science engaging the material world as something *unknown*. The experimental scientist's vision proves here to be quite compatible with late-romantic fears of a physical world, menacing and empty of human content. Verne's task now, in this second half of the nineteenth century, was to design a scientific adventure along the lines of Claude Bernard's pursuit of an unknown *res extensa*. To execute this adventure, he needs a "team" that represents an anatomy of scientific attitudes at his time. For this as well, he could turn to Claude Bernard, who sets experimental science against two sorts of inadequate scientific response to the unknown.

Professor Lidenbrock is the exact incarnation of Claude Bernard's systematizer, who reduces observed facts to known paradigms, rather than seeing them as possible beginnings for new hypotheses. Axel poses as his scientific apprentice. Axel fits a number of profiles: he is the educated young man of scientific pretensions in Verne's post-romantic age. As such, he is not only an example of the young reader Hetzel hopes to reach, but an example of the sort

of young student who might have attended Claude Bernard's lectures. Claude Bernard has a warning for this sort of emotionally engaged scientist as well: "En un mot, le savant qui veut trouver la vérité doit conserver son esprit libre, calme, et si c'était possible, ne jamais avoir, comme dit Bacon, l'oeil humecté par les passions humaines." (73) Axel retains certain things from Michel. He is a Latinist. And in his mockery of his uncle's a priori theorizing, he follows Michel in his rejection of the architects of twentieth-century Paris. But where the latter blindly revolts against an establishment that mechanically applies the classifying sciences to all levels of experience, [10] Axel's reactions are more complex, more rooted the science of his time. As a comfortable resident of Hamburg, he shows an interest in his uncle's science, and wields the specialized language of geology with ease. But he is not allowed to stay in Hamburg; he is thrust into an adventure in the most unknown place of his time, and possibly the most "romantically" fearful: the depths of the earth. [11] Axel is plunged into a situation where he is literally forced to deal with a series of unknown phenomena. His challenge is to function in that totally new world, where science's awareness of *res extensa* as fundamentally unknown casts doubt on the fundamental adequacy of conventional cultural responses to material nature.

A question arises: given the above, why didn't Verne simply choose as his protagonist, and as Lidenbrock's opposite, a real experimental scientist as Claude Bernard set forth? The reason has to be a practical one. For if Verne's task as a writer is to narrate the adventure of science, he surely realized that a scientist, as Claude Bernard defines his practical task, cannot be the agent of adventure. Had Verne made Axel an experimental scientist, he would resemble the mutant-narrator of J.H . Rosny aîné's *Un Autre monde* (1896). Rosny's protagonist tells of teaming up with a scientist to observe and hypothesize about beings he perceives in another dimension. We have a story of the laboratory, of experiment and patient observation, told in the slow time of experimental science. Verne, however, had the task of inventing a way to dramatize the adventure of science, much as the television series *Nova* has to do today. [12] His solution to the problem of creating scientific adventure, was a stroke of literary genius: he made Axel the narrator of his story. If the adventure is a scientific adventure, it is told from the highly unreliable point of view of a young man of alternating scientific and romantic propensities, who at the end of the adventure does not become a scientist but a writer, the author of the story we read. The reader experiences both his companions, and their encounters with unknown phenomena, through Axel's eyes. Lidenbrock is Axel's character. He is presented, alternately, as an authority figure and as a foolish scientist, both in his theoretical blindness, and in his impulse to rush off, on the slim evidence of a note in a book, to crazy and dangerous adventure. In like manner Hans, whose pragmatic doings actually bring the trio through the adventure alive, is glossed over by Axel as some mysterious shamanic figure. In all cases, in Axel's presentation of characters and descriptions of phenomena, the reader becomes increasingly aware of how limited and unreliable his point of view is.

Even so, because of his central position as narrator, Axel locates himself between two forms of closed "science"—theory and magic—hence presents himself as more open to a dynamic engagement with the unknown. He is positioned as the figure of scientific promise. This positioning allows Verne, if he cannot show experimental science per se at work, to use Axel's first person narration to present the *effects* produced by the various encounters with the unknown this journey entails. These effects, filtered through Axel's extremely unstable personality and unreliable vision, are those of wonder, on a scale from curiosity and

uncertainty, to awe and terror. Taken by his uncle, with fear and trembling, on a dangerous expedition, Axel recounts what he sees and experiences. But if he reacts emotionally, he rarely examines. Disorienting phenomena are encountered, their meaning increasingly avoided. What the reader retains from these encounters, however, are instances of wonder. The reader literally becomes Axel's companion, led to question and doubt what is set forth in his narrative. In this sense, it is the reader of Axel's account who learns to act as the experimental scientist. Hetzel's didactic imperative is not destroyed; on the contrary, it is carried, in the form of sense of wonder, to the higher plane of rhetorical effect on the reader.

Axel's Story: The Rhetoric of Wonder

Axel and Lidenbrock embark on their journey to the center of the earth, in order to give experimental proof or disproof for Humphry Davy's "alternate chemical theory of volcanic action," which posited the cause of volcanic eruptions as a chemical reaction between metallic oxides and water at the surface of the Earth. The conclusion Lidenbrock draws here is that, if eruptions are caused at the Earth's surface, and not by heat from the depths of the Earth, then a journey by humans to the center of the earth is possible. Questions of course remain: Is the center of the earth hollow? Is the temperature there cool enough to allow some form of exploration? An informed reader of the time might know that Davy's theory had been seriously challenged by the time depicted in the novel. [13] Lidenbrock however is given a new "fact" to contend with—the note by Arne Saknussemm claiming he has gone to the center of the earth.

This opening sequence establishes both Axel and Lidenbrock as opposite and, at the same time through the workings of Axel's narrative, complementary types of bad scientist, as defined by Claude Bernard. Lidenbrock is the "scholastic," who reasons from theory rather than observed fact. Throughout the voyage, Axel delights in staging scenes that show Lidenbrock's blindness to fact: "Cela contredit singulièrement les théories du professeur Lidenbrock. Je ne puis m'empêcher d'en faire la remarque: 'Eh, bien,' réplique-t-il, 'qu'est-ce que cela prouve contre ma doctrine?' "Rien,' dis-je d'un ton sec, en voyant que je me heurte à un entêtement absolu'[This is singularly in contradiction with Professor Lidenbrock's theories. I cannot resist pointing it out. 'Well,' he says, 'what does that prove against my theory?' 'Nothing," I reply dryly, seeing that I am up against an implacable stubbornness]." (164) [14] The opening pages of the narrative prepare the reader for such moments. On finding the note, Lidenbrock announces he is the kind of scientist who would "go and see for himself," to verify by observation and experiment Saknussemm's account. In his initial decision, Lidenbrock seems to abandon the official science of Cuvier, the authority he later cites again and again. Instead of Cuvier, he now appears to echo Claude Bernard, for whom observation and experiment are both active and complementary processes. [15] And yet, Lidenbrock does not stop to observe the facts of the note, which offer slim evidence for the trip to the center of the earth. This initial blindness allows Axel to present him, on repeated instances during the voyage, as one who simply refuses to see: "'Mais regardez, examinez, observez!' Je forçai le professeur à promener sa lampe sur les parois de la galerie [But look, examine, observe! I made the professor shine his lamp on each of the walls]." (98) Axel creates scenes throughout where his uncle, in his own words, reveals his scientific blindness. Near the end of their subterranean adventure, Lidenbrock now presents himself, in Axel's staging, as one who

categorically refuses to look (“Il ne s’agit pas de voir. Je me suis proposé un but, et je veux l’atteindre! [Seeing is not the question. I set myself an objective and I mean to attain it!]” [155]).

As he stages his uncle in this opening scene however, Axel reveals himself to be not only Lidenbrock’s opposite, but Claude Bernard’s other type of bad scientist. If Axel derides his uncle for letting theory blind him to fact, he offers the opposite kind of blindness, the eye distorted by emotional haste, the classic bypassing of facts in a rush to judgment: “Je n’avais pas fait cent pas que des preuves incontestables s’offrirent à mes yeux [I hadn’t gone a hundred yards further before incontrovertible proof appeared in front of my eyes].” (98) In terms of scientific method, Axel presents the world in terms of absolute extremes. At the same time, however, he gives no voice whatsoever to the one person who might fit Claude Bernard’s description of the researcher as free and calm spirit, never swayed by human emotions to faulty judgment. This is Hans, the Icelander who literally takes them through the underground region. The loquacious Axel rushes to judgment again and again, seeing Hans as a servant, then as a shaman, finally as a figure of classical myth. What he never recognizes—but which comes through in his account—is the potentially experimental method that underlies Hans’ actions.

Only about three-fifths of the narrative takes place under the earth. It takes some 150 pages to get there. Any scene along the way however offers a microcosm of the effects Verne’s narrative works on the reader. A good example is the opening scene in staid Hamburg, that of the discovery and deciphering of Arne Saknussemm’s runic message. Established here is a rhythm of engagement and deferral of discovery that not only leads Lidenbrock and his nephew “à entreprendre la plus étrange voyage du XIXe siècle [to undertake the strangest voyage of the nineteenth century],” (6) but defines the mechanism by which Verne will generate sense of wonder during this strange journey. Axel introduces himself both as a scientific dreamer—spending hours among the neatly classified mineral specimens in his uncle’s cabinet—and as a philistine, who sees all these stones as the means of making an extra room for himself in his uncle’s house, “avec une belle chambre de plus, dont je me serais si bien arrangé! [with a fine extra room, which would have suited me down to a T] ”. (7) Axel’s subsequent presentation of Lidenbrock looks down on him as a harmless antiquarian: “Cette exclamation me rappela que le professeur Lidenbrock était aussi bibliomane... mais un bouquin n’avait pas de prix à ses yeux qu’à la condition d’être introuvable, ou tout au moins illisible [This exclamation reminded me that Professor Lidenbrock was a fanatical book collector in his spare time. But a volume had no value in his eyes unless it was unfindable or, at the very least, unreadable].” (7) This seems the most sedate of worlds. What a surprise, then, when Saknussemm’s message falls out of one of these old books. The slightest crack in this comfortable world of well-organized specimens and books, and Axel and his uncle are embarked on an expedition into purest *res extensa.* This is a lane to the land beyond the dead, to a place where categories of order, books of knowledge, all human dreams themselves, prove ineffectual.

Before they begin, however, the *illisible* runes must be deciphered. In presenting this process, Verne uses Axel’s narrative to establish a rhythm of interaction—between the reluctant pupil, the suddenly authoritarian professor, and a series of minor but “fatal” events—that will recur, in other contexts and at increasing levels of intensity, throughout the novel. Lidenbrock’s response to the note that falls from the old Icelandic book is not that of a

collector and classifier. He is suddenly, as scientist, as impetuous as Axel is cautious. Lidenbrock hails Arne as an “alchimiste célèbre.” He never asks if he or the note are hoaxes (Arne’s given name “Saknussemm,” despite the learned Icelandic double m, means “sack of nuts”). Lidenbrock asks only one question: “Pourquoi ce Saknussemm n’aurait-il pas enfoui sous cet incompréhensible cryptogramme quelque surprenante invention? Cela doit être ainsi. Cela est [Why might this Saknussemm not have hidden some surprising invention in the incomprehensible cryptogram? That must be the case. That *is* the case] “(13). Against all experimental method, the scientist declares certainty. In perfect deductive fashion, the sole task now is to crack the code. He rearranges the runes from horizontal right-left to vertical top-bottom, and then begins what Axel sees as an impossible task: going through the permutations of the 132 letters in the message. On this small scale, that of Saknussemm’s note, rational science is thrown overboard, middle-class stability collapses. The unknown looms large, as the stodgy classifier, Lidenbrock launches on a mystic quest to calculate an answer on the magnitude of Arthur C. Clarke’s nine billion names of God. The world of the all-too-human is suddenly invaded by the possibility of wonder.

We see here, as in the rest of the novel, that all forms of scientific inquiry—false or true—are ultimately subject to a “fatality” of events, things happen that invariably deviate the protagonists from discovery. Axel is certainly capable of asking rational questions: “car rien ne prouve l’authenticité de ce document [for nothing proves that the document is genuine].” (27) Yet his overheated imagination soon leads him to embrace the professor’s fantasm heart and soul. He too begins to count permutations, possible words dance before his eyes: “Je me débattais contre une insoluble difficulté; mon cerveau s’échauffait... [I was struggling with an insoluble problem; my brain started overheating...]” (19) Feeling faint, Axel fans himself with the document, and lo, as the paper passes back and forth before his eyes, he suddenly sees that the message is written not only top to bottom but backwards. This is sheer accident. Yet Axel irrationally claims he has discovered a scientific law: “J’avais découvert la loi du chiffre! [I had discovered the law of the numbers]”. [16] (33) When he reads the message however, his boasting yields to fear and trembling: for what Saknussemm is actually describing is a voyage to the center of the earth! Again, his imagination carries him away, this time with feelings of claustrophobic terror: he sees his uncle wanting to make the voyage, taking his nephew with him. Fearing the worst, he resolves to destroy the document. He is about to do so when, *coup de malchance,* his uncle enters the room, and he has barely time to set the document down.

Axel now knows the key to the text. But instead of telling his uncle, he watches, sadistically, as Lidenbrock wrestles with his permutations: “Je pouvais d’un geste desserrer cet étau de fer qui lui serrait le crâne, d’un mot seulement! Et je n’en fis rien! [With a single act I could undo the iron hoop wrapped tight around his brain—with just one word. I did nothing]”. (22) [17] Yet, in neatly intertwined manner, Lidenbrock’s torture becomes Axel’s torture, for there is no telling how long the former might have stuck to his futile task, had not more events intervened to move things along. Forgetting all else in his obsession, Lidenbrock has locked the house and lost the key; Axel and the maid are trapped inside without food. As hunger begins to gnaw at Axel, he looks for excuses to retreat from his position (“Je commençais à me dire que j’exagérais l’importance du document... [I started to tell myself that I was exaggerating the importance of the document...]” (23-24). Finally, he persuades himself that he alone, not physical circumstances, has made the decision to give Lidenbrock the key to the puzzle in exchange for the key to the door. Despite all the keys, locks and mini-crises in this scene, the door to the unknown remains open here. Saknussemm’s statement remains

untested. The only way to prove or disprove this 'I was there' is to go in person and verify. If all these twists and turns may seem amusing, they reveal however that what claims to be a scientific adventure has a fortuitous, if not patently irrational, beginning. The reader sees that the unknown can abide in something as insignificant-seeming as a piece of paper in an old book. The reader also sees how foolishly inadequate two people of apparently scientific pretensions can be, who make the unknown all the more wondrous by their inability to engage it.

Axel's Descent to the Underworld: Humanity Engages *res extensa*

As Axel undertakes this journey, he reveals himself, in his fears and emotive response to the places he travels, to be the descendant of the French romantic hero, of Senancour's Oberman and Chateaubriand's René. For such a figure, nature is a spectacle, exterior landscape and events are met with effusive personal reactions, observation is always centered in the observer's self. At the same time, Axel's discourse reveals a person steeped in what the Western world calls humanist culture. This culture provides him with the mythic and literary structures that accompany him as he encounters the unknown. They provide, in a sense, pre-packaged models for explaining whatever phenomena may arise. In this sense, then, Saknussemm did not make the first voyage to the center of the earth. Seen through Axel's eyes, any number of mythic figures, writers, and epic heroes have made this journey before him. One in particular is cited by Axel at strategic moments—Virgil. In Book Six of *The Aeneid,* Aeneas descends into the land of shades via Lake Avernus to confer with his father Anchises. Later, in Dante's *Divina Commedia,* Virgil himself, now a character in his successor's poem, continues to guide pilgrims and visitors through the labyrinth of the Inferno. This labyrinth is a Christianized version of the one depicted by the original artificer, Daedalus, on the sibyl's door through which Aeneas enters the lower realm. Axel begins his descent thus: "C'était le *facilis descensus Averni* de Virgile [It was Virgil's *facilis descensus Averno*]." (92) [18] However easy the descent, it becomes increasingly difficult for Axel to make these cultural models "stick" to the phenomena he encounters. Lost in the underground tunnels, he uses the term "labyrinth" to describe the location he is in. Yet it is clear that no Daedalus, no human hand, has touched this place. Axel's humanist responses raise an important *scientific* question: is it possible for someone carrying such cultural baggage to make direct, unmediated contact with the material unknown, in this case a place never physically visited by mankind?

Axel's reaction to Lidenbrock's project is one of fascination and utter terror. He expresses his emotions in a romantic effusion, tinged by science, but echoing the morbid dread of an Edgar Allan Poe tale: "Je la passai [la nuit] à rêver de gouffres! J'étais en proie au délire. Je me sentais étreint par la main vigoreuse du professeur, entrainé, abîmé, enlisé! Je tombais au fond d'insondables précipices avec cette vitesse croissante des corps abandonnés dans l'espace. Ma vie n'était plus qu'un chute interminable [I spent (the night) dreaming of chasms. I was the creature of delirium. I felt myself seized by the vigorous hand of the professor, dragged along, engulfed, bogged down! I was falling to the bottom of unfathomable pits, with the increasing speed of bodies abandoned in space]." (37-38) [19] On the long preliminary journey that takes him via Denmark to Iceland, and once there across the volcanic wasteland to the crater of Mt. Sneffels, Axel looks to literature for guides. Rounding Elsinore, he invokes

Hamlet, who spoke of the undiscovered country. Iceland is a place, he notes, the very opposite of his familiar green classical landscape. For example, he is unable to see Hans for what he is, one who scales the barren rocks in search of bird eggs. Instead, he camps him in his familiar culture, as “un fermier qui n’avait ni à semer ni à couper sa moisson, mais à la récolter seulement [He is a farmer who doesn’t have to sow his seed or cut his harvest, but merely gather it in].” (56)

Axel in Iceland is already in terra incognita, a stranger in a place where he does not speak the language, and where his only communication with his host M. Fridriksson, takes place, significantly, in Latin. Equally he faces, in Iceland, an entirely new geological landscape. But rather than study it as new phenomena, he layers this landscape with textbook knowledge, interiorizing and familiarizing the unknown rather that confronting its newness: “En véritable neveu du professeur Lidenbrock... j’observais avec intérêt les curiosités minérologiques étalées dans ce vaste cabinet d’histoire naturelle; en même temps je refaisais dans mon esprit toute l’histoire géologique de l’Islande [As a nephew of Professor Lidenbrock’s... I examined with interest the minerological curiosities displayed in this vast natural history collection. At the same time my mind ran through the whole geological history of Iceland].” (76). As well, Axel covers the real terrors of the ascent of Sneffels with romantic posing in the manner of Oberman or Byron’s Childe Harold. His musings however reflect the more mystical visions of Victor Hugo: “Je me plongeais ainsi dans cette prestigieuse extase que donnent les hautes cimes... J’oubliais qui j’étais, où j’étais, pour vivre de la vie des elfes ou des sylphes... Je m’enivrais de la volupté des hauteurs, sans songer aux abîmes dans lesquels ma destinée allait me plonger avant peu [I plunged into that high-blown ecstasy produced by lofty peaks... I forgot who I was, where I was, and lived the life of elves and sylphs. . I was intoxicated by the voluptuous pleasure of the heights, oblivious to the depths my fate was shortly going to plunge me into].” (81) [20]

Thus far, Axel seems able to find cultural guides for his experience, guides that divert his gaze from empirical scientific examination of phenomena he encounters. The result however, for the reader, is a clear disjunct between his literary responses, and the actual physical facts that, despite his cultural masking, filter through his effusions, raw “things” that, untouched, retain their unknown status. This masking however becomes increasingly difficult to do as Axel penetrates into the completely unknown territory underground. Here cultural guides must be replaced by mechanical devices: compass, barometer, chronometer, the Ruhmkorff lantern, all of which seek to reproduce the natural rhythms of night and day, of light and darkness, which can no longer be counted on to provide the familiar landscape of culture: “Il aurait dit plus justement ‘glissons,’ car nous nous laissons aller sans fatigue sur les pentes inclinées... La boussole, que je consultais fréquemment, indiquait la direction du sud-est avec une imperturbable rigueur [He should have said ‘off we slide,’ for we were able to simply let ourselves go on these inclined slopes... The compass, which I often consulted, showed the direction as southeast with an unflinching precision].” (92) The irony of this citation will soon extend to all these mechanical aids by which Axel and Lidenbrock seek to map their journey in relation to familiar places and landscapes above ground. The Ruhmkorffs go out. The chronometer and thermometer seem an absurdity as the voyagers encounter the vast underground cavern, water that obeys no tides, a cavernous granite vault, which Axel misnames the “firmament,” and finally “light,” produced by some unknown source, that resembles nothing familiar on earth. Finally, there is the compass in which Axel puts such absolute faith, and which proves to be totally wrong, its polarity reversed by the “electrical

storm" on the "sea" that in fact brings the voyagers back to their point of departure, just when they believe they have reached the other shore. In terms of all known maps—physical and cultural—our voyagers become completely "déboussolés."

All along, the voyagers are giving unknown places familiar names: Port Gräuben, the Lidenbrock Sea. Yet, increasingly, there are encounters with material phenomena where no name or cultural model fits, where nothing exists that can offer the least sense of orientation. We are in the presence of Descartes's *res extensa*, "things" that bear no mark of the human mind. The crucial scene here perhaps is the one where Axel takes a wrong turn in the tunnels, and finds himself suddenly alone and lost, with his physical Ariadne's thread, the Hans-Bach, suddenly gone: "Je me baissai donc pour plonger mon front dans l'eau du Hans-bach... Je foulais un granit sec et raboteux! Le ruisseau ne coulait plus à mes pieds! [I bent over to wet my forehead in the water of the Hans-Bach. Under my feet was dry and uneven granite. The stream was no longer flowing at my feet!]" (125) We notice that as Axel reaches down and physically confirms there is no water, his terms shift from the humanizing "Hans-Bach," to the objective ones of "granit sec et raboteux." The "ruisseau" has become water, pure physical necessity. Death from thirst is neither a product nor a figment of the cultural mind. At first, Axel attempts to humanize his situation with terms like "labyrinth." But what he now experiences cannot be covered with poetically loaded terms, or Poe-like effusions about being buried alive. All at once, he finds himself face to face with the cold equations of the natural world, and his language conveys this objectively: "Ces trentes lieues d'écorce terrestre pesaient sur mes épaules d'un poids épouvantable. Je me sentais écrasé [Those 70 miles of Earth's crust weighed down on my shoulders with a terrible weight. I felt I was being crushed]." (125)

But this is not all. Without a lamp, Axel now confronts a situation that not only no poet had ever imagined, but no human before him had ever experienced: a degree of physical darkness that exceeds any found even in the deepest night of earth. Axel faces the truly unknown here; and his situation forces him to face it with scientific objectivity. Note how his description again modulates away from poetic discourse to discussion of physical levels of light and the retina: "Sur terre, au milieu des plus profondes nuits la lumière n'abandonne jamais entièrement ses droits! Elle est diffuse, elle est subtile, mais si peu qu'il en reste, la rétine de l'oeil finit par la percevoir! Ici, rien. L'ombre absolue faisait de moi un aveugle dans toute l'acceptation du mot [On Earth, in the middle of the darkest nights, light never entirely gives up its rights. It is diffuse, it is subtle, but however little remains, the retina ends up receiving it. Here, nothing. Absolute darkness made me a blind man in the full sense of the word]." (128)

As Axel experiences what appears to him an absolute void, one is tempted to say he experiences Pascalian terror. But if this were the case, he is still approaching this moment as a humanist, in terms of what Pascal calls *la condition humaine*. In reality, however, Axel is physically forced, by the absence of all perceivable light, to act as an experimental scientist would. Indeed, it is only because he has physically lost all cultural bearings, all romantic sense of self, in the dark, that he is able to engage *res extensa*. Here, in the total absence of known forms of light, he is forced to attempt to measure the degree of an unknown form of darkness, and in doing so, becomes suddenly aware of the inadequacy of his own sense apparatus in terms of the objective nature of light. The point here is that Axel's terror is a scientific terror. What he perceives could only be conveyed because he has enough scientific training, not only to grasp, but to seek to measure the *degree* of uniqueness of his situation.

The scientist in Axel returns in a sort of “thought experiment” that immediately follows from his uttering the word “labyrinth,” as if he suddenly realized that the relativizing process of science is perhaps the only way out of the closed systems (“*les entrailles”*) of our culture: “Et, chose étrange, il me vint à la pensée que, si mon corps fossilisé se retrouvait un jour, sa rencontre à trente lieues dans les entrailles de la terre soulèverait de graves questions scientifiques! [And strangely enough, it came into my mind that if one day my fossilized body was found again, encountering it 70 miles into the bowels of the Earth would raise serious scientific questions].” (127) In the midst of what could be defeat and despair, a glimpse such as Axel gives of the future continuity of scientific experiment opens a brief window onto a form of wonder that inspires future readers to continue the pursuit of the unknown.

Verne gives the reader this small glimpse of scientific wonder here. And then, exterior forces intervene. We saw “chance” in action in the opening scene—Axel fans himself and accidentally breaks Arne’s code; in the nick of time Lidenbrock enters the room before Axel can destroy the message. In this instance however, something akin to what Robert A. Heinlein will call “serendipity,” a clear device of wonder, intervenes. Axel suddenly hears his uncle’s voice, a possible but highly improbable acoustic event. Then, even more improbably, Axel falls down a precipice in the dark, only to emerge on the shores of an already-named “Lidenbrock Sea,” as his uncle and Hans have gotten there first. Axel has displayed the romantic penchant for dreaming. Now, he can only explain his fall, how he arrived safely “au milieu d’un torrent de pierres, dont la moins grosse eût suffi à m’ecraser [in the middle of a torrent of stones, the smallest of which would have been enough to crush me],” (136) in terms of “providence,” or as a dream: “Je me demandai si j’étais bien éveillé, si je rêvais encore... [I began to wonder if I had woken up properly, if I wasn’t still dreaming]” (135)

Axel may wish to see himself as having fallen down an Alice-in-Wonderland rabbit hole. In fact, he finds himself confronted with a landscape of increasingly unknown phenomena, each crying out for careful scientific examination. What for instance is the nature of this great “sea” they encounter? Why is it there? Saved by an act of wonder, only to be plunged into a world of increasing physical wonders, Axel begins to realize, in the heightened tempo of things, that the language of human culture no longer fits the things he is observing: “Le mot ‘caverne’ ne rend évidemment pas ma pensée pour peindre cet immense milieu. Mais les mots de la langue humaine ne peuvent suffire à qui se hasarde dans les abîmes du globe [The word ‘cavern’ is clearly insufficient for my attempt to convey this immense place. But the words which make up human language are inadequate for those who venture into the depths of the Earth].” (139) Incorrigible Axel still throws his romantic diction (“les abîmes du globe”) at the unknown. But the reader now increasingly sees the uselessness of this language of poetic exaggeration, and with it the overwhelming inadequacy of the humanist observer in the face of patently new phenomena: “Mais qu’étaient ces cavités auprès de celle que *j’admirais* alors, avec son ciel de vapeurs, ses irradiations éléctriques... Mon imagination se sentait impuissante devant cette immensité. Toutes ces merveilles, je les contemplais en silence. Les paroles me manquaient pour rendre mes sensations... Je regardais, je pensais, j’admirais avec une stupéfaction mêlée d’une certaine quantité d’effroi [But what were these holes compared to the one I was now admiring, with its sky of clouds, its electric illumination... My imagination felt powerless before this immensity. I reflected on all these marvels in silence. Words to describe my feelings failed me completely... I looked, I thought, I admired, in a stupefaction mingled with a certain amount of fear] ’ (139-40) [our italics]. [21] What is already an effect of wonder however is augmented here by the obvious disparity between word

spoken and thing glimpsed, by the fact that this unexplained *res extensa,* like the dark cavern, gradually engulfs Axel's verbiage, erases his familiar models from poetry and religion: "Au lieu d'un *firmament brillant d'étoiles* [our italics], je sentais par-dessus ces nuages une *voûte* de granit qui m'écrasait de tout son poids [Instead of a firmament bright with stars, I felt the granite vault above these clouds crushing me with all its weight...]." (138)

At the same time, events increasingly happen that leave Axel little time to contemplate an increasingly unknown world. "Things" intervene that keep the scientific explorer from getting close enough to phenomena in order to study them. For example, they discover a forest of what they call giant "white mushrooms." They mount an expedition with the intention of studying these objects close-up. They are prevented from doing so, because this underground "light" cannot penetrate their shade. Events intervene in like manner, when the expedition on the Lidenbrock Sea is interrupted by a battle of what appear to be sea-creatures. Axel first refers to them as "monstres marins," a term taken from art historians of the time. Then he and Lidenbrock seek to identify them as living specimens of presumably pre-historic sea monsters, as reconstructed by contemporary paleontologists. In fact, in the melee that ensues, their exact forms of these beings are never determined. The rhythm of such "impediments" accelerates until the final "eruption" that ejects them from below the earth. In all of these incidents, as Axel and his uncle are prevented from getting close to these phenomena, their attempts to describe and define, in their obvious inadequacy, gives fleeting glimpses of "something" unknown that lies endlessly beyond their reach, but draws the reader's curiosity, doubt, and often awe. We have another technique for generating sense of wonder.

Experiment and Dream: The Moulin-Quignon Man

It is on the shores of this subterranean "sea" that the center of Axel's and Lidenbrock's scientific journey is reached. A clear shift is seen in these episodes from geological considerations to questions of paleontology, from issues of the age and the constitution of the earth, to issues of the nature and evolution of life. The shift is quite noticeable in Chapters 37-39, where substantial material was added in the 1867 edition. If the issues raised by Humphry Davy, Humboldt and others belong to an earlier generation of scientific speculation, questions about the age of life forms, and especially of *homo sapiens*, were burning issues at the time of Verne's novel, not only in France and the England of Darwin, but all over Europe. This was an arena of genuinely experimental science, and the advent of debates about origins may have brought Verne, during the period between first and revised publication, to read Claude Bernard's *Introduction*, a work that transcends Claude Bernard's own specialties of medicine and physiology, to discuss the nature of scientific experiment in the broadest terms.

On the shores of the Lidenbrock sea, Axel's party makes direct contact with an ever-accumulating mass of data, fossil and otherwise, that, if subjected to experimental science, promises to alter much of what the 19th century knows about the evolution of life and mankind. But in order for scientific experiment to be valid in this case, they would have to study this data *in its own context*, in its under-earth environment. But this is exactly what these two examples of Claude Bernard's bad scientists avoid doing. The more alien the

phenomena encountered, the more they seek, in increasingly sophisticated maneuvers, to relocate this data in familiar contexts. The reader sees abundant promise of scientific discovery. That promise, however, is ever dissipated as the protagonists seek to convert unknown facts into known events.

After the episode with the "mushrooms," Axel and Lidenbrock come across an entire area of giant plants, a landscape that the latter at once magnifies into an Alice-in-Wonderland dreamscape: "Étonnant, magnifique, splendide!... Voilà toute la flore de la seconde époque du monde... Voilà ces humbles plantes de nos jardins qui se faisaient arbres aux premiers siècles du globe! Regarde, Axel, admire! Jamais botaniste ne s'est trouvé à pareille fête! [Astonishing, magnificent, splendid!... Here we have the complete flora of the Secondary Period of the World... Here we have those humble garden plants in the first centuries of the Earth. Look, Axel, admire! No botanist has ever been invited to such a display!]" (142) Despite the apparent passion of discovery, the effect on the reader is that of betrayed sense of wonder, for at the core of the professor's effusions is the embedded assumption that these flora are simply larger versions of today's domestic varieties. How can he say, in fact, that no botanist has ever confronted such a spectacle, when he himself, as a botanist, is looking at it face to face, and rather than emoting, should be asking questions about the nature of these plants. Lidenbrock's vision appears schizophrenic here. One half of him stands in the presence of unknown flora. The other half is absent, as he travels in imagination to the familiar earth of garden plants, where of course no botanist has ever seen such plants. It is of course most unlikely that these are simply larger versions of known plants. Their real evolutionary differences should be investigated, but our two scientists never propose to do so.

The professor dodges such questions by placing himself in two locations, and speaking from the one where the evidence is not at hand. Axel, as he presents the situation, finds it all but impossible to keep Lidenbrock in the underground location, with his eye of the facts at hand. For example, on examining some skeletal remains found in this soil, Axel notices an anomaly: "Je ne comprends pas la présence de pareils quadrupèdes dans cette caverne de granit [I cannot understand how such quadrapeds came to be in this granite cavern]". (142) His caveat would seem crucial, as the animals in question are not known to be found in sedimentary soil. Lidenbrock however waves away the question with another gesture toward familiar territory, as he makes a fantastic-seeming application of Davy's theory, asserting that, in fact, the out-of-place sediment has fallen underground due to a volcanic rift in the earth's surface.

But Lidenbrock soon after faces a more startling anomaly: the presence of the fully preserved skeleton of a "quaternary man" in this same sediment. Did it too fall down through a volcanic rift? Lidenbrock's response this time is to relocate his find in the context of a scientific controversy going on at exactly the time of the publication of Verne's novel: that of the Moulin-Quignon Man. If there are still doubts that Verne had an interest in the methods of experimental science, the discovery of supposedly human remains in quaternary sediment at Moulin-Quignon was seen, at the time, as a prime example of what Claude Bernard calls a "découverte imprévue," a discovered fact that could cause previous theories—in this case those of Cuvier—to collapse, in Claude Bernard's words, to *crouler.* [22] Verne dates the event exactly: "le 28 mars 1863, des terrassiers fouillant sous la direction de M. Boucher de Perthes les carrières de Moulin-Quignon, près d'Abbeville... trouvèrent une mâchoire humaine à quatorze pieds au-dessous de la superficie du sol. [On 28 march 1863, French

workmen under the direction of Boucher de Perthes had unearthed a human jawbone at a depth of 14 feet below the soil in a quarry at Moulin-Quignon, near Abbeville (Somme)]" (179) The authenticity of this find was hotly disputed at the time. In a letter to Charles Darwin, dated May 24, 1863, J.D. Hooker remarks: "What a mess Falconer, Busk, Carpenter & Prestwich have made of it!... I regard the position of all 4 as humiliating. Falconer is of his original opinion saving solely that no fraud was played (how he reconciles this to his facts I cannot conceive). Busk believes a little more than F[alconer]. Carpenter more than either, and P[restwich] is ready to believe anything. Falc[oner] assured us that his whole conversation with Lartet in the train from Paris to Moulin Quignon was, how so to word the report as to give least umbrage to France's susceptibility!" [23]

The point here is not that the find was a fraud, or even that it was not *the* paradigm-shifting event it was thought to be. What is important for the understanding of Verne's text is that this question of the quaternary man was already being resolved, new finds verified, all over the world at the time of the novel's first publication. It was current, but hardly revolutionary news at the time of the second edition of *Voyage* in 1867, when large sections of this chapter and the two following chapters were added to the text: [24] As Andrew White puts it, "Research among the evidences of man's existence in the early Quaternary, and possibly in the Tertiary period, was being pressed forward across the board. In 1864 Gabriel Mortillet founded his review devoted to this subject; and in 1865 the first of a series of scientific congresses devoted to such researches was held in Italy. These investigations went on vigorously in all parts of France and spread rapidly to other countries. The explorations which Dupont began in 1864, in the caves of Belgium, gave to the museum at Brussels eighty thousand flint implements, forty thousand bones of animals of the Quaternary period, and a number of human skulls and bones found mingled with these remains. From Germany, Italy, Spain, America, India, and Egypt similar results were reported." [25]

Even so, Lidenbrock has before his eyes what he believes to be a *complete* skeleton of a quaternary man. His colleagues, given the state of contemporary paleontology, could at best hope to reconstitute such a specimen from fragments. In this context, Lidenbrock's artifact, found and studied *in situ,* is a significant scientific find, one which would surely bring new, and clearly transformative data to the ongoing question of mankind's origins. But once again, and now quite dramatically, Lidenbrock turns his back on his data and the mysteries of its being. At once, he transports himself, in a sort of waking dream, back to his classroom at the Johannaeum, where he now displays, in a formal lecture, his quaternary specimen to skeptical colleagues. If he first speaks in the conditional tense: "Les Saint-Thomas de la paléontologie, *s'ils étaient là*, le toucheraient du doigt (italics in Verne's text)... [The doubting Thomases of paleontology, if they were here, would be able to touch it with their finger]." (181) he soon invests his own fantasy: He is actually *there*, speaking in the present tense. In a strange foreshortening that breaks all links with a prehistoric past, the "skeleton" of the underground world now becomes a "cadaver," an object of dissection, in the familiar classroom: "Le cadavre est là! Vous pouvez le voir, le toucher [The corpse is there! You can see it, touch it]." (182) In the real present of his scientific voyage, imagination fails Lidenbrock. In his imaginary trip to his familiar lecture hall, however, he now goes boldly where no man has gone, putting flesh on the creature whose bones he has never really examined. If Lidenbrock now asks hard questions, he is asking them in the wrong place, to an audience that has never seen their context: "Mais de vous dire par quelle route il est arrivé là, comment ces couches où il était enfoui ont glissé jusque dans cette énorme cavité du globe, c'est ce

que je ne me permettrai pas [But by what route it arrived here, how the strata it was enclosed in, slid down into this enormous cavity of the globe, I am unable to tell you].” (183) We can see this disjunctive scene as the supreme example of Axel “staging” Lidenbrock. This time however, Axel is “captivated” by his own dramatic skills. For, in the act of recounting the scene, he is literally “there,” present in the lecture hall, describing the expressions on imaginary faces, applauding as the professor finishes his lecture. In a sense, in this scene, the reader is the only one who sees both worlds. Able to do so, the reader finds its way back from the minor seduction of Lidenbrock’s “dream” to the greater mystery of this amazing skeleton, snatched away before its eyes, leaving a strong moment of doubt and wonder, in the form of the thousand questions never asked.

Up to now, the two scientists at least asked questions about phenomena they encounter. They are either turned away from answering these questions by intervening events (e.g. the “electric” storm). Or they satisfy themselves with patently inadequate answers (e.g. the Davy hypothesis of volcanic sediment). From this point on however in the narrative, our scientists no longer make even the minimal effort to describe phenomena, let alone analyze them. Lidenbrock’s “lecture” is a prelude to a broader series of experiences, in which description and dream become one. For example, in Andrew White’s comments above, we saw that huge quantities of fossil fragments were being found during the mid 1860s by paleontologists across all Europe. Axel comes across just such a field of bones. As such places were being found, one would expect his response to be more measured. Instead, he transforms the place into a vast “plaine d’ossements... un cimetière immense, où les générations de vingt siècles confondaient leur éternelle poussière [a plain of bones. . an immense cemetery, where the generations of two thousand years mingled their eternal dust].” (178) As the bones of long lost creatures crunch under his feet, he reacts as if in a dream, multiplying both the vastness of the field, and the number of objects in this field, much like De Quincey’s opium eater summoning ever-proliferating crocodiles in the dream sequence of *Confessions of an English Opium Eater.* To deal with this exploding vision of factual objects, he multiplies the number of scientists needed to deal with it, calling upon “mille Cuvier” to take up the impossible task of recomposing “les squelettes des êtres organiques couchés dans ce magnifique ossuaire [the skeletons of all the-once living creatures which now rested in that magnificent bone-graveyard].” (178)

As the two move away in their raft from this “cemetery,” Axel, who up to this point has shown himself to have some scientific knowledge of the nature of light, suddenly views changes in light in a very different, non-scientific, indeed patently “fantastic” manner: “Par un phenomène que je ne puis expliquer... la lumière éclairait uniformément les diverses faces des objets [By a phenomenon I cannot explain, the light was uniformly diffused so that it lit up all the sides of objects equally].” (184). Less important than his inability to give a scientific explanation, is the fact that his cultural model—Hoffmann’s Erasmus Spikher, the man who loses his mirror image—does not even fit the occasion. His earlier lesson of total material darkness in the cavern seems lost on him here. Axel now appears to see the physical world in a totally new light, that of dream, in which he loses all ties to physical reality, himself no longer casting either shadow or image. Now entering what seems a vast cluster of living tertiary vegetation, his mind no longer perceives the objects before his eyes. Instead, as in a waking dream, he sees these fossils turn into living plants before his very eyes. The categories of conventional science clearly no longer have relevance here: “C’était à confondre la raison des classificateurs les plus ingénieux de la botanique terrestre [It was enough to upset the sanity

of the most ingenious classifiers of terrestrial botany].” (185) All at once, the evolutionary scope of the dream widens; where there were plants before, now forms of living prehistoric animals seem to appear. Axel question his senses as one does in a dream: “J’avais cru voir... Non! reéllement, de mes yeux, je voyais des formes immenses s”agiter sous les arbres! [I thought I saw... No! I really *did* see, enormous shapes wandering around under the trees]” (185)

At this point, Axel has no other referent but his own earlier “dream”—“ce rêve où j’avais vu renaître tout ce monde des temps anté-historiques [the dream where I had seen the rebirth of this complete world from prehistoric times]” (186) [the “dream” itself is found in Chapter XXXII, 243-246]. But where the earlier episode was clearly seen by Axel as a dream, the dream now appears to take on flesh, and he can no longer distinguish between dream and waking “reality.” Suddenly, among this patently improbable flora and fauna, a giant living hominid seems to appear before his eyes. Axel throws at this apparition the ultimate weapon of his cultural arsenal—Vergil. The creature is seen as a “berger antédiluvien,” a herdsman of flocks from the poet’s Eclogues. But this new Golden Age proves to be but a dream of a dream. Vergil proves powerless, and awe and wonder are now one with derangement of the senses. In fact, though Verne is writing long before the idea of the “unconscious” was formulated, a deeper dream logic seems at work here. Axel, whose Latin was more or less accurate till now, makes a significant “slip” as he tosses a quote at the creature: *Immanis pecoris custos, immanior ipse.* The word in Vergil (Eclogue 5:44) is *formosi/formosior*, beautiful, referring to Daphnis. In a note to his translation, William Butcher identifies the misquote’s source as Victor Hugo’s *Notre Dame de Paris.* [26] This however does not detract from the fact that, in Axel’s mind, at this moment of psychic shock, a misquote of this sort signals the surfacing of something repressed, now made visible in what appears an unconscious substitution of a (medieval-romantic) vision of monstrosity for that of Daphnis and the harmony of Vergil’s bucolic vision. Some terror, operating on a deeper psychic level than any of the previous dream visions Axel has conjured, causes him to misspeak, to utter the word *immanis,* “savage,” instead.

The question, of course, is Lidenbrock’s role here. Axel’s account assumes that Lidenbrock too saw this creature. For he tells us that, whereas always before Lidenbrock led and Axel followed, now it is Axel, in total rout before the terrifying giant, who drags Lidenbrock away, “qui pour la première fois se laissa faire! [who for the first time in his life did not resist].” (187) But how do we really know whether Lidenbrock was a physical witness to a real scene, or simply another figment of Axel’s dream? We remember that it is Axel who is telling the story. Given his described relation to his uncle, it would seem tempting for him to reverse roles here, in what might be a totally imaginary scenario, and see the otherwise fearless explorer fleeing himself before the unknown. The greater unknown in this episode, however, is not the narrative’s unreliability, but its silence. Usually Hans is physically present, if silent, at these moments of encounter with unknown phenomena. Here he is completely off-stage, waiting with the raft on the shore. Axel flees the “antediluvean man” and drags Lidenbrock with him, whom he suggests is more terrified than himself. But what did Hans think as these two come running up? If this was Axel’s dream, Lidenbrock figures in it, but Hans, the figure of calm experiment, is left completely out. By this time in the story, the reader no longer trusts Axel’s account. The reader, hoping to leave the realm of dream, now eager to see this underground world through more objective eyes, turns to Hans, but he is physically not there at all.

Hans as Experimenter

Let us recapitulate here. Lidenbrock, as seen by Axel, is Claude Bernard's much criticized scholastic, who favors theory over observation. Axel is his young, post-romantic pupil, equipped to ask scientific questions, but fearful of engaging the unknown, kept from doing so by the inadequacies of his humanist responses to the raw facts of *res extensa,* and, increasingly, by a growing propensity to cover physical reality with dreams. Verne has turned what seems a paradox into a stunning literary device: he uses Claude Bernard's two bad scientists and their failure to engage the unknown to create moments where the disparity between perceived fact and inadequate response generates a sense of wonder. This in turn inspires the reader to rethink the situation, to demand a more thorough scientific approach to material fact. Hans is not given a voice in the novel's scientific debates. Because of his silence however, and through the glaring disparity between his deeds and Axel's account of them, it may be Hans who is the prime generator of scientific wonder in the novel. Hans has the makings of an experimental scientist. Indeed, he could not have achieved the results he gets without using an experimental method. But all this activity is occluded by Axel. The reader is left to wonder what has gone on, concerning Hans, in the silences of Axel's text.

When Lidenbrock and Axel first hire the Icelander Hans Bjelke, as guide to take them into the Sneffels crater, Axel describes him as "ce personnage grave, flegmatique et silencieux." Hans does seem to be verbally challenged: he speaks only Icelandic, and in that language utters only an occasional monosyllable. To the educated bourgeois Axel, Hans is a servant. And for Axel, once a servant, always a servant. For despite the fact that Hans renders extraordinary service to the two scientists on this hazardous journey, and even saves their lives on a number of occasions, Axel is still unable, even toward the end of their adventures, to see Hans as little more than a devoted servant: "Cet homme, d'un *dévouement* surhumain dont on ne trouverait peut-être pas d'autre exemple, avait travaillé pendant que nous dormions et sauvé les objets les plus précieux au péril de sa vie [This man of superhuman devotion, one that would perhaps never be equalled, had worked while we slept, saving the most precious articles at the risk of his life]." (172)

Throughout the journey, however, Hans's ability to perform successful experiments on nature becomes increasingly evident. Hans first observes, then devises ways to guide his companions safely through seemingly impossible obstacles. In order to do so, he certainly has to know a lot, and be willing to learn more. Despite this, Axel presents him as a blank sheet. This offers an important clue as to the nature of Verne's depiction of science in the novel. Claude Bernard sees the awakening of the scientific method in mankind as a desire to pass from just seeing to the controlled activity of observation: "Mais l'homme ne se borne pas à voir; il pense et veut connaître la signification des phénomènes dont *l'observation* lui a révélé l'existence." (2) Axel and Lidenbrock certainly see, and occasionally observe. But they never even come close to knowing the meanings of things. But, as Verne knew, if they were to pursue scientific inquiry to its end, we would have a story about doing science, not an adventure. This is where Hans enters the scene. Hans is Verne's ultimate stroke of genius in telling his tale of scientific wonder. For Hans clearly incarnates Claude Bernard's first step in reforming the sciences: the *tabula rasa.*

An extraordinary statement leaps out at the reader of Claude Bernard: “L’homme *peut donc plus qu’il ne sait,* et la vraie science expérimentale ne lui donne la puissance qu’en lui montrant qu’il ignore [Man then can do more than he knows, and true experimental science only gives him power over things by showing him how much he does not know].” (85) Neither Lidenbrock, nor even less Axel, measure up to this standard. For essentially, they know little and do less. To Axel, Hans is the man from Iceland, a barren land he describes as void of all traces of Western culture. In contrast however to the faulty science of Lidenbrock, and to the clear inadequacies of Axel’s cultural models in the face of the physical unknown, Hans’s silence, his absence of theories and cultural responses, takes on a positive value. Claude Bernard makes another important statement that could apply to Hans: “Un homme ignorant, qui ne connaîtrait pas la théorie, serait, en effet, sous ce rapport, dans les meilleurs conditions d’esprit [A man who is ignorant, that is who would have no knowledge of theory, would in fact, in this respect, be in the best state of mind].” (71) “Ignorance” refers to *tabula rasa,* which for Claude Bernard is the best condition of mind from which to begin the experimental journey. During this journey however, Hans the blank sheet begins to fill, at least in the reader’s mind. Though Axel does not describe him doing so, Hans, to get the results he gets, *has* to study the landscape and draw significant experimental conclusions from analyzed data. If Axel simply accepts Hans’s deeds without comment or curiosity, the reader is left to extrapolate from Hans’s actions whatever methods of investigation might have informed them, to reconstruct his silent encounters with the unknown.

Hans’s first major feat is the discovery of water in the subterranean caverns that saves the lives of the adventurers, a feat Axel glosses over by simply naming the stream Hans discovers the “Hans-Bach.” As the trio penetrates deeper into the earth, they predictably run out of water. This is their first encounter with the cold equations of nature, and Axel at once succumbs to laments of hopelessness: “Enfin mes forces m’abandonnèrent. Je poussai un cri et je tombai. ‘A moi! je meurs! [Finally my strength left me. I uttered a cry and fell down. Help! I am dying!]’” (109) But as Axel the romantic lies despairing, Hans the man of action rises and goes off: “Pourquoi ce départ? Hans nous abandonnait-il? [Why is he leaving? Is Hans abandoning us?].” Hans returns to wake Axel from his delirious sleep, with the single word “Vatten.” He leads Axel and Lidenbrock to a place in the cavern wall where he has determined there is water. He then takes up a pick, and opens the wall, letting out a stream of hot water, that cools as it begins to flow downward. As the water traces its path, even Lidenbrock the theoretician is obliged to see Hans’s actions as following the ways of material nature: “Eh, bien, laissons couler cette eau! Elle descendra naturellement et guidera ceux qu’elle rafraîchera en route [Well then, we will let the water flow. It will work its way down naturally and guide those who drink from it on the way]! ” (114) Axel however, though admitting that Hans may have conducted “des recherches,” rapidly passes him off as a shamanic *sourcier*: “Guidé par un instinct particulier aux montagnards, aux hydroscopes, il ‘sentit’ ce torrent à travers le roc... [Guided by an instinct particular to mountain men, to water-diviners, he had ‘felt’ the presence of a stream through the rock. .]” (111) Characteristic of Axel’s approach to unknown phenomena is a quickness to assimilate them to known activities on the surface of the earth. Hans however is not in his native mountains here; it is not at all certain that what works on earth will work here in this new subterranean environment.

The fact here remains: Hans did discover water, hence had to conduct successful research in order to do so. Axel remains silent, and both scientists incurious. Even so, filtered through Axel’s account, the reader picks up signs that Hans possesses a strong empirical sense, a

keenly experimental approach to phenomena. Later for example, when Axel, lost in his "labyrinth," hears voices and seeks to orient himself, he hears Hans utter several times, from different locations, the word "forloräd." Axel realizes this is a form of experimental triangulation, "qu'il fallait précisement parler le long de cette muraille qui servirait à conduire ma voix comme le fil conduit l'électricité [that I too had to speak along the side of the gallery, which would carry the sound of my voice just as wires carry electricity]." (130) Here for once (he is totally unaware of it himself), Axel is translating into "scientific" language what appears to be Hans's unspoken hypothesis, derived from experiment, that describes the acoustic properties of sound in this particular cavern. Another product of Hans's silent experimental activity is his healing ointment. Axel has survived his fall to the seashore with life-threatening wounds, which Hans treats: "Hans a frotté tes plaies avec je ne sais quel onguent dont les Islandais ont le secret, et elles ont cicatrisées à merveille [Hans has been rubbing your wounds with some sort of ointment known only to Icelanders, and they have closed up marvelously]." (135) Neither Lidenbrock nor Axel are curious about the nature of this wondrous "je ne sais quoi" salve. Did he bring it with him, or, more likely, concoct it from "native" materials? Again, it is by no means a given that a medicine made of Icelandic herbs will work at all in this new environment. If Hans did concoct his salve from new, underground, ingredients, how did he do it? Again the two scientists pass this off as unworthy of scientific investigation. Of all the "marvels" they encounter underground, Hans's silent skill is by no means the least. His companions remain blind to it. The reader, however, asks the questions they do not ask, shares in the sense of wonder that surrounds Hans unseen scientific activity.

The most important scene with Hans is his building of the famous raft that ultimately carries the voyagers up Stromboli's crater and back to the Earth's surface. Here for the first time, clearly stated, Hans *has to* work with "indigenous" materials, in this case petrified fossil wood. When Axel asks what sort of wood this might be, and whether it floats, Lidenbrock at once limits the field of investigation by using the Icelandic word "*surtarbrandur."* "Black wood" in Icelandic, this is a combustible lignite used for heating, whose origin (as Lidenbrock says) is the "mineralization" of certain northern species of trees. In answer to Axel's question: how can such petrified wood float? Lidenbrock picks up a piece of fossil wood *at his own feet*, which is clearly not Icelandic wood, and tosses it in the water. The wood floats, Lidenbrock is satisfied. Yet this could be just a lucky toss, heads or tails; the next piece may not have floated. Axel is not convinced, and discussion ends. A "scientific" discussion has taken place, but none of the questions as to how, and with what material, Hans has built the raft is addressed. The reader knows Hans certainly did not have any *surtarbrandur* at his disposal. He had to work with unknown types of fossil wood. He surely did not proceed by tossing samples into the water; he had to test each kind of fossil material for its properties: does it float? Can it be made waterproof? Is it durable?

One thing is later made clear: Hans could not have used a material like *surtarbrandur*, as this is a combustible substance, and as such could never have withstood the intense heat of the ascent through Stromboli. Axel describes Hans at work among piles of different kinds of wood: "Il y avait là de quoi construire une marine entière [There was enough [wood] there to build an entire navy] (Our translation, omitted from Butcher's text)." Hans obviously has been engaged in a long process of testing, making sure, to the best of his ability, that his boat is adapted to the conditions of this new environment. Hans is denied a voice to describe his method., the reader can only re-construct his experiment *ex nihilo,* from the silence that surrounds it. It is at this moment that Axel forever puts aside inquiry into Hans's activity by

elevating him to the status of cultural icon: guide, steersman, silent Vergil to this talkative scientist-companions. The process of doing science is forever silenced by making it an image. Verne's engraver Edouard Riou, however, responds to Hans as a reader might, by drawing an image that emphasizes his presence as experimenter-adventurer. The Riou engraving depicts Hans standing tall at the helm of his raft, holding steady, facing the unknown with resolve, while his two passengers, mere spectators, sit and look on. This iconic drawing, which presents varieties of scientific mankind as they face the sheer mystery of the physical unknown, will set the tone for other depictions of silent experimenters in later novels. [27] In *Vingt mille lieues sous les mers,* we have varieties of this iconic image: the well-fed Professor Aronnax (an Axel successfully grown up) standing arms folded on the deck of the *Abraham Lincoln*, staring out to sea, his back turned to a table upon which rests various telescopes and instruments; later, the famous engraving of a wiry, energetic Nemo standing on the deck of the *Nautilus*, surveying unknown seas with his sextant in hand. Experimental science passes in Verne from the *tabula rasa* of Hans to Nemo's equally silent mastery of all scientific knowledge of his time.

Stromboli: The Ascent of Wonder

The rest of this narrative of scientific discovery—the rout from beneath the earth—reads like a frenzied dream. The voyagers come across what seems another Saknussemm rune, indicating a cave. They set off on their raft, only to find the passage blocked by a giant stone. Against all caution and logic, these geologists set off a charge of dynamite, which triggers a violent volcanic reaction that propels them out of the crater of Stromboli. The string of "mishaps" that begins with Lidenbrock's lost key ends with this volcanic crescendo. Hugo Gernsback, who introduced Verne into what would be the American SF mainstream, was highly sensitive to the potential for wonder in Verne's narratives, to the point of sometimes urging the reader, in his editorial comments, to redo the author's experiments using more accurate methods. [28] But even Gernsback had an issue with the ending of *Voyage:* "It is possible that some of our readers may find fault with the vehicle that Verne chose to bring back the travelers from the earth's interior... At least it is logical, although the chances are that our heroes would not have survived such an ordeal. But we should not be too critical on such points... " (361) It is certain the characters could not have withstood the physical forces as described. The description however is Axel's. As such, it appears to describe a dream sequence, a voyage through the narrator's unconscious. [29] The chaos and destruction of a physical ascent has become a dream dance of the four raw elements of *res extensa*: earth, water, fire, and finally air. And if the ascent is "amazing," the landing is more astounding yet, in the same green world that once inspired Vergil's golden age. Given Axel's propensity to dream, and what seems here a final oneiric voyage through the primal forces of life to a safe awakening, one is tempted to see the entire story as the narrative of a dream, or of a nightmare.

Yet, in terms of sense of wonder, Verne's ending is highly significant. We need not dismiss the story as a dream—or a mere fiction. For it is doing something that only science fiction will later do: it takes characters on a voyage through the unknown, only to return them to the known, but in such an improbable, nay impossible, manner that the return now seems more wondrous than the voyage itself. Verne's protagonists come back to the zone of mankind's

"mastery" of nature, a space now all the more narrow in comparison with the extraordinary scope of their journey. They find the familiar temperate zone, but only after they experience how precariously it sits, between the extremes of ice and rock (Iceland) and the fire of the subterranean forces. Life resumes as it was. Lidenbrock, who has seen nothing, made no scientific discoveries, is honored by the university. Axel returns to his fiancée, and no doubt a literary career that is based on his story of a failed expedition. Hans takes his pay, and goes home. The final wonder, however, is the fact that, after such an improbable voyage and an impossible return, they do return home.

The wonder of Verne's ending will have a long career in subsequent SF. The voyagers to the center of the earth have encountered along the way the blank, a-human forces of nature —*res extensa*—the world of the cold equations, a world that, as Pascal said, has no *knowledge*, no awareness of us or our science and culture. The final wonder then of such a voyage is that, given the impossible odds of our ever relocating ourselves once we have experienced pure quantity and extension, we miraculously find a world to our measure. This is something often criticized in SF's "generation starship" tales, as with Heinlein's *Orphans of the Sky*, where human beings who have lost their bearings in the void, by some improbable course of things, find themselves on a planet that is even better than the Earth they left behind forever, where they start over again in a new golden age—"good eating, Alan." Even so, such endings, read in the light of Verne's *Voyage*, may in fact be the quintessential SF experience. Take the example of Poul Anderson's classic *Tau Zero* (1970). Here the generation starship, humanity's Noah's ark, breaks the Tau barrier, and in doing so actually produces a new "big bang," through which the crew sails on to find a new and better world on which to begin again. In Anderson's novel, the protagonists survive the same raw physical forces Axel and Lidenbrock encounter, now augmented to the nth degree. As with the ascent through Stromboli, the physical universe throws everything it has at them, and yet they come through alive, to find a world theirs for the taking. In this ultimate form, the sense of wonder is generated by the "reprieve" given over and over, to protagonist and reader, in the scientific voyages of Asimov, Heinlein and other classic SF writers.

In contrast to what has been the critical consensus, a very different view of Verne's work and its impact on later SF emerges from our placing Claude Bernard's idea of science at the heart of his seminal scientific adventure, *Voyage au centre de la Terre*. A neverending search to know the unknown drives Claude Bernard's experimental method. In an opposite manner, French critics like Roland Barthes and Michel Serres tend to place Verne, for good or bad, in the culturally dominant Cartesian mode, in which science is seen to master the physical world by "appropriating" nature to its logically formulated categories. [30] There are indeed many such "catalogues" of natural phenomena in Verne. But this does not explain the persistent encounters with the unknown in his work, from which the scientist who observes and experiments comes away empty handed. In order to explain this constant sense of wonder that surrounds the unknown in Verne's scientific adventures, we turn instead to Claude Bernard. In contrast to the classifying sciences of the time, Claude Bernard was first among commentators on science in France's 19th century to offer a view of science which is essentially that of modern practitioners. Unlike Comte's systematizing of physical reality under the "laws of phenomena," or Laplace's "demon," which posited that science could calculate all the permutations of the natural world, Claude Bernard focused less on the product than the process of science, the *search* for knowledge, in which the experimenter is ever drawn to the wonder of the unknown. Claude Bernard's experimental science was not an anomaly in

French science. Instead he gave voice to actual experimental science *as it was being done* in France. His was the practical voice of science in contradistinction to the Cartesian ghosts in the machine, that still, in complex ways, continue to haunt French criticism today. Verne would not be revered and emulated by SF today if it were only for his catalogues of known facts, or for Nemo's library (which, by the way, remains an unknown). He is read because, in the wake of Claude Bernard, he infused scientific adventure with its sense of wonder. It is this same sense of wonder that causes particle physicists in modern times to name a particle the "charm quark," something that decays into a "strange quark." It is this impulse that brings a physicist-writer like Robert L. Forward to want to imagine "life" on a neutron star.

Verne, Wells, and the Sense of Wonder

We have made the case that the sense of wonder Verne develops in *Voyage au centre de la Terre* is born of a transposition, to the novel of travel and adventure, of Claude Bernard's vision of experimental science as unending pursuit of the physical unknown, driven by "une sorte de soif de l'inconnu, et le feu sacré de la recherche qui ne doivent jamais s'éteindre chez un savant [a sort of thirst for the unknown, and the sacred fire of research that must never go out in a scientist]." (307) Many critics however would give the role of creator of sense of wonder instead to H.G. Wells and his Time Machine. Jean-Jacques Bridenne, for example, compares Verne with Wells along the lines of the "fancy" and "imagination" distinction of Wordsworth: Verne rearranges the furniture of present knowledge, while Wells offers "prophetic" extrapolations: "Du point de vue scientifique, [Wells] se permet... de traiter en réalités assises les hypothèses les plus étonnantes, mais les plus constestables [From the scientific point of view, he allows himself to treat as established reality the most astonishing and controversial hypotheses]." [31] Verne himself may be the source of such distinctions with his famous remark: "[Wells's] histoires ne reposent pas sur une vraie base scientifique... j'utilise la physique, il l'invente [Wells's stories do not rest on a true scientific foundation... I use physics, he invents it]." (108) We propose however to take Verne at his word here, and see the "base scientifique" he speaks of here as the experimental science of Claude Bernard. Sense of wonder then, for Wells, would be generated by bold if dubious extrapolations, whereas for Verne it is the product of mankind's ongoing encounter with the material unknown.

But is Bridenne's really an accurate description of Wells's sense of wonder? Wells's Time Traveler is an investigative scientist. And the time machine—seen as Wells's device of wonder—would appear to allow its user to do investigations anywhere in time, past or future. But that said, what exactly is the scope of scientific investigation in *The Time Machine*? Let us look first at the Traveler's theory on which the machine and time travel is posited. If time is the fourth dimension, then "there is no difference between Time and any of the three dimensions of Space except that our *consciousness* moves along it." [32] The time machine then limits travel to the time of an *individual* consciousness, that of the Traveler. In terms of space, the Traveler remains confined to his laboratory, located in Richmond, in the Valley of the Thames. If the travels, in "time," to the year 802,701 AD, then on to the end of the earth, he remains in the same location. Over the span of time, things have changed radically around this three-dimensional locus. But why, once he is in the future, does he not leave this location

(just as he could do in his present), and explore other places and climes? Instead, the parameters of his travel appear to be governed by the spatiotemporal stretching of Mrs. Watchett. He perceives her, entering his laboratory as he leaves, as zooming forward. Upon his return, he sees her retrace her initial trajectory, arriving at the same *place*, the laboratory door, from which she began *her* journey back and forth in time. The entire adventure of the Traveler in the future can be measured as the distance from one corner of the laboratory to another, the distance the Morlocks dragged his machine inside their compound. The implication is that he is spatially tied to the location of his machine. By the same logic, had he moved it laterally, to the old English Channel for instance, he would have returned there, not a comfortable thought.

Frank Scafella speaks of the Traveler as one who investigates the future using the methods of experimental science. [33] But again, we must ask: what is the scope of the Traveler's investigation, the reach of his scientific queries? Verne's explorers go to a place where there are no humans, and where they eventually lose all contact with the familiar human world. Wells's Traveler, on the other hand, chooses (accidentally or perhaps obeying some unconscious desire) a location in the future where humans, if degenerate, still exist. It may be true that the Traveler, in the world of Eloi and Morlocks, proceeds by observation, the formulation of hypotheses, and the correction of those hypotheses as he discovers new, contrary data. But he has limited his exploration to a single human landscape. And within that landscape, he applies to his encounter with the unknown a few social models, all taken from his own time. In terms of evolutionary spacetime however, 802,701 AD is so far in the future that it is all but impossible that either humans or their institutions would still exist, let alone follow patterns of behavior linked to this observer's specific culture and time. Within these narrow parameters, his investigation of the Morlock mystery has only one issue—the impasse of horror. His only resource is to flee in the dark, to clamber on the seat of his machine in the nick of time as his last match goes out. In short, there is very little sense of wonder in the Eloi and Morlocks; seen through the Traveler's eyes, their world and doings is more like *déjà vu.*

The final vision of the terminal beach would seem more appropriate for wonder. But if we think of it, this is not really an encounter of mankind with pure *res extensa*. What the Traveler experiences instead seems more an encounter, at one and the same place, with his own evolutionary future and past. As he looks out over the flat landscape, dying sun and giant crabs, the last vestiges of devolved life on a barren earth, he sees what Richmond must become, a place without mankind. At the same time however, because he, the man of 1895, still stands in this future place, he is able to look back, down the evolutionary chain from himself to mankind's origins on a similar beach: "Silent? It would be hard to convey the stillness of it. All the sounds of man, the bleating of sheep, the cries of birds, the hum of insects, the stir that makes the background of our lives—all that was over." (86) He hurries back to the safe drawing room in 1895. And in the end, we could say he has not moved at all. For wherever he stands, on the terminal beach or in his drawing room, the future and past he sees remain quite predictable. If we evolved from nothing, we will devolve to nothing. All that is left of the Traveler's extraordinary voyage is a beard and torn clothing, marking the passage of several days of biological time, the personal "time arrow" that no time machine can alter.

What then is different from Axel's encounters with the physical unknown in the cavern? Or his meeting with the "herdsman"? A main difference is that Axel's brushes with the unknown are temporary, not terminal, his trajectory open, not closed. Doors are constantly closed on

the Traveler: he barely escapes the Morlocks as they close the door to their compound, emprisoning his machine. The door to the future is closed by the dead earth. Indeed, the door to his own laboratory, that opens with Mrs. Watchett, closes as she retreats backwards on his return, shutting the door to time travel at the very same time she opens it. The Traveler has the entire future at his command, but only within the closed space of the Thames Valley. Wells's reader is never challenged by the potential wonder of what lies beyond this limit.

Wells's extraordinary voyage is no voyage at all. The time loop brings the future Traveler back to his present. If he never returns from the second trip, to the past; if the loop is broken, it is probably because Richmond was a more dangerous place in the past than in the future. But the reader learns nothing of this. Verne's reader, on the other hand, is taken along with Axel from one place to another. The reader sees what Axel sees and feels, senses the potential wonder of his encounters with the unknown, but (like Axel) is never given the time to ask significant questions, to examine evidence, draw conclusions. The reader of *The Time Machine*, on the other hand, is warned away from asking such questions by Wells's primary narrator. After telling his tale to his circle of friends in his present, the Traveler asks those who do not believe his account, to take it as a lie, or as a prophecy, or even as a story. Unlike Axel's readers however, the Traveler's audience does not have this latter option. They (and Wells's readers) are not encouraged to take it as a story, because the narrator, who believes the Traveler, takes it as a prophecy, and in doing so, shuts the door on Claude Bernard's never ending story of science. Telling his listeners to live "as though it were not so," Wells's narrator discourages all further stories and wonders. If Axel's readers end the story still wanting to continue the journey of experiment and discovery, the reader here is told such journeys are futile.

Let us make one final comparison between Wells and Verne around the problem of sense of scientific wonder. When the Traveler arrives in the time of the Eloi and Morlocks, he finds the landscape presided over by a sphinx-like statue, its features worn by the ravages of time. This figure stands at the portal of all spacetime exploration, and seems to imply in its mute blankness that, however great the reach of human experiment, the result must always be enigma, the natural world will never reveal its secrets. Claude Bernard, at one point, seems tempted by an equally futile vision of scientific inquiry. But if an one point he cites the "fable de Sisyphe," it is only to reject this figure of silent suffering, endlessly rolling the rock of scientific investigation up the slope, only to see it roll forever back to the bottom. Instead, in a significant variation of the never ending task of science, Claude Bernard cites Pascal: "Nous ne cherchons jamais les choses, mais la recherche des choses." (307). In light of this sense of things, Verne's sphinx is cast as Hans. Hans may seem silent, enigmatic. And yet he acts, and in doing so opens future doors to scientific wonder instead of closing them. Hans shoulders the burdens of nature, and in the silent wonder of his toiling points the way to future experimental science.

Conclusion: Verne's Way

In terms of later development of science fiction, the paths that lead from Wells and Verne bifurcate. The pivotal point is this question of sense of wonder. Wells uses the term in his later novel *The War of the Worlds* (1898), but the situation for his narrator is very different from that of Axel. The moment is the end of Chapter 7, as the narrator leaves the Artilleryman, and

proceeds on to experience “dead London”: “With that realization my dormant sense of wonder, my sense of the proportion of things, awoke again. I glanced... to Mars, red and clear, glowing high in the west, and then gazed long and earnestly at the darkness of Hampstead and Highgate.” (156) Wonder here is, as in *The Time Machine*, a sense of the *proportion of things*. Here he looks to Mars; he will wander the deserted streets of London, surveying the utter destruction superior Martian science inflicts on humanity. Later, however, he will see those streets again teem with men, after the Martians succumb utterly to Earth bacteria, against which they have no defense. The narrator’s “wonder” is a kind of cognitive estrangement that comes from having stood twice in the center of things, between cosmic hubris and human folly, and watched the empty streets fill once again with mankind at the median: “And strange, too, it is to stand on Primrose Hill... to see the people walking to and fro among the flower beds on the hill, to see the sightseers about the Martian machine that stands there still and to recall the time when I saw it all bright and clear cut, hard and silent, under the dawn of that last great day... ” (173) What dominates the extraordinary is the common vision of the people, for whom the flowers and the Martian tourist attraction are one and the same.

The return of Wells’s Narrator to London would seem, like that of Axel and Lidenbrock to Hamburg, to be a homecoming. In the case of Wells, we are tempted to quote T.S. Eliot’s famous lines: “We shall not cease from exploration/ And the end of all our exploring/ Will be to arrive where we started/ And know the place for the first time.” [34] But this applies only if we amend it to say “know *our place* for the first time.” To wonder in Wells is to sense that lonely middle ground, on one hand, between the scientific explorations of a Time Traveler, a Doctor Moreau, or even the “evolved” Martians, and on the other, the mass of humanity that lives like the mindless bacteria who outlast them. In contrary manner, the point of Axel’s homecoming, of the chain of wondrous moments and events that bring him back, is that he knows neither this place nor the places he has been. In the eyes of experimental science, we never know any place, for the first or for any time. But Axel and Lidenbrock, in their failed encounters with *res extensa*, have shown enough of the wonders of the unknown that the reader desires to continue the scientific journey.

Bridenne ultimately qualifies Wells’s work: “[Il] est rapidement passé de l’anticipation scientifique à l’anticipation *ou plutôt à la prophétie sociologique*. (110) The word “prophesy” may not fit, but in a sense science, in Wells, remains a function of the human user in its social context. If for Claude Bernard, science is a passionate and continuous search to know the unknown, for Wells pursuit of the unknown leads the pursuer (and his narrator double) to realize the human limits of what can be known. Considered the more scientifically speculative of the two writers, Wells instead bequeaths to future science fiction a deep pessimism. The scientific adventure ends with mankind isolated within its cognitive structures, and the reader that accompanies the scientist on his journey being warned that knowledge of the other—the unknown outside self—is a solipsistic dream. This way leads to the skepticism of a Stanislaw Lem, who works with the epistemological a priori, that humans can never know anything outside themselves.

Verne’s way, especially as set forth in *Voyage au centre de la Terre*, traces a very different path in later SF. His subsequent, most famous, novels of scientific exploration all feature notable encounters with the unknown, where the scientific observer but slenderly grasps the phenomena at hand. An example is Arronax in the silence of his diving suit moving through an

Atlantis he can never touch (*Vingt mille lieues sous les mers*). Another is Barbicane, Nicholls and Michel Ardan flying by the dark side of the moon. Given a short glimpse of the terrain by a meteor flash, they are whisked away before they can see and examine it. (*Autour de la Lune*). Even in Verne's later novels, where he becomes more pessimistic about the moral reach of science, he still creates moments of wonder, as in *Le Sphinx des glaces* (1897) where solving one mystery (that of Arthur Gordon Pym) leads to fruitless encounter with the greater scientific unknown of the "Ice Sphinx" itself.

All these however are episodes. They all point back to the miraculous unity of *Voyage au centre de la Terre*, where Verne first develops a narrative and a rhetoric of wonder that transposes the open-ended science of Claude Bernard into a structure that fuses experiment and exploration, that makes science into the adventure of science, the unfurnished process that, constantly generating its a sense of wonder, urges us to continue the journey.

In the above sense, Verne's novel provided the model for a long and distinguished series of later SF novels. Heinlein seems to exploit the young Axel and his improbable and wondrous brushes with the unknown in his 1950s juvenile novels, most notably in the first-person narration of Kip in *Have Space Suit, Will Travel* (1958). Kip the young dreamer with an old space suit finds himself on a journey that leads to encounter with incomprehensible physical forces, which he does not understand, but from which he wrests a reprieve for himself, and only serendipitously for the rest of mankind. In a different vein, Arthur C. Clarke seems to recreate Verne's sense of wonder in juvenile novels like *Islands in the Sky,* also narrated in the first person. There are, as well, many third person narratives in both Heinlein and Clarke where sense of wonder is generated by incomplete encounters with the physical unknown. With the above authors, these third-person narratives are so narrowly focalized as to present the action from the single point of view of a protagonist. Notable examples in Heinlein are *Starman Jones* (1953), where we see the marvels of interstellar space from the sole perspective of a young farm boy who becomes a brilliant astrogator; and *Citizen of the Galaxy* (1957), where the narrative focus is that of a slave boy, Thorby. Clarke routinely focuses his encounters with the unknown through the tightly restricted perspective of protagonists who are ultimately overwhelmed by the ineffable. Examples are "A Meeting with Medusa," *Rendezvous with Rama,* and ultimately the entire *Space Odyssey* series.

Finally, we find Verne's techniques of wonder still functioning in Gregory Benford's novels of space-time exploration. A clear example is *Against Infinity* (1983), a third-person narrative, but again tightly focalized on the vision of the young protagonist, Manuel. In a sense here, Axel and Lidenbrock are reincarnated as Manuel and Old Matt, and the center of the earth is recast as the Aleph, an inscrutable entity that somehow contains all of physical existence, yet is located on not-too-distant Ganymede, a place (like the center of the earth) humans can and do explore. Manuel's final encounter with this entity is, in the best Vernean manner, a brush with the unknown, the inconclusive nature of which provides the sense of wonder that will drive the enterprise of human science forward, on a perhaps never-ending struggle with the brute mysteries of *res extensa.* If these works are central to what is commonly seen as science fiction, then we can at least speculate that Verne, in a single stroke in *Voyage au centre de la Terre,* and inspired by the vision of science of Claude Bernard, in fact created science fiction, as the literary form that defines itself as purveyor of scientific wonder.

NOTES

1. See John Clute and Peter Nicholls, *The Encyclopedia of Science Fiction* (New York: St.Martins-Griffin, 1995), p. 1083-85; and Cornel Robu, "A Key to Science Fiction: The Sublime," *Foundation* #42 [Spring, 1988], 128-136.
2. Letter to Louise Colet, April 6, 1853, in Gustave Flaubert, *Correspondance* II, editor Jean Bruneau, (Paris: Gallimard Bibliothèque de la Pléiade , 1980), 298.
3. Paul Valéry, "Sur la technique littéraire," in *The Art of Poetry*, Introduction by T.S. Eliot (New York: Vintage Books, 1958), p. 314. In this volume the concluding essay, Valéry's first published piece in 1889, is given in French.
4. Reino Virtanen, *Claude Bernard and His Place in the History of Ideas* (Lincoln: University of Nebraska Press, 1960), p. 13.
5. Claude Bernard, *Introduction à l'étude de la médecine expérimentale* (Paris: Garnier Flammarion, 1966), p. 307.
6. The edition of Claude Bernard's *Introduction à l'étude de la médecine expérimentale* we cite throughout is Garnier Flammarion (Paris, 1966).
7. Arthur B. Evans, *Jules Verne Rediscovered: Didacticism and the Scientific Novel* (New York: Greenwood Press, 1988), p. 25. Evans discusses the state of secondary science education primarily, where "science education was consistently viewed as a religious and ethical matter as much as an intellectual one." (13) Claude Bernard's remarks however give us a good idea of science education at the level of the university "faculties." Here the problem was more a question of inadequate scientific method (aprioristic positivism) than of religion or ethics. But insofar as young Axel is obviously a product of university science, and insofar as he demonstrates the various *défauts de méthode* Claude Bernard enumerates, one must assume that Hetzel was taking aim at higher science education as well.
8. Evans, pp. 18-19. Evans sees Verne discussing this new type of novel with Dumas *père* during the early 1850s: "But at this juncture the particulars of such a unique novel remained only a vague idea in Verne's mind." (19)
9. Non-dated letter from Hetzel to Jules Verne (end 1863-early 1864), in *Un éditeur et son siècle. Pierre-Jules Hetzel (1814-1886)* (San Sebastian: ACL Édition, 1988), pp. 118-119.
10. Michel is not the narrator. But Verne's third person narrator shows a visible disdain for the dominent Comtean categories and hierarchies that dominate this future world: "Nous ne pouvons citer la nomenclature infinie des Sciences qui s'apprenaient dans cette caserne de l'instruction: un palmarès du temps eût fort surpris les arrière-grands-pères de ces jeunes savants."[We are incapable of reciting the infinite nomenclature of the Sciences as it was taught in these military barracks of learning: A list of top awards today would have really startled the great-grandfathers of these young scientists" (our translation). (38)
11. An interesting connection exists between the fascination in German Romanticism with mines and underground "kingdoms" and Verne's late romantic journey. Ludwig Tieck's "Der Runenberg," (1802) for example, is a classic example. We have in this story a "rune mountain," a miner with connections to the "dark powers" of buried nature (Saknussemm?), the fatal lure of the mineral kingdom, and its contrast with the world of organic life. Tieck was little known in France. However the most prominent German work in this vein is E.T.A. Hoffmann's "Die Bergwerke zu Falun"[The Mines of Falun] (1819), and Hoffmann, cited in *Voyage*,was, via the Loève-Veimars translations, a

major influence on 19th century French literature. Hoffmann's source for his tale was the famous treatise of G.H. Schubert, *Die Nachtseiten der Naturwissenschaften* [The Night Side of the Natural Sciences], which recounts the discovery, in a Swedish mine, of the perfectly preserved body of a young man. Hoffmann elaborates on this "scientific" account by returning to the idea of the lure of the mineral depths. It is tempting to see Axel's remark, when lost in the underground cavern, about the perplexity of future scientists when several hundred years hence they find his preserved body and the mystery of how it got there, as a playful reference to Hoffmann. But whereas Hoffmann "romanticizes" Schubert's factual account, Verne now reverses polarity, and sees Axel's plight, not as the lure of some mineral maiden, but as a genuine encounter, not with supernatural forces, but with the material unknown, with *res extensa.*

12. *Nova* in fact takes its clues from Verne. Doing science must become a narrative puzzle; seemingly loose ends, data often collected separately, or by accident, are dramatically linked, again often by chance, revealing a new phenomenon, but one that invariably points to greater scientific mystery. For example, a recent Nova episode on supervolcanoes "dramatized" doing science by presenting far-flung threads, scientists investigating various puzzles concerning sudden climate change as measured in different manners and domains. Through serendipitous connections, a pattern gradually emerges that points to the presence of supervolcanoes, capable of creating massive volcanic winters, literally right under our familiar lakes, and who knows where else. Under the earth remains a mysterious place. And in an obvious gesture toward Verne, the program ended with Neil deGrasse Tyson, in a short animated interlude, attired as an underground explorer, "falling" rapidly down a volcano, through the molten core, propelled, then slowed by surface gravity as he reaches the other side. (*Nova*, on KCET, Los Angeles, 09/12/2009).

13. On the Plutonist theory of James Hutton, that early displaced Davy's volcanic theory, see Dennis R. Dean, *James Hutton and the History of Geology* (Ithaca NY: Cornell UP, 1992). Also see the interesting book by Allen A. Debus, *Dinosaurs in Fantastic Fiction: A Thematic Survey* (Jefferson NC: McFarland Publishing, 2006), especially chapter 1 on Verne's subterranean "museum."

14. Translations from Verne's novel are from the William Butcher edition*, Journey to the Center of the Earth,* Oxford World Classics (Oxford: Oxford UP, 1992). The French text used is the 1867 edition, *Les Intégrales Jules Verne* (Paris: Hachette, 1978). Page numbers in text are to Butcher's translation.

15. See *Introduction*, p. 34-35: "Au premier abord... cette distinction entre l'activité de l'expérimenteur et la passivité de l'observateur paraît claire et semble devoir être facile à établir. Mais, dès qu'on descend dans la pratique expérimentale, on trouve que, dans beaucoup de cas, cette séparation est très difficile à faire. . Cela résulte, ce me semble, de ce que l'on a confondu l'art de l'investigation, qui recherche et constate les faits, avec l'art du raisonnement, qui les met en oeuvre logiquement pour la recherche de la vérité [At first glance, this distinction between the activity of the experimenter and the passivity of the observer seems obvious. But as soon as one gets involved in practical experiments, one finds that, in many cases, this distinction is difficult to make... The reason for this, it seems to me, is that one has confused the art of investigation, which seeks out and verifies facts, with the art of reasoning, which arranges these fact logically in the search for truth]."

16. Here we take issue with the Butcher translation. He flattens Axel's exclamation: "I had discovered how the code works." Discovering "la loi du chiffre" is a much more absolute claim, doubly absurd given the manner in which the solution to the code was found.

17. A note on the translation. Butcher translates "crâne" as "brain." The literal word is "skull," and this is significant in defining Axel's use of various forms of language. The word "skull" is starkly material and non-Cartesian. Axel is capable of outbursts of the most excessive Romantic language; he can shift in an instant to such neutral, "scientific" description. In other words, when pushed by circumstance, he proves capable of seeing through the veil of emotion and cultural illusion, of

grasping the physical object in itself. It is such “breakthroughs” (as when, lost in the underground cavern, he encounters the new darkness, and proves capable of measuring its unyielding physical nature) that bring Axel, and the reader, to the most intense experience of scientific wonder.

18. *Easy is the descent to Avernus.* (*Aeneid*, Book 6, line 126). Here already, facing the ominous reality of this descent, Axel’s Latin appears to be slipping: “Sate sanguine divom/Tros Anchisaide, *facilis descensus Averno*/Noctes atque dies patet atri ianua ditis/Sed revocare gradum superasque evadere ad auras/Hoc opus, hic labor est” [Easy is the descent to Avernus/For the door to the underworld lies open day and night/But to retrace your steps and return to the breezes above/ That’s the task, that’s the toil]

19. A note on the text. The Butcher translation is accurate. No translation however can reproduce the particular late-Romantic prose of this effusion. One notices a stylistic effect that was already cliché by Verne’s time, the proliferation of illogical plurals. An example: “Je la passai à rêver de gouffres!” Or “Je tombais au fond d’insondables précipices.” The latter example even has a plural verb, the imperfect “was falling” which implies a number of falls. This excessive use of iterative discourse marks such late romantic, almost parodistic, works as Flaubert’s *Novembre,*(1842) or *Mémoires d’un fou* (1838). See Danièle Chatelain, *Perceiving and Telling: A Study of Iterative Discourse* (CSUSD University Press, 1998).

20. The style echoes that of Hugo’s poetry from *Les Rayons et les Ombres* (1840) and *Les Contemplations* (1856). Hetzel was Hugo’s publisher during this period. One of Hugo’s major themes during this period is the total indifference of the natural world (what we are calling *res extensa*) to human endeavor and suffering. An interesting possible link, via Vergil again, exists between the musing of Axel “perdu dans ce *labyrinthe* dont les sinuosités se croisaient en tous sens... ” (202-203), that the discovery of his fossilized remains in this terrifying and indifferent place would “raise serious scientific questions,” and Hugo’s poem “*Oceano nox”* from *Les Rayons et les Ombres* (1840), where the poet reflects on an unnoticed death by drowning in an indifferent sea. The lines from Vergil to which the title refers: “Vertitur interea caelum, et ruit oceano nox, (*Aeneid*, II, l. 250) translates roughly as “meanwhile the sky revolves and night rushes from the ocean.” A further note on the translation. The phrase “cette prestigieuse extase” is translated as “high-blown extasy.” Insofar as the word “prestigieux” means something with “éclat,” and “shining extasy” is a barbarous rendering of the idea, we could suggest, in keeping with our theme, that Axel here means “wondrous ecstasy.”

21. A note on the translation: Having the French text before one’s eyes helps understand the nature of Axel’s discourse. In the passages translated in this paragraph, the Butcher translation flattens the archly late-romantic allusions and language of the narrator. When Axel says “je contemplais” he echoes Victor Hugo; none of this comes through with “reflected on.” Or “j’admirais... ses irradiations éléctriques,” which becomes “I was admiring... its electric illumination,” removes the romantic iterative. Finally, “I felt the granite vault above these clouds weighing down on me” does not render “je sentais par-dessus ces nuages une voûte de granit *qui m’écrasait de tout son poids.”* Echoes of Baudelaire, of Edgar Allan Poe, and beyond all literary models, the sheer physical feel of a massive weight of granite *crushing* Axel’s puny physical being.

22. See *Leçons de physiologie expérimentale, tome I, première leçon, 23 décembre 1854, p. 17:* “Les autres [découvertes] *imprévues* sont des découvertes qui surgissent inopinément dans l’experimentation, non plus comme corollaires de la théorie... mais toujours en dehors d’elle, et par conséquent lui étant contraires [The other *unexpected* discoveries are ones that arise unexpectedly as a result of experimentation, they are not simply corollary to a theory... but are always outside and other, and consequently opposed to a theory].” Claude Bernard presents these “découvertes imprévues” as having an almost cataclysmic effect on established knowledge, forcing a “collapse” [crouler] of existing theory, in effect a *tabula rasa* that demands that science reconstruct a new theory on new bases discovered in the wake of the new data.

23. *The Darwin Correspondence Project*, letter 4169. Falconer, George Busk, William Benjamin Carpenter, and Joseph Prestwich were the British members of the Anglo-French conference held at Paris and Abbeville to consider the authenticity of the flint tools and human jawbone discovered by the archaeologist Jacques Boucher de Perthes in the Moulin-Quignon gravel pit near Abbeville, France, in March 1863 (*Athenæum*, 23 May 1863, p. 682). See also letter from J. D. Hooker, [7 May 1863]

24. See William Butcher's "Introduction" to his Oxford UP translation, p. xvi-xvii: "The publishing history of the *Journey* indicates another concern, for this novel is unique among Verne's in undergoing significant changes after publication in book form. Most of chapters 37-39 were added in the first large-octavo edition (1867)."

25. See Andrew White's account in *A History of the Warfare of Science with Theology in Christendom*, 2 vols. 1898. White was first president of Cornell University. It is interesting to note that Charles Lyell's *Geological Evidence of the Antiquity of Man* appeared in 1863.

26. Butcher, p. 230. The Vergil misquote occurs in Victor Hugo, *Notre Dame de Paris* (1831), chapter 4, scene 3, entitled "Immanis pectoris custos; immanior ipse," referring of course to Quasimodo the hunchback. Butcher sees another classical allusion in Axel's description of the antediluvean herdsman, this time to Homer's *Odyssey*, Book 11, where Odysseus in Hades spies "a giant pursuing wild animals with a club in his hand." We wish he had given a precise reference for this. All we could find is 11, 285-293, concerning the cattle of "the mighty Iphiclus from Phylace," and Melempus, the only man who undertook to drive them, and ended up in chains "a prisoner of the savage herdsman" [*The Odyssey*, E.V. Rieu translation (London: Penguin Classics, 1991), pp. 167-68. If so, this is a pretty obscure passage.

27. *Voyage au centre de la Terre*, (Paris: Collection Hetzel, "Les mondes connus et inconnus," 1912), p. 169. The illustration is by Edouard Riou, (1833-1900), a pupil of Gustave Doré.

28. Hugo Gernsback serialized Verne's novel as *A Trip to the Center of the Earth*, in the May, June and July, 1926 issues of *Amazing Stories*. Gernsback comments in his "Introduction to Our Story" that "this particular "Voyage" has sometimes been declared the author's masterpiece." (100) *Dr. Ox's Experiment* was published in the August 1926 issue, and *The Purchase of the North Pole* (*Sans dessus dessous,* 1889) in the September and October 1926 issues. It is interesting that this series of Verne works are all, to some degree or another, works about scientific experiments. In fact, in Gernsback's editorial comment to *Dr. Ox*, he appears to respond to the kind of scientific wonder we are describing, in which failed experiment, an aborted encounter with unknown possibility, leads the reader to want to repeat the process, to do it better: "There is of course excellent science in this story, and if anyone should go to the trouble of repeating Dr. Ox's experiment on the vast scale shown here, the results would probably be just as depicted by our famous author." (421) Gernsback is even more categorical about *Voyage*: "There is nothing in all the daring visions of this tale which, even today our scientists would declare impossible. The interior of the earth is still unknown... " (100) In this work, Verne has successfully transferred the scientific vision of Claude Bernard to the birthplace of American SF.

29. There is an interesting connection here between Axel's response to the fire that should have physically consumed his party, and Gaston Bachelard's *La Psychanalyse du feu* (1938). Bachelard makes the distinction here between "le penseur"—the objective scientist—and l'homme pensif," the man who confronts physical reality as poet and dreamer. The case of fire interests Bachelard, for he states that, because of its fascinating nature, it has never been seen by science in a truly objective manner: "l'attitude objectif n'a jamais pu se réaliser [one has never been able to bring to term an objective approach]." The "homme pensif" on the other hand, like Axel, lets himself be taken up by the dream of fire.

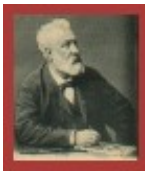
30. The first major pronouncement by a major French establishment critic is Roland Barthes's essay "Nautilus et Bateau ivre," (*Mythologies*, Paris: Éditions du Seuil, 1957), pp. 80-82). Barthes sees

Verne's extraordinary voyages as juvenile power fantasies, "where the child-man reinvents the world, fills it, encloses it, closes itself within it, and crowns this *encyclopedic effort* by assuming the bourgeois attitude of appropriation—slippers, pipe, and fireside—while outside the storm, that is to say the infinite, rages uselessly." (80) Axel may recoil from the unknown, seek refuge in dreams, but the process of dreaming is an active one, that engages, however imperfectly, the unknown, leaving behind in the reader the sense of wonder that will inspire the desire for future encounters. The "storm that rages outside" is neither useless in the eyes of science, nor isolated from meaningful contact. What is interesting here is Barthes's comparison of Verne and Rimbaud's "Bâteau ivre." One could argue that Axel's failure to engage the unknown with the models and systems his culture provides him, is the harbinger of Rimbaud's desire to cast off all such models as useless, in order to engage the "real" behind the veil of human theory. On the other hand, the "boat's" bold expedition, casting itself on unknown seas, reminds one of Lidenbrock's precipitous desire to rush to the center of the earth. Rimbaud's poetic visions, in fact, are full of references to Verne. The desire to contain Verne in the old Cartesian mind-matter duality continues in works like Michel Serres's *Jouvences sur Jules Verne* (Paris: Éditions de Minuit, 1974), and in works from inside the French SF community, such as Bernard Blanc's *Pourquoi j'ai tué Jules Verne* (Paris: Éditions Stock, 1978).

31. See Jean-Jacques Bridenne, "Jules Verne, père de la science-fiction, Part 1I: "De Jules Verne à Wells," *Fiction* (7), June 1954, p. 109.
32. *The Definitive* Time Machine: A Critical Editon of H.G. Wells's Scientific Romance, with Introduction and Notes by Harry M. Geduld (Bloomington: Indiana University Press, 1987), p. 32.
33. See Frank Scafella, "The Rebirth of a Scientific Intelligence, or From "Traveller" to "Travailer" in *The Time Machine*," in *H.G. Wells's Perennial Time Machine,* edited by George Slusser, Patrick Parrinder, and Danièle Chatelain (Athens GA: Georgia University Press, 2001), 39-50.
34. T.S. Eliot, "The Four Quartets: Little Gidding," *T.S. Eliot: The Complete Poems and Plays, 1909-1950* (New York; Harcourt, Brace and Company, 1952) p. 145.

Danièle Chatelain (daniele_slusser@redlands.edu) is Professor of French at the University of Redlands. She took an MA in Art History/Archeology from the Université de Strasbourg, and a PhD in French Literature and Narrative Theory/Rhetoric from the University of California, Riverside. She has published a number of articles, in French and English, on topics of narrative theory and rhetoric, in journals such as *Romanic Review, Poétique, Style,* and *Science-Fiction Studies,* as well as in various critical anthologies and collections. In 1998, she published a book, *Perceiving and Telling* (CSUSD University Press, 1998) for which she received an American Council of Learned Societies research grant. She was French language editor for the international conference volume: *Transformations of Utopia*, the Switzerland as Utopia conference, Yverdon, Switzerland (AMS Press, 1999), and co-editor of *H.G. Wells's Perennial Time Machine,* the Time Machine Centenary conference, Imperial College, London (Georgia UP, 2001). With George Slusser, she co-authored the first English translation/critical edition of Balzac's *Le Centenaire* (Wesleyan University Press, 2005). She is the co-author/translator (with George Slusser) of *From Prehistory to the End of the Earth: Three Novellas of J.H. Rosny*, the first scholarly translation/critical edition of this Belgian author in English (Wesleyan University Press, 2010).Currently, she is writing a book on the impact of science on 19th century French fiction, tentatively titled *Cartesian Mediations*, and working on a translation of 19th century French scientist Claude Bernard. She recently co-authored and mounted a web exhibition, *Balzac's Paris 1800-1850*, renewing her interest in art-history/urbanization (www.balzacsparis.ucr.edu).

George Slusser (slus@ucr.edu) has a BA in English Literature/Philosophy from UC Berkeley, and a PhD in Comparative Literature from Harvard, in modern English/American, German and French literatures (1750-present). His dissertation dealt with the birth of the fantastic in art and music in Diderot, Hoffmann and Balzac. He is a Woodrow Wilson Fellow, has held two Fulbright teaching fellowships (Tübingen and Paris X), a California Council for the Humanities fellowship, and authored a major Title IIC grant for the Eaton Collection. Professor of Comparative Literature at UC Riverside, he served as Curator of the Eaton Collection for 28 years, until his retirement in 2006. He has written and/or edited 36 books to date, and has published over 125 articles in several languages and multiple venues. With Danièle Chatelain he has co-authored articles on the narrative structures of SF, and two translations/critical editions, in the Wesleyan Early SF series, of neglected forerunners of the genre: Balzac's *The Centenarian* (2006), and the forthcoming *From Prehistory to the Death of the Earth: Three Novellas of J.H. Rosny aîné* (Fall 2010). His most recent publication (with Gary Westfahl) is *Science Fiction and the Two Cultures* (McFarland, 2009). He is working (with Danièle Chatelain) on a study of science and fiction in 19th century France, *Cartesian Mediations*.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Nemo, the *Nautilus*, and the Triumph of the Instrumented Will

Robert O'Connor

Abstract

The monstrous in science fiction is commonly an externalization of all or part of the solitary will, the overreacher's selfhood manifested in some embodiment manufactured by his own conscious or subconscious mind. A parallel science-fiction phenomenon empowers the individual or the collective self to achieve feats beyond the body's limited capacities through the ingenuities of engineering. Combining aspects of the willed monstrous and the engineered and logically explicable marvelous, Jules Verne's *Twenty Thousand Leagues under the Seas* focuses on a character whose ego combines many elements of 19th century willfulness and whose monstrous embodiment, the *Nautilus*, empowers its creator's will. As engineer, as collector, as taxonomist, as artist, as polymath, as imperialist, as revolutionary, as autocrat, as avenger, as misanthrope, as mercantilist, as environmental sentimentalist, as environmental rapist, as self-indulgent potentate, and as surrogate god, Captain Nemo is of his age though he believes himself opposed to it, and the *Nautilus* is the instrument by which he magnifies himself.

Résumé

Le monstrueux en science-fiction est souvent une extériorisation de tout ou partie de la volonté solitaire, l'ipséité de l'individu qui réussit se manifeste par une certaine forme de personnification réalisée par son propre conscient ou inconscient. Un phénomène parallèle la science-fiction permet à l'individu ou au moi collectif de réaliser des prouesses au-delà des capacités limitées de l'organisme grâce aux techniques de l'ingénierie. Combinant les aspects du monstrueux voulu et du merveilleux expliqué rationnellement, *Vingt Mille Lieues sous les Mers* de Jules Verne se concentre sur un personnage dont l'ego combine de nombreux éléments de l'entêtement du 19ème siècle et dont l'incarnation monstrueuse, le *Nautilus*, rend démesurée la volonté de son créateur. Comme ingénieur, collectionneur, taxonomiste, artiste, esprit universel, impérialiste, révolutionnaire, autocrate, vengeur, misanthrope, mercantiliste, amoureux de l'environnement, violeur de ce même environnement, potentat indulgent à l'égard de soi-même, et enfin comme substitut Dieu, le capitaine Nemo appartient à son époque, même s'il y est opposé, et le *Nautilus* est l'instrument par lequel il se grandit lui-même.

The monstrous in science fiction is very commonly an externalization of all or some part of the solitary will, the overreacher's selfhood manifested in an embodiment manufactured by his own conscious or subconscious mind. Victor Frankenstein combines body remnants to produce his personal nemesis, his "own vampire" (Shelley 81), who will enforce the dark loneliness that created it. Dr. Jekyll uses the compound produced in his experiments with "'transcendental medicine'" (Stevenson 475) to unchain desire from the repressive powers of

conscience and becomes, first, the murderer of his era's lethal respectability and, then, the self-murderer of his own repressive perfectionism. With the help of the long-dead Krell, Dr. Morbius amplifies and sends forth his incestuous Id to destroy anyone who would come between himself and his daughter (*Forbidden Planet*). Such tales tend to be psychologically grounded, owing a debt as much to occult as to hard science.

A parallel science-fiction phenomenon, with fewer overtones of medieval pseudoscience, empowers the individual or the collective self to achieve feats beyond the body's limited capacities through engineering. Swift's Laputans oppress their earth-bound neighbors by blocking the sun and threatening to bring their island down onto their victims' homes and cities (*Gulliver's Travels* Part III). Robert Heinlein's Waldo Jones releases himself from the prison of his weakened body through manipulable devices that have since come to be referred to as "waldos" (*Waldo* and *Magic, Inc.*). The bionic Steve Austin (Caidin, *Cyborg*, and ABC's *The Six Million Dollar Man*) and the even more drastically reengineered Alex Murphy (*Robocop*) fight evil by using body enhancements that whole teams of scientists have given them.

A more complex manifestation of such character creation is the relationship between Captain Nemo and the *Nautilus* in Jules Verne's *Twenty Thousand Leagues under the Seas*. Combining aspects of the monstrous and of the logically engineered marvelous, Captain Nemo's *Nautilus* simultaneously encases and externalizes its creator. The ship, like the chambered shell after which it is named, provides an armored home for its restless captain and his obedient crew, allowing them, at times, to sequester themselves and, at other times, to lash out as a single threatening entity. Although there are moments when Nemo and his companions seem tempted toward a self-annihilating quietude, more typically, their actions embody the broad possibilities, from the relatively benign to the clearly malignant, of a decidedly 19th century triumph of the will. Perpetual Faustian endeavor is not the inevitably admirable and always forgivable thing Goethe and others once deemed it to be, and examined from the perspective of our own millennium, a century regretting more and more of the energetic triumphs of the human past, Nemo's engineered willfulness often seems a very dark thing indeed.

In keeping with the century that produced the Crystal Palace, Nemo's genius shows itself most directly through his capacities as an engineer, but an engineer possessing the managerial skills and the commanding personality of a captain of industry. The words Verne applies to another engineer of genius, Cyrus Smith of *The Mysterious Island*, fit Nemo perfectly:

> whatever the circumstance, he never failed to retain the mastery over himself, nor to meet the three necessary conditions for human achievement: an active mind and body, an impetuous desire, and a powerful will. (13)

An "active mind and body" provide Smith and Nemo with the creative energy to initiate their projects, but "an impetuous desire" and "a powerful will" sustain them as they coordinate the work needed to complete what they have at first merely imagined. In Nemo's case, not only does he design a miraculously advanced submarine, but he funds and organizes its manufacture, and the manufacture of all its supporting technology, undetected by any world power. This latter fact, the vessel's entirely secret construction, allows Nemo and his crew to harass world shipping with such startling suddenness that Professor Aronnax and others

believe the offending object to be a stupendous creature of natural origin (a gigantic narwhal in the opinion of Aronnax) rather than a product of human ingenuity.

Like a technically astute Jehovah, Nemo directs his Leviathan through the world's waters pursued by the righteous but inferior might of captain Farragut and the United States Naval vessel *Abraham Lincoln*. Farragut's success in finding the *Nautilus* suggests Nemo's willingness to be found, and the great Farragut's inability to outmaneuver Nemo and the *Nautilus* or to breach the submarine's defenses demonstrates the immense tactical advantage Nemo and his machine have over any other captain and ship.

This dangerous power is confirmed when Professor Aronnax, his servant Conseil, and the French-Canadian harpoonist Ned Land are washed from the decks of the *Abraham Lincoln* and find precarious refuge on the metal skin of the *Nautilus*. For a moment, Dr. Aronnax retains his sea creature hypothesis, guessing that the hard exterior of the submarine is "a bony carapace, like that of some prehistoric animals" (45). At last, though, he admits "that the creature, the monster, the natural occurrence which had puzzled the entire scientific world and baffled and troubled the minds of seamen in both hemispheres, constituted a still greater marvel—a man-made phenomenon" (45). Still worse, this man-made phenomenon is under the command of a misanthrope reluctant to take on new passengers. As Nemo himself indicates to Aronnax and his companions after barely allowing them the mercy of shipboard captivity, it is only through his God-like caprice that they, his voluntary attackers, have been allowed to become Jonahs swallowed by Nemo's unnaturally luxuriant whale.

After their disconcerting entry into Nemo's disorienting hermitage, the tolerated intruders are introduced to the technology and the material amenities that allow Nemo his aquatic existence. Despite his sympathies with the poor and his revolutionary ideals, Nemo is as self-indulgent a connoisseur of the arts as any acquisitive robber baron and has indulged himself, within his bubble of steel beneath the pressures of the sea, with a private collection that any hoarder of cultural treasures might envy. The works of Raphael, da Vinci, Correggio, Titian, Murillo, Holbein, Velasquez, Ribera, Rubens, and others hang from the walls of the *Nautilus*. The ship also carries musical "scores of Weber, Mozart, Beethoven, Haydn, Meyerbeer, Herold, Wagner, Auber, Gounod, and several others" (72). Presumably, this music is intended for Nemo's own impromptu performances on the ship's organ, the powerful, and thus nearly inevitable, instrument of choice not only of the captain of the *Nautilus* but of such other great egotists of the human imagination as the Phantom of the Opera and the abominable Dr. Phibes.

In addition to his collected music and art, Nemo also possesses a museum's worth of oceanic biological specimens. Equipped with elaborate dredging nets to scoop up masses of marine life and diving suits and electrified bullets to hunt more selective specimens, Nemo has captured sea creatures in abundance, partially to supply his tables with food and partially to satisfy his scientific curiosity. This collecting exemplifies another great project of the 19th century will, the attempted gathering and taxonomic arrangement of all the earth's living things. Conseil particularly appreciates this effort and spends long hours not only specifying the Latin designation of each displayed creature but also using the large viewing windows of the *Nautilus* to further aid in the effort to catalogue the full range of sealife.

Nemo's knowledge of engineering, art, music, and biology is supplemented by his familiarity with geography, geology, metallurgy, hydrodynamics, navigation, electrodynamics,

and cultural anthropology. Add to these capacities Nemo's fluency in French, English, German, Latin, and several other tongues, plus a mastery of the invented language of the *Nautilus*'s crew, and he clearly possesses a universal genius's store of facts and skills. The *Nautilus*'s library, in the opinion of Professor Aronnax, contains "everything that humanity has produced of greatest beauty in history, poetry, the novel, and science: from Homer to Victor Hugo, from Xenophon to Michelet, from Rabelais to Mme. Sand" (70). Nemo's volumes on science include "books on mechanics, ballistics, hydrography, meteorology, geography, geology, etc." which "[take] up at least as much space as works on natural history" (70). It appears that little known to humanity remains beyond Nemo's scope and that nothing vital – only political economy! - has been omitted from the *Nautilus*'s bookshelves.

None of this as yet suggests the *Nautilus* as a scourge of the seas or Nemo as a willful destroyer, but very early in the novel, before Aronnax, Conseil, and Ned Land have become Nemo's prisoners, the *Nautilus* has already used its ramming power to cripple ships. The one rule the three outsiders are required to obey while on the *Nautilus* is to accept periodic isolation while the ship and its crew carry on activities the captives are not to witness. The murderous possibilities of these actions are evident, and the morbid lingering of the *Nautilus* in the vicinity of the sinking hulk of the *Florida*, with the bodies of four men, a woman, and an infant clearly visible to Aronnax and his companions (124-25), is a direct demonstration of the consequences of shipwreck. When Aronnax, after a period of involuntary sleep, is called to minister to the wounds of a *Nautilus* crew member, we have been primed to imagine Nemo's probable depredations of the previous night, and later, when Nemo overtly attacks a European vessel and Aronnax watches its crew drowning (373), the full power of the *Nautilus* to enact its captain's vengeance is revealed. The tears he then sheds as he gazes at the portrait of what presumably is his murdered family (373) indicates the intense private grief at the core of his rage.

That Nemo is a potentially dangerous autocrat, as haughty as any monarch and not to be trusted with the power of so infernal a machine as the *Nautilus*, is evident long before this scene, however. In an early summation of Nemo's nature, we are told that Aronnax

> instantly recognized his dominant feature: confidence in himself, for his head rose nobly from the curve formed by his shoulders and his dark eyes looked at you with a cool assurance. He was composed, since his skin, more pale than ruddy, indicated a calmness in the blood. Energy he possessed, as demonstrated by the rapid contraction of his eyebrow muscles. And courage also, since his deep breathing marked great vitality and expansiveness. (49-50)

A few pages after Aronnax makes this judgment, as applicable to a self-reliant hero as to a self-assured villain, Nemo tells him that he and his companions will forever remain the captain's captives. The usually mild-mannered scientist then accuses Nemo of savagery, to which Nemo replies,

> "I am not what you call a civilized being! I have broken with society for reasons which I alone have the right to appreciate. So I do not obey its rules, and I ask you never to invoke them in my presence again!" (63)

The ironic injustice of this situation is emphasized throughout the novel by the rancor which flares up between the commanding Nemo, whose central desire is to exercise his own unrestrained will, and the Canadian Ned Land, who embodies the North American triumph of freedom over autocracy, a triumph that Verne relies on in several of his novels to express his

democratic sympathies. Because Ned, Aronnax, and Conseil are a threat to Nemo's autonomy and anonymity, the *Nautilus* is to be their perpetual prison house.

Nor, as we have seen, is Nemo a self-denying autocrat. Although he is a champion of the disadvantaged and the powerless in one avatar of his existence, the *Nautilus* gives him access to everything he needs to live like the wealthiest potentate. He has no hesitation about reaping what the sea offers as long as he and his crew have some purpose in mind for using what their nets and electric bullets collect for them. Nemo directly states that hunting for the mere sake of killing is hateful to him, but apparently all is well if the hunter eats or wears what he shoots or the killer rights some moral wrong through the carnage he wreaks. Thus, when one of his sailors repeats the crime of the Ancient Mariner, the universe seems not to notice because the albatross is being harvested for some unstated practical purpose. Aronnax describes the moment as follows:

> It was then that I witnessed one of the finest gun shots ever to play on the heart-strings of a hunter. A big bird with a large wingspan, very clearly visible, was gliding towards us. Captain Nemo's companion shot at it when it was only a few metres above the waves. The animal fell down dead, and dropped down within reach of the skillful hunter, who seized hold of it. It was an albatross of the finest sort, an admirable specimen of those pelagic birds. (116)

Verne could hardly have missed the significance of this moment, but what is an act of perverse will requiring an eternity of penance in *The Rime of the Ancient Mariner* occurs here with the everyday assurance that comes with a sense of moral entitlement.

Hunting, often to the point of mass slaughter, is one of the commoner acts of willfulness in 19th century tales of masculine adventure, but when one consumes nature in some more or less responsible fashion, what objection can be made to the killing? Even creatures of the most extreme rarity may be hunted as long as the eventual intention is to harvest their meat or their fur. Twice Nemo encounters creatures we are told are approaching extinction, and twice he allows them to be killed. He personally dispatches the first of these with a single electric bullet and leaves it to be carried off by a crew member:

> It was a magnificent sea otter, an enhydra, the only quadruped that is exclusively marine. The five-foot otter was surely very valuable. Its skin, rich brown on top and silver underneath, was one of those admirable furs that are so sought after on the Russian and Chinese markets; the fineness and sheen of its coat meant it was worth at least 2,000 francs. I admired this curious mammal with its rounded head and short ears, round eyes, white whiskers like a cat's, webbed and clawed feet, and bushy tail. This precious carnivore, hunted and tracked down by fishermen, is becoming extremely rare, and it has taken refuge principally in the northern Pacific, where its species will probably soon become extinct. (115)

The second, a Dugong, falls to the harpoon of Ned Land with Nemo's encouragement. The self-indulgence of this particular *Nautilus* adventure is emphasized by the interchange that precedes it:

> "Yes, Master Land, its flesh is real meat. It is very highly esteemed, reserved for the tables of princes throughout Malaysia. This excellent animal is so fiercely hunted that, just like its congener, the manatee, it is becoming rarer and rarer."
>
> "And so, captain," Conseil said seriously, if by chance this were the last of its race, would it not be better to spare it—in the interests of science?"

> "Perhaps," responded the Canadian, "but in the interests of the table, it is better to hunt it."
>
> "So go ahead, Master Land," replied Captain Nemo." (220)

Despite some difficulty, Land kills the Dugong, and its flesh is added to the ship's larder.

Nemo also uses the *Nautilus* to enforce his personally approved code of animal morality. In what seems an extension of his hatred of predatory humans, he has little tolerance for predation among sea creatures and champions the sentimentalist cause of the weak occupants of the lower rungs of the food chain against the stronger, larger carnivores at the top. His first massacre of predators is of the swarming Giant Squid that have impeded the *Nautilus*'s movement. When the beak of one of these creatures fouls the submarine's propeller, Nemo vows, in words suggestive of Kurtz in Conrad's *Heart of Darkness*, to "Surface, and exterminate all the vermin" (346). With arms enough to rival Scylla, the dozen or so squid are, to varying degrees, butchered by the crew, who experience a killing frenzy as they strike at the writhing tangle of tentacles. Luckier than Odysseus, Nemo loses one crew member in the encounter rather than six.

Much more extreme is the carnage Nemo inflicts, during a transparent parody of the obsessive hatred of Ahab against Moby Dick, upon a pod of sperm whales that have chosen to attack a pod of gentler baleen whales. When Ned Land asks to harpoon one of the baleen whales, the suddenly conscientious Nemo says, "What would be the point?" He condemns "Hunting simply to destroy!" and because "We have no use for whale oil here on board" (287), he refuses to let the captive harpoonist proceed. He even goes so far as to lecture Ned on the terrible impact whaling has had on the marine life in Baffin Bay. Nemo then notices the sperm whales quickly approaching to attack the morally preferable baleen whales and declares, "it is right to exterminate such cruel and evil-doing animals" (288). As Nemo uses the *Nautilus* to spear sperm whale after sperm whale and the surface becomes glutted with their torn bodies, even Ned Land becomes disgusted.

If Nemo's attitude toward animal interaction is to differentiate the evil from the righteous, he follows a similar pattern with humanity. Whether or not the previously mentioned sinking of the *Florida* is of the *Nautilus*'s doing, Nemo assures himself and his guests of a full spotlitghted view of the ship's demise. More insidiously cruel than the mere invasion of the privacy of death that the *Florida* incident might, generously interpreted, represent and treated as a matter of expedient indifference is Nemo's handling of a Papuan invasion of the *Nautilus* during a necessary reventilation of the ship. Aronnax, Ned, and Conseil have inadvertently led the Papuans to the submarine and are startled by Nemo's nonchalance in dealing with the potentially deadly threat. Their concern is eliminated when the hatches are opened to take in the vital oxygen and the Papuans are struck by Nemo's lightning, passed as a powerful current through the rails of the entrance tunnel. The savages, presumably ignoble, have been taught a lesson by European science.

Entirely opposite to this callousness and suggestive of Europe's capacity to raise the impoverished heathen to sudden prosperity is Nemo's heroic kindness to a Sinhalese pearl diver whose life he and Ned save and whose poverty is allayed when Nemo places a string of pearls in the diver's hands. That this gesture of generosity to a poor man exploited by the rich indicates a largesse the *Nautilus* facilitates on a grander scale at other times is hinted in an exchange between Aronnax and Nemo at Vigo Bay, underwater repository of a hoard of gold

looted from the Americas by Spain. When Aronnax imagines the good that so much gold could do if properly used, Nemo exclaims,

> "What makes you believe, Monsieur, that these riches must be considered wasted if I collect them? Do you think that it is for my own benefit that I take the trouble to gather these treasures? Who told you that I do not put them to good use? Do you think I am unaware there are suffering beings and oppressed races on this planet, wretches to be helped and victims to be avenged?" (253)

Aronnax immediately identifies "rebellious Crete" (253) as the culture to benefit from Nemo's treasure-hunting, but Nemo's reference to thousands of such hoards magnifies the potential impact of efforts he might make to aid the oppressed, to instigate revolution, and to avenge the victimized. With all the zeal of a Garibaldi or a Bolivar and many times the resources of a Count of Monte Cristo, what might a politically connected and technologically empowered Nemo accomplish?

But the whole point of Nemo's willfulness is to maintain a disconnection from the general struggles of humanity, or, at most, to maintain a connection to one narrow focus at a time. For a moment, he plays explorer and imperialist, but he unfurls his black flag emblazoned with the golden N of Nemo at the South Pole on the imagined coast of Antarctica, inhabited by crowds of penguins but generally avoided with aversion by *Homo sapiens*. He plays a sub-aqueous Childe Harold contemplating the ruins of Atlantis, a vaster wasteland than Byron ever composed his meditations on, but Aronnax is the only sharer of Nemo's contemplated desolation, and the single word "Atlantis" is Nemo's only scrawled comment on that continent in ruins.

By contrast, Nemo does prove the intensity of his zeal for vengeance in the glimpses he gives Professor Arronax of the several possible *Nautilus* maritime attacks and in the direct spectacle of the vessel Aronnax watches the *Nautilus* sink. But as many aspects of 19th century willfulness as Nemo practices and as his ship allows him to carry into magnified operation, the most salient fact about Nemo is his apparent unwillingness to be effectively willful, to influence the world at large in any lasting way. His genius is cloistered in the very vessel that manifests its power, his discoveries are destined not to survive the instrument that makes them possible, his revolutions hardly intrude upon human awareness, his impositions upon nature and humanity are matters of isolated moments, his imperialism is paltry, and his acquisitiveness circumscribed. He becomes the monster most truly only when the *Nautilus* hurls itself at some vulnerable ship, and after that, his presence is effaced by the watery world he prefers to the tyrannized earth, the realm of a willfulness become global plague.

His is not the fully realized triumph of the 19th century will that his subversive actions so ironically exemplify, and that Hitler's 20th century triumph of the will brings to grotesque fulfillment, but the involuted specter of that will. His marvelous ship allows that specter strength enough, for a moment, to be known, but Nemo's essential nihilism, his inescapable despair, renders his genius moot and validates the pseudonym he chooses to sum up his life.

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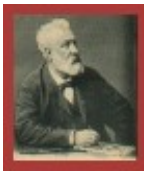
Dr. Robert O'Connor (robert.oconnor@ndsu.edu) has taught in the English Department at North Dakota State University since 1985 and also taught for several years before that at Southwest Texas State University. Much of his teaching has been in the British novel, British Romantic poetry and prose, and science fiction, fantasy, and horror. His articles have appeared in *The Wordsworth Circle*, *The Lamar Journal of the Humanities*, and elsewhere. In 1995, the Edwin Mellen Press published his edition of Henry William Bunbury's *Tales of the Devil*, a fully illustrated set of parodies of M. G. Lewis's *Tales of Wonder* (1801) and similar volumes of ballad horror.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Distraction et écritures mécaniques chez Verne : deux exemples

Nicolas Saucy

Abstract

This article highlights a specific intertextuality between Surrealist literature — in particular of André Breton — and Jules Verne that might offer a new appreciation and interpretation of the *Extraordinary Voyages*: one element of this intertextuality is in the use that Verne makes in his narratives of psychic automatism, which appears first in *Journey to the Center of the Earth* in the form of Axel's mechanical writing and later in the form of Paganel's "providential distraction" in *The Children of Captain Grant*. A new reading of these works is proposed in the light of this aspect of Surrealism, a reading that emanates from the principle of the joy of the *trouvaille*.

Résumé

La mise en exergue d'un intertexte entre la littérature surréaliste — en particulier André Breton — et Jules Verne permet de proposer une nouvelle appréciation et interprétation des *Voyages extraordinaires* : un des éléments de cet intertexte est l'usage que Verne fait dans sa poétique de l'automatisme psychique qui apparaît d'une part dans *Voyage au centre de la Terre* sous la forme de l'écriture mécanique d'Axel et d'autre part sous la forme de la "distraction providentielle" de Paganel dans *Les Enfants du capitaine Grant*. Il s'agit ici de proposer une nouvelle lecture à la lumière de ce que le surréalisme nous propose, lecture qui rayonne autour du principe de la jouissance de la trouvaille.

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Bien que la démarche qui suive puisse sembler inhabituelle pour le lecteur — tant par la proposition de l'existence d'un intertexte et des relations entre Breton et Verne que par le rapprochement entre deux personnages verniens rarement étudiés conjointement —, jl'auteur de cet article, fidèle à l'école dite « de Genève », tient à préciser que cet essai (qui n'ambitionne que de lever un coin du voile de la richesse de la poétique vernienne) se veut novateur dans son approche du texte vernien ; en outre, ce dernier n'est à considérer que comme un exemple de la réalité de cet intertexte, parmi un grand nombre d'autres réalités possibles.

Pour un lecteur appartenant au mouvement surréaliste, les *Voyages extraordinaires* de Jules Verne possèdent une profondeur confondante. Même si les romans d'aventures de Verne semblent — et devraient être — à l'opposé de la poétique, exposée dans le *Manifeste*

du surréalisme en 1924 par André Breton, il existe en fait à plusieurs niveaux une intertextualité entre le récit vernien et les récits surréalistes, et plus particulièrement ceux du chef de file du mouvement éponyme. Thématiques, topologiques et structurels, ou encore cryptogrammatiques, les liens sont bien trop nombreux entre les deux auteurs pour que cela ne soit que coïncidences : en effet, plutôt que de voir en cette récurrence un simple hasard providentiel, – ou pour reprendre les termes de Pascaline Mourier-Casile – « un emprunt à la même tradition ésotérique », [1] la présence de cet intertexte tend à affirmer l'idée que je propose : voir en Jules Verne et en ses romans d'aventures une matière première du surréalisme, retravaillée et transformée pour répondre aux attentes d'André Breton et de ses coreligionnaires, mais présente non pas juste comme des échos de lectures de jeunesse mais en tant que palimpseste réel et profond. Breton semble ainsi ne pas pouvoir exister sans Verne.

Une première approche analytique de ce palimpseste a été réalisée par Pascaline Mourier-Casile qui dresse une correspondance entre les mythes présents chez le chef de file du surréalisme, principalement dans *Arcane 17*, et les trois auteurs que sont Gourmont, Jarry et Jules Verne. [2] L'analyse consacrée à Verne se penche principalement sur *Les Indes noires*. En effet, l'auteure propose une relecture de cet ouvrage en parallèle avec *Arcane 17* dans une perspective d'inversion : il existe pour elle un transfert – alchimique et poétique – d'une œuvre à l'autre, par conversion de signe, « de l'œuvre en noir à l'œuvre en blanc » [3], précise-t-elle. En l'occurrence, il s'agit principalement d'une inversion monochrome des couleurs et des chemins : par exemple, si l'île Bonaventure présente une lumière éclatante, les mines des *Indes noires* se perdent dans l'obscurité. Pourtant, plus que l'alchimie et la poétique des auteurs, c'est un détail textuel qui a retenu l'attention de Mourier-Casile et a permis toute sa réflexion : la présence dans les deux récits d'une « petite fille à l'harfang ». [4] Néanmoins, mis à part ce personnage emblématique, ce n'est qu'au travers de ressemblances peu convaincantes que l'analyse se poursuit. [5] L'auteure annonce même, dans la préface, qu'elle ne cherche pas à créer un intertexte. [6] Toutefois, elle est la seule critique à avoir réellement introduit un rapprochement entre Breton et Verne. Ses conclusions ne mettent que faiblement en relation les deux auteurs : alors qu'elle rapproche *Arcane 17* des *Voyages extraordinaires*, elle énonce enfin que « la plupart de ces thèmes fondamentaux, communs [à Verne et à Breton] […] s'alimentent à une source commune, celle de la tradition ésotérique ». [7] Tout en annonçant des convergences, la nature du lien que Mourier-Casile relève - puisqu'il existe hors du texte - dissocie les deux auteurs. Son intuition n'était pas erronée : elle a su voir la première des détails qui poussent à relier les deux auteurs. Mais le fait qu'elle s'en tienne uniquement à ce rapport et à quelques ouvrages limite la portée de sa réflexion. Nos recherches suivent une autre logique : nous considérons que le fait de pouvoir associer les deux auteurs par un intertexte nous dispense d'expliquer les liens qui les unissent par leur appartenance commune à une tradition indépendante et exogène.

Dans une autre mesure, l'article *The Science is fiction : Jules Verne, Raymond Roussel and Surrealism* de Terry Hale et Andrew Hugill [8] dresse une filiation de Jules Verne à Raymond Roussel, et de celui-ci au surréalisme. Toutefois, les auteurs ne poussent pas la réflexion plus avant et s'en tiennent à l'établissement de ces liens. Je me propose, donc, de définir ce que la rencontre de ces deux auteurs crée, et quelle en est la portée poétique, en proposant de nouvelles interprétations des textes, ainsi que nous le verrons dans cet article.

Je restreins ici ma démonstration à l'un des liens qui existent entre les deux auteurs, ce que l'on peut appeler « l'automatisme psychique » — hyperonyme qui recouvre plusieurs modes d'écritures et plusieurs dispositifs cognitifs tant chez Breton que chez Verne — et l'utilisation qui en est faite, pour démontrer l'existence d'un intertexte : la reconnaissance de celui-ci permet en outre de proposer une nouvelle lecture du monde vernien tout comme le texte vernien peut venir éclairer les récits surréalistes ; le présent essai se concentrera sur la relecture des textes verniens. L'automatisme psychique tel qu'il est défini dans le *Manifeste du surréalisme* de 1924 joue un rôle fondamental dans tout le mouvement artistique d'André Breton et même avant la publication de ce texte fondateur : cette poétique doit permettre d'atteindre la surréalité [9] car libérée de la censure de la conscience, et de découvrir le fonctionnement réel de la pensée grâce à la création poétique qu'elle suscite. Etrangement, un mode d'expression semblable se retrouve chez certains personnages verniens.

Deux personnages tirés de l'univers des *Voyages extraordinaires* sont à même de nous montrer de quelle manière ces écritures mécaniques et « distraites » sont une composante de la poétique vernienne : le premier est Paganel des *Enfants du capitaine Grant*, et le deuxième est Axel, le neveu du professeur Lidenbrock du *Voyage au centre de la Terre* avec son expérience scripturale de demi sommeil. Autant la distraction surnaturelle de Paganel que l'écriture spontanée d'Axel sont subies par le personnage, ce pourquoi nous les considérons comme exogènes : bien qu'Axel soit à l'origine de l'écriture du « journal de bord », il ne lui appartient pas de proposer un type d'expression qui serait pour lui révélateur ; au contraire, il n'est que le jouet des éléments extérieurs. La présence de ce type d'écriture chez Verne est à admettre comme un signal : ce n'est pas un hasard, mais un signe qu'il faut déchiffrer, et son déchiffrement permet en l'occurrence de mieux saisir le texte vernien, tout en admettant que les *Voyages extraordinaires* fonctionnent ainsi qu'un terreau théorique et pratique pour Breton et le surréalisme.

L'automatisme pour André Breton et les surréalistes

L'automatisme est chez les surréalistes le meilleur moyen d'atteindre la surréalité en dépassant la conscience humaine et en exposant clairement l'inconscient. Breton, à travers la critique du romanesque dans le *Manifeste du surréalisme*, fait une apologie de l'imagination comme ordonnatrice de l'existence. Puisque l'écriture automatique est « la véritable pensée qui se cherche elle-même », [10] elle doit s'en prendre à la logique, qui a imposé à l'homme une vue limitée de lui-même. Breton revendique que les poètes, avec les moyens qui leur sont propres, participent à l'élaboration d'une nouvelle méthode de connaissance.

Il ne s'agit plus seulement, pour Breton, d'un aspect de la création verbale mais d'un mode général d'expression du psychisme humain. A travers cette technique d'écriture qu'est *l'automatisme* tel que le définit le *Manifeste du surréalisme*, Breton espère exprimer « le fonctionnement réel de la pensée » « soit verbalement, soit par écrit, soit de toute autre manière. » [11] Il s'inspire par ailleurs pour cette théorisation des écrits de Pierre Janet sur la question de l'automatisme psychologique (1889) [12] : l'écriture automatique est pour Janet la réponse donnée par le sujet, à son insu, à une suggestion subie au préalable dans le sommeil hypnotique — ce qui n'est nullement le cas dans le texte automatique surréaliste —

et par ailleurs, il juge les résultats obtenus si pauvres et si répétitifs qu'il caractérise l'automatisme comme une dégradation de l'activité psychique, ce qui situe sa pensée aux antipodes de celle de Breton pour qui l'automatisme livre l'or brut de la poésie. Un autre grand théoricien de l'automatisme auquel s'intéresse Breton — mais dès 1933 seulement — est Myers. Il reste toutefois à distance de celui-ci, la question de l'extériorité de la « voix » surréaliste ne lui paraissant pas même pouvoir se poser. Cette voix qui se fait entendre est, pour Breton, celle du sujet — certes pas du sujet conscient, mais du sujet quand même, dont il convient « d'unifier (la) personnalité ». En effet, il précise dans *Le Message automatique* que si l'automatisme, comme il est vécu par les médiums ou le spiritisme, tend à dissocier la personnalité psychique du médium, la conception surréaliste prône l'unification de la personnalité. [13] De Myers il retiendra par contre son interrogation sur la structure, au plan strictement psychologique, d'un possible réservoir commun de conscience.

Ainsi, se trouvent ramenées à un même but les expériences menées entre 1919 et 1924, telles que phrases de demi-sommeil, [14] propos des sommeils hypnotiques, récits de rêves, dessins automatiques. Voilà ce que prétend l'attaque contre le roman, expression dans l'art de l'attitude réaliste [15] : bien au contraire, il faut se concentrer sur les possibilités offertes de ne pas suivre cette voie romanesque, et de réaliser par toute forme d'expression automatique, telle principalement l'écriture automatique, une explosion d'imaginaire, permettant de découvrir le psychisme humain, et par delà, la surréalité. Cette écriture automatique est placée sous « [la] dictée de la pensée, en l'absence de tout contrôle exercé par la raison, en dehors de toute préoccupation esthétique ou morale » [16] : elle doit surtout faire fi de toutes les particularités de l'énonciation fictive — romanesque —, et tendre à une réalité parfaite, évitant par là descriptions, linéarité du récit, intrigues romanesques et la psychologie des personnages. Breton énonce les caractéristiques de cette nouvelle forme d'expression, et les moyens d'y arriver dans le *Manifeste du surréalisme* :

> Tout occupé que j'étais encore de Freud à cette époque et familiarisé avec ses méthodes d'examen que j'avais eu quelque peu l'occasion de pratiquer sur des malades pendant la guerre, je résolus d'obtenir de moi ce qu'on cherche à obtenir d'eux, soit un monologue de débit aussi rapide que possible, sur lequel l'esprit critique du sujet ne fasse porter aucun jugement, […], et qui soit aussi exactement que possible, la pensée parlée. [17]

Ce mode d'expression est essentiel aux yeux d'André Breton : la surréalité doit permettre à l'homme de connaître son devenir, son origine, d'accéder à une forme de connaissance universelle par les élans poétiques qu'elle crée. Si essentielle soit-elle, Breton non seulement n'a jamais sacralisé l'écriture automatique, bien qu'il appuie sur elle sa poétique, mais encore ne prétend-il pas laisser toute liberté à cette écriture : il consent à la diriger, à la travailler, pour la rendre plus révélatrice, preuve en sont les multiples ratures et les multiples modifications que l'on trouve sur les manuscrits des *Champs magnétiques*. [18]

La distraction et les écritures mécaniques chez Verne – 1. Paganel ou la « distraction surnaturelle »

Cet exercice spécifiquement surréaliste qu'est l'écriture automatique — spécifique dans sa dimension créatrice — n'est pas sans rappeler certains passages des *Voyages extraordinaires*, bien que le terme « écriture automatique » lui-même n'apparaisse jamais

chez Jules Verne, alors qu'il est fait mention de « la distraction » [19] à plusieurs reprises, entre autre dans *Les Enfants du capitaine Grant*, et que l'on peut saisir comme étant la dénomination d'un symptôme d'une activité adventice. L'exemple présent concerne un automatisme psychique subi, dans lequel le monde s'impose à un personnage qui ne se rend pas compte de ce qu'il écrit ou de ce qu'il fait, et c'est sous la forme de la *distraction* que celui-ci se présente. En l'occurrence, Paganel, confronté à un état psychique particulier et par un trait de caractère qui lui est propre, se révèle être le vecteur d'une pensée sans arrêt, sans linéarité ni fixité, qui se répercute sur ses actions, qui, par corrélation, en deviennent non-linéaires : rêve, écriture spontanée, analogies imaginaires ou encore actes dûs à la distraction se présentent comme la clef d'un certain type de récit vernien.

Ces aléas de l'écriture assument un rôle dans un espace diégétique lié à l'économie du récit et à la structure de celui-ci : ils ne sont pas juste des signes épars et flottants, mais répondent à une logique que la lecture permet de reconstituer. Ils semblent même devenir dans les romans verniens les catalyseurs de la pensée parlée, de l'inconscient qui se révèle et détermine tout à la fois destin et réalité par une explosion d'imaginaire. Cet exercice n'a pas comme but final de révéler la pensée réelle de l'homme dans le sens où il n'est jamais pratiqué volontairement, mais inconsciemment. Cela implique que la révélation peut se concrétiser malgré tout. La vision vernienne de cet automatisme présente l'esprit s'imposant de lui-même par moments à l'homme, sans qu'on puisse l'y contraindre de sa propre volonté, et se lie du coup fermement au hasard ; ici, c'est à travers une sorte de passivité inconsciente que le réel véritable voit le jour. Le personnage vernien est alors un véritable « patient » dans l'acception étymologique du mot. Ainsi de Paganel, dans *Les Enfants du capitaine Grant* : il symbolise le personnage vernien du type « distrait », à savoir un personnage en proie à un naturel « automatique » puisque l'on peut considérer, à la suite de Pierre Janet [20] , la distraction comme une manifestation non contrôlée par la pensée, autant pour l'écriture que pour les mouvements. Cependant, cet automatisme psychique n'est jamais vu négativement par Jules Verne : au contraire, il représente une sorte d'aboutissement du hasard en prenant la forme de mouvements ou d'actes créatifs.

Paganel non seulement n'est jamais en phase avec ses compagnons d'aventures, mais c'est de lui que dépend la totalité du récit : de lui en tant qu'individu agissant certes, mais également par son habitude de faire abstraction sans volonté propre de sa conscience, créant ainsi d'étonnantes correspondances lexicales. Premièrement, s'il se trouve sur le *Duncan* — le navire de Lord Glenarvan — ce n'est que pur hasard, puisqu'il s'avère qu'il s'est trompé de navire pendant la nuit lors de son embarquement ; dès les premiers échanges de paroles avec Glenarvan, on note qu'il se laisse porter par « les ailes rapides de l'imagination » [21] qui semblent toujours liées à la distraction. Il est singulier de retrouver ici le lien entre distraction et imagination : la première créant la deuxième, il s'ensuit l'accession à une forme nouvelle d'expression. Imaginative, celle-ci dépasse l'état psychique du sujet et se lie au monde de manière à ce qu'il s'applique à une révélation par l'écriture ou le comportement ; la distraction serait *in fine* le signe de la capacité du personnage à laisser la part belle à son inconscient. Cette capacité pourrait même être transmise : lors de la dernière interprétation du cryptogramme, Paganel assure ses compagnons qu'ils doivent « Oublie[r] autant que possible les interprétations précédentes, et dégage[r] [leur] esprit de toute préoccupation antérieure » [22] pour saisir le sens du document parcellaire. Ensuite, c'est par un jeu d'analogies à la lecture des trois fragments du parchemin qu'il conduit ses compagnons jusqu'à la résolution du cryptogramme et ainsi jusqu'à leur but, l'ilot Tabor ;

Paganel admet à la fin du roman avoir été « bien distrait » pour ne pas s'être rendu compte que le nom qu'il tentait de déchiffrer étant en fait l'appellation orographique d'une île, mais en anglais. Enfin, il pratique une sorte d'écriture spontanée : le géographe tout à la fois résout l'énigme du message d'aide et assure la survie de la troupe des Grant, en écrivant le nom de la Nouvelle Zélande en lieu et place de Twofold-bay en Australie sous la dictée de Glenarvan, moment où l'imagination en feu de Paganel se superpose à la dictée de celui-ci ! [23] La distraction du géographe provoque un afflux d'imaginaire qui se révèle dans le cadre d'une « création » littéraire dont les termes portent en eux le salut commun. L'écriture devient le révélateur d'un état inconscient latent et la pierre de touche du saisissement d'un destin inscrit dans le monde.

L'appellation Twofold de la baie dénote un double-jeu, une double lecture, nom que Jules Verne n'a certainement pas choisi au hasard lorsqu'on sait l'attention qu'il a toujours mise à choisir les noms de ses personnages et des lieux qu'ils visitent : cette baie se situe sur le 37° parallèle que suivent les aventuriers depuis le début du roman et en cela constitue donc la continuité logique du récit. Le lecteur est symboliquement appelé à plier et à déplier le texte (*to fold*, plier), tout comme il tourne les pages du roman, dont le sens serait amphibologique. Le récit, en l'occurrence, prend un double chemin, guidant d'une part le lecteur et la diégèse dont il dépend vers un lieu entendu et attendu et d'autre part à un nécessaire travail de lecture pour déchiffrer ce qui se trouve sous les mots. Un pliage dû au hasard se trouve être à l'origine de la troisième interprétation que propose Paganel du cryptogramme : alors qu'il rédige la lettre qui deviendra providentielle, ses yeux tombent sur un numéro de l'*Australian and New-Zealand Gazette* plié. Enfin, l'analogie révélée par ce « hasard » conduit le géographe à écrire Zealand au lieu d'Australie :

> Paganel achevait ce dernier mot, quand ses yeux se portèrent, *par hasard*, sur le numéro de l'*Australian and New-Zealand*, qui gisait à terre. Le journal replié ne laissait voir que les deux dernières syllabes de son titre. Le crayon de Paganel s'arrêta, et Paganel parut oublier complètement Glenarvan, sa lettre, sa dictée. [24]

Son esprit, captivé par sa récente découverte (un des termes incomplets des parchemins se termine par –aland ce qui constitue la fin du mot « Zélande » en anglais), ne peut alors suivre la dictée de Glenarvan et s'impose à la main. En outre, il n'apparaît nullement dans ce passage une quelconque adresse au lecteur, ou un aparté du narrateur destiné à susciter la réflexion de celui-ci : illusion ou réalité, le narrateur ne semble pas en savoir plus que son narrataire.

La logique que la pensée doit combattre, comme le dit Breton dans le *Manifeste du surréalisme*, est ici battue en brèche : en effet, celle-ci voudrait que Paganel ne fasse qu'écrire ce qui lui est dicté et précipite ainsi la fin du récit au travers de la capture du *Duncan* et de la mort de ses amis. D'autant plus que cette modification de la destination du *Duncan* permet de terminer la diégèse vernienne en guidant les aventuriers vers l'îlot refuge : encore mieux, ce n'est que par l'automatisme psychique de Paganel que les péripéties se terminent, que le « devenir » des personnages se réalise pleinement. En fait, sans cet automatisme, sans cette révélation surréelle, la quête n'aurait pu aboutir. La distraction intervient donc tout autant au niveau de la structure du récit (car le roman ne se construit qu'au hasard des analogies lexicales faites par Paganel suivant un triptyque qui lie les trois parties du roman au trois interprétations du cryptogramme) qu'à l'interne comme clef du destin du personnage soumis à cette expression libérée de l'inconscient. C'est une « distraction […] providentielle »

[25] comme le dit Glenarvan, et qui élimine tout à la fois la linéarité du récit et les intrigues du romanesque, puisqu'elle surprend aussi bien le lecteur que les personnages, et même le narrateur ! Ce roman d'aventures et d'énigmes possède un système narratif qui, tout en endossant et abandonnant tour à tour l'omniscience, déploie ce qu'on pourrait appeler des indéterminations exceptionnellement vastes. Tout est en devenir, donc vague et incertain. Le passage recèle même d'autres expressions confondantes, puisque Glenarvan demande à Paganel « par quelle étrange association d'idées, par quelle surnaturelle aberration d'esprit » a-t-il écrit ce qu'il a écrit. Nous ne sommes pas loin, d'ailleurs, avec « surnaturelle », du lexique employé par Breton dans le *Manifeste* ; [26] quoi de plus normal que le « surnaturel » dans un voyage qui est « extraordinaire » ?

La folie, ou tout du moins la distraction, est le chiffre du cryptogramme, puisque le géographe avoue qu'il « [est] un insensé, un fou, un être incorrigible, et qu'[il mourra] dans la peau du plus fameux distrait ». [27] Une différence est faite par Verne entre le hasard et la distraction : si les personnages pensent d'abord que c'est par hasard que le *Duncan* se retrouve là où ils sont, ils changent d'avis dès qu'ils apprennent la raison de sa présence sur les côtés de la Nouvelle-Zélande ; en effet, c'est l'imagination de Paganel qui a décidé du sort commun ; la survie n'a pas cette fois dépendu de la bonne volonté divine mais s'agence grâce à cette fertilité distraite du géographe. Enfin, l'imagination possède bien ici un rôle d'ordonnatrice de l'existence.

Les surréalistes menèrent des essais de voyages automatiques — dont ils choisissaient le point de départ au hasard, le pointant sur une carte — censés leur permettre d'atteindre le point sublime. En effet, en 1924, le groupe surréaliste décida de s'essayer à un voyage « pour voir » en Sologne. Pointant le lieu de départ au *hasard* sur une carte, ils espéraient découvrir le fonctionnement réel de la pensée (et le point sublime par l'exploration de l'espace géographique). Après l'échec de cet essai, il semble que les surréalistes ont reporté sur l'art et sur le voyage intérieur la tâche de découvrir ce point si recherché. Pour Verne, ces aléas de mouvements et d'exploration sont à réaliser à l'intérieur du texte : le monde comme un roman est comparable à une « pelote de laine » que l'on défile ligne après ligne pour en atteindre le centre, ou tout du moins un point *haut en sens*.

La distraction et les écritures mécaniques chez Verne – 2. Demi sommeil et création littéraire : le journal d'Axel

Dans un autre ordre d'idée, l'explosion d'imaginaire d'Axel créée par l'examen à la lunette de l'espace qui l'entoure, dans *Voyage au centre de la Terre*, représente la dernière partie de son parcours initiatique. Contrairement à Paganel, qui subit sa distraction, Axel semble être l'initiateur de son écriture, sinon de ses automatismes psychiques. Consciente et désirée d'une certaine manière, la création littéraire d'Axel rend compte du narrateur intradiégétique et homodiégétique comme d'une entité s'imposant au monde. Chaque lecteur du *Voyage* a en mémoire ce passage grandiose de l'écriture vernienne. L'union de son esprit et du monde est consommée par l'expérience du mélange de son être avec les particules du Néant.

S'extrayant de son propre corps, Axel semble se fondre dans son environnement, de façon à découvrir son humanité propre par un jeu de miroirs ; toutefois, son voyage n'est pas consommé dans sa totalité, car il est sauvé *in extremis*, retenu physiquement par son oncle. L'unicité du moi peut même être remise en question ici. L'intérêt n'est d'ailleurs pas tant ce qui lui arrive que la manière dont l'expérience se passe et par quel médium elle se réalise – le texte lui-même. Plus encore, restant à moitié conscient lors du vol mystique, il décrit ses sentiments sous la dictée de son esprit mais sans la censure de la conscience. Celle-ci n'intervient pas dans le processus rédactionnel de la diégèse, mais laisse place à l'expression de la pensée parlée : « Je rêve tout éveillé, » [28] dit-il. Ce rêve lui permet presque de connaître son origine, par l'évocation « géologique » intrinsèque au lieu qui l'entoure : Axel, au travers de sa rêverie et de sa puissante imagination — ici réellement ordonnatrice de l'existence — remonte le temps. Il ne s'agit pas ici d'un simple rêve cosmogonique, comme on en trouve chez Nerval, avec *Aurélia*, [29] même si le chemin parcouru est proche.

A l'illusion visuelle du héros se superpose une transcendance temporelle, une analepse qui mène Axel à l'origine de la vie du monde. Progressivement, il va arriver au point où « les siècles s'écoulent comme des jours », et atteindra le moment où la Terre se forme. Le but géographique, point positif du centre de la Terre, se renverse en un point sublime [30] métaphysique, lui-même symbole d'un lieu de l'esprit humain. La révélation qui se fait pour Axel est d'un autre ordre, car elle n'implique pas la réalisation d'une cosmogonie, mais la découverte d'un sens propre à la vie de l'individu, par l'accomplissement d'une unité avec l'espace et le temps dans une dimension paradoxale.

> Au centre de cette nébuleuse, quatorze cent mille fois plus considérable que ce globe qu'elle va former un jour, je suis entraîné dans les espaces planétaires […]. Quel rêve ! Où m'emporte-t-il ? Ma main fiévreuse en jette sur le papier les étranges détails. J'ai tout oublié, et le professeur, et le guide, et le radeau ! Une hallucination s'est emparée de mon esprit…

L'état de demi sommeil permet au personnage, grâce à la dictée automatique de sa pensée, de se confondre avec le monde, de capter son propre destin grâce à cette interpénétration réciproque. En effet, cette mer Méditerranéenne représente symboliquement un point sublime. Le temps s'y trouve aboli, le haut et le bas se rassemblent également, l'homme devient le centre de la vie, il semble renouer avec les pouvoirs originels : le réel et l'imaginaire ne font plus qu'un. La prégnance de ce thème dans ce roman permet d'imaginer que cette association paradoxale n'est en rien un hasard, mais une réalisation poétique propre à Verne. Il peut être possible de voir dans les *Voyages extraordinaires* un essai de découverte du psychisme humain par l'exploration de la terre, apportant une dimension singulière aux romans d'aventures verniens. Les lignes qui forment la diégèse deviennent les catalyseurs par lesquels l'expérience de la lecture initie un voyage intérieur, alors que les personnages le vivent et l'expérimentent. Les *Voyages extraordinaires* ne sont pas à lire à la manière d'un guide scientifique et orographique de la surface et des profondeurs de la terre, mais sont à appréhender à l'image d'une cartographie psychique, dont les buts seraient d'aboutir au point sublime.

Le deuxième temps de l'écriture spontanée dans *Voyage au centre de la Terre* intervient à un moment extrêmement particulier de l'aventure qui est la tempête, symboliquement autre point sublime du roman. Axel, les sens troublés tout à la fois par les bruits et les lumières, confronté à la mer unie au ciel — l'horizon n'existe plus —, ne peut que coucher

automatiquement ses pensées et ses émotions sur le papier, d'une main fébrile. Il semble que ce soit par instinct qu'Axel reste capable de saisir ce qui lui arrive et de comprendre l'environnement dans lequel il se situe ; il relate par écrit ce qui lui arrive ; si le texte ne fait pas mention d'un état psychique particulier, on peut imaginer que c'est sous le coup d'une intense émotion — celle liée à l'exposition aux risques que comporte une tempête en mer — qu'Axel n'est pas toujours capable d'écrire. Il signale lui-même à l'approche de l'orage qu'il se « sen[t] particulièrement impressionné, » [31] et ses émotions, de même que la précipitation des événements et leur dangerosité font qu'Axel ne peut écrire sinon « machinalement ». [32] Au radeau qui flotte sur une mer bouillonnante font écho les questions qui surnagent à l'esprit du héros : « Où sommes-nous ? » [33] tout d'abord, puis « Où allons-nous ? où allons-nous ? » [34] martelée anxieusement ; l'incertitude du narrateur s'attache moins à l'aspect géographique qu'au futur des individus car cette inquiétante interrogation est celle qui guide en fait Axel, tout comme le patient surréaliste : de la jointure du haut et du bas résulte l'explosion d'un imaginaire déconcertant, et un mode d'écriture automatique devient seul à même de laisser affleurer la réponse : c'est le *désir* qui guide Axel. N'en est-il pas de même au tout début du roman, lorsqu'Axel et le professeur cherchent à déchiffrer le message codé ? En effet, l'expérience réalisée révèle le désir d'Axel : la « phrase quelconque » qu'il « jette » sur le papier n'est rien moins qu'une déclaration d'amour adressée à Graüben. [35] Il ne le fait pas autrement qu'inconsciemment, ou tout du moins sans le savoir, puisque c'est à son « étonnement » qu'il voit la phrase recomposée par le déchiffrage de son oncle. [36]

C'est dans cette même tempête que les clairs-obscurs jouent un rôle important. En effet, par miroitement ou par éclairs et par ombres s'affichent les mots d'Axel qui recouvrent une vérité éclatante :

> [Ici mes notes de voyage devinrent très incomplètes. Je n'ai plus retrouvé que quelques observations fugitives et prises machinalement pour ainsi dire. Mais dans leur obscurité même, elles sont empreintes de l'émotion qui me dominait, et mieux que ma mémoire elles me donnent le sentiment de notre situation.] [37]

D'une écriture machinale — et qu'est-ce qu'une écriture machinale sinon une écriture qui n'est pas régie par la conscience ? — surgissent des éléments que la mémoire elle-même ne peut saisir. L'imagination dans son plus vibrant mouvement garde intrinsèquement une valeur révélatrice et conduit à la résolution de la triple interrogation — « Où allons-nous ? » — posée en trois jours, et concernant en cela trois personnages. Quelques lignes pointillées viennent entrecouper le récit d'Axel et conduisent en fait, point par point, au but — la grève — où les héros peuvent enfin se reposer : le texte agit alors en tant que ligne conductrice, renouvelant la métaphore littéraire qui projette la diégèse comme étant l'aventure par excellence. D'ailleurs, une fois le point sublime traversé, l'atmosphère se calme, et « le ciel et la mer s'étaient apaisés d'un commun accord » [38] à l'instar de l'écriture qui retrouve, suivant les mots du narrateur, l'aspect qu'elle avait « comme devant » [39] et Axel retrouve même ses esprits. Cette écriture spontanée préfigure l'unité du monde et de l'homme ; en effet, le récit sans limite et sans censure actionne l'être profond d'Axel et lui donne à saisir la réponse à son triple questionnement. Celle-ci est initiatique, car elle conduit Axel vers la sortie, et son discours pourrait laisser croire qu'il devient fou ; en fait, le voyage extérieur – physique – qui est une visite de la Terre devient un voyage intérieur, de l'esprit. La perte de contrôle du narrateur est la représentation diégétique de l'essai d'exploration du psychisme humain : en traversant les artères de la Terre, on parvient ainsi à l'inconscient du monde et *de facto*, par

l'unité recouvrée, de l'homme. L'imagination n'est alors plus uniquement celle du narrateur, mais celle de l'auteur : la cartographie du monde suit le dessein de découvrir le fonctionnement de l'esprit humain ! Ce n'est plus la représentation intratextuelle de la diégèse (soit le *Journal de bord* pour *Voyage au centre de la Terre*) qui forme l'aventure du héros, mais bien le récit premier. D'une aventure extraordinaire l'on passe à une aventure du texte.

On pourrait donner un sens amoureux à cette expérience métaphysique d'Axel. De manière fréquente la découverte et le passage par un point sublime chez Verne se manifestent par une réflexion sentimentale : le désir que nous évoquions précédemment recouvre alors une profonde signification. Le vis-à-vis qu'offre le miroir du monde révèle l'attente primordiale et les inquiétudes latentes du personnage. Son désir n'est ici rien autre que de retrouver la surface, d'établir enfin un lien entre lui et sa promise, Graüben. En l'occurrence, cette thématique revient fréquemment dans les *Voyages extraordinaires,* comme dans *Le Rayon vert*, où le rai de lumière du soleil couchant surpris — et désiré par la jeune femme comme un passage obligé avant son mariage — par les deux héros permet de connaître les réelles inclinaisons amoureuses qui les habitent : le futur de l'individu scintille par les feux de l'amour, représentation du destin des personnages (les lieux emblématiques de cette métaphore de reconstruction sont placés sous le signe de la lumière). L'accession à un point précis du globe, qui serait alors métaphoriquement un lieu de l'esprit humain, au travers de l'écriture, permet la reconnaissance de son être, de sonder sa *propre* réalité.

Dans *Voyage au centre de la Terre*, l'élément romanesque et scriptural est prégnant et indélébile de la quête du savoir : si la fatalité semble s'acharner sur les héros, le Professeur prétend ne pas céder face aux éléments, ni même reculer d'une simple *ligne* :

> […] les éléments conspirent contre moi ! l'air, le feu et l'eau combinent leurs efforts pour s'opposer à mon passage ! Eh bien ! l'on saura ce que peut ma volonté. Je ne céderai pas, je ne reculerai pas d'une ligne, et nous verrons qui l'emportera de l'homme ou de la nature ! [40]

L'imagination toute puissante de l'homme qui désire percer les mystères du monde, et ce faisant les siens propres, s'examine à la *ligne près*. Qu'il y ait ici une expression proche de la littérature n'est pas anodin. Elle prend pour notre propos une valeur supérieure : proche de l'espace littéraire, elle est la mise en abîme de l'aventure poétique. Le repli est toutefois interdit, il faut avancer ligne après ligne dans le récit afin d'en découvrir sa finalité ; les héros décident de s'arc-bouter contre les mots et les font sauter à la dynamite pour en révéler les secrets intimes, de la même manière que l'on force les portes et les couloirs de la Terre. La linéarité du récit n'existe justement pas dans ces méandres intratextuels où, une fois de plus, c'est la *ligne* qui sert de guide. Et si celle-ci intervient à ce moment, c'est aussi elle qui donne l'impulsion première, grâce au hasard, à l'aventure. La découverte fortuite de la clef du cryptogramme (il est simplement à lire en miroir) du *Voyage au centre de la Terre* se fait par automatisme. Axel, « en proie à une hallucination » s'évente « machinalement : » [41] apparaît alors le texte parfaitement lisible du document.

Il est frappant qu'Axel, pendant sa rêverie première au bord de la mer Méditerranéenne, s'avance vers l'eau au point de s'y noyer mais est sauvé. Aurait-il fallu qu'Axel se noie pour que l'expérience initiatique se fasse entièrement ? Les *Aventures du Capitaine Hatteras* nous permettent peut-être d'y répondre : là, le point sublime est le pôle Nord, où Hatteras découvre un volcan et à l'intérieur duquel il veut se précipiter ; mais il est, lui aussi, sauvé au dernier

moment ce qui provoque sa folie, au contraire d'Axel qui reste sain d'esprit. L'accès à ces lieux emblématiques déclenche une sorte de perte de l'esprit, d'automatisme singulier. La différence entre les deux personnages est principalement l'écriture spontanée que pratique Axel pendant son rêve: exutoire, elle capte la surcharge émotionnelle et la libère, révélant son désir profond.

Jules Verne imaginait d'abord une fin catastrophique pour *Les Aventures du Capitaine Hatteras* dans laquelle le personnage éponyme se jetait dans le Volcan, mais on sait qu'il avait dû la changer sur la demande d'Hetzel : du coup, Hatteras devient fou, ce qui équivaut à une mort métaphorique (puisque selon les termes de Clawbonny, le médecin d'Hatteras, « sa raison est morte ») et sa folie devient l'indicateur que le point sublime est atteint. Le remaniement de la fin des *Aventures du capitaine Hatteras* est ainsi éclairé d'un jour nouveau. En fait, Hatteras serait presque ici victime d'une anhédonie [42] à la William James. [43] La fonction de la folie reste à être définie : serait-ce une marque de résolution de la quête du pôle Nord ? Nous serions en tous cas enclins à repousser l'idée qui verrait en la folie une sanction infligée à l'homme qui dépasse les limites fixées comme dans le cas de Prométhée. Au contraire, cette folie serait à considérer comme la continuation de l'expérience. Une fois rentré le capitaine Hatteras passe son temps à marcher en direction du Nord [44] alors même qu'il haranguait ses hommes en leur disant que « le salut était au Nord ».

Axel écrit et manque se noyer tandis qu'Hatteras devient fou : la spontanéité de la pensée qui se manifeste le plus simplement dans un point sublime (centre de la Terre pour l'un, pôle Nord pour l'autre) est la représentation latente d'un système diégétique ; la folie d'Hatteras est alors un moment évanescent de la capacité du héros à entrer en contact avec la pensée humaine réelle, et elle en devient même un présage « funeste » pour ses compagnons. Je ne peux m'empêcher de citer le passage tant il est poétique et éloquent :

> Hatteras le balançait d'une main. De l'autre, il montrait au zénith le pôle de la sphère céleste. Cependant, il semblait hésiter. Il cherchait encore le point mathématique où se réunissent tous les méridiens du globe, et sur lequel, dans son entêtement sublime, il voulait poser le pied. [45]

Le pôle devient bien alors un point sublime pour reprendre les termes de Jules Verne où tous les contraires se rassemblent, et où l'esprit veut séjourner. Relevons le champ lexical des extrêmes : « zénith », « pôle », « point mathématique », « réunissent tous les méridiens », « sublime » ; tout comme les lignes dessinées sur le globe par les méridiens, ces mots dirigent le lecteur vers le point sublime. La métaphore littéraire se fait jour, comme si souvent chez Verne : les lignes tracées sur le globe — méridiens, latitudes, lignes végétales ou humaines – servent à guider les personnages, le lecteur et même le narrateur vers l'union totale des opposés qu'est le point sublime. Ici, le pôle nord regroupe l'ensemble des lignes, créant un point sublime littéraire (puisqu'il n'apparaît que dans la diégèse) au travers d'un point géographique inatteignable ; ainsi, le récit surpasse la réalité en en permettant l'accès. Hatteras, au bord du pôle, montrant du nadir au zénith (centre du ciel, point d'acmé de la course du soleil dans le ciel) le pôle du soleil, dessine presque lui-même de sa main un trait reliant les pôles des différents astres, de haut en bas. *Idem* pour le *Voyage au centre de la terre* dont les galeries souterraines, je l'ai déjà dit, et les nombreux réseaux de couloirs peuvent être comparés à l'écriture qui tente d'atteindre la psyché humaine. Qui plus est, puisqu'il est fait mention ici de voies, le nom du héros transpire par paronomase sa propre volonté de voyager vers un but précis avec un « axe » - la route - et « elle » - Graüben, sa promise - (Axel). L'impossibilité d'accéder au point géographique nécessite sa réalisation

littéraire. L'homme se fait écrivain en traçant des traits sur l'ensemble du monde, traits qui convergent toujours vers un point sublime.

Conclusion

Deux exemples, deux expériences différentes mais qui atteignent le même apogée : le « point sublime ». Que ce soit grâce à la distraction de Paganel ou des écritures mécaniques d'Axel, la chape translucide qui recouvre le monde devient transparente et laisse entrevoir le destin des individus répondant ainsi à la question : « Où allons-nous ? » Et même si, comme pour les surréalistes, c'est *a posteriori* — d'une manière certaine, c'est à chaque fois le cas — que l'on comprend la signification du signe suscitée par une explosion d'imaginaire, les automatismes psychiques qui conduisent les personnages est à admettre comme l'assomption d'un niveau supérieur de conscience de l'homme qui lui permet d'anticiper ou d'illuminer sa vie par la création scripturale. Les formes d'expressions suscitées par la distraction ou un mécanisme automatique chez Verne sont à l'origine d'une poétisation du monde. Il s'avère nécessaire d'être soumis à certains moments à un automatisme psychique, comme Paganel ou Axel, pour saisir pleinement l'expérience de la vie. Jules Verne, dans les limites de l'exercice romanesque auquel il s'attelle, parvient à construire une réflexion liant automatisme psychique (sous les formes que nous connaissons maintenant, à savoir la distraction et les écritures mécaniques) et connaissance de soi et du monde ; Axel se surprenant lui-même à écrire qu'il aime Graüben parvient grâce à un usage mécanique de la pensée à découvrir quels sont ses sentiments réels de la même manière qu'il résout l'énigme du parchemin qui le conduira au final à épouser Graüben, tout comme Paganel atteint tout à la fois l'expression du destin de être propre et de celui de ses compagnons.

Etonnamment, l'espérance formée par André Breton de voir dans l'écriture automatique et dans toute forme d'automatisme psychique la possibilité d'atteindre le fonctionnement réel de la pensée par l'expression imaginaire poétique trouve un écho dans les *Voyages extraordinaires*, mais avec une différence notable : la finalité de sa réalisation dans ceux-ci propose un schème interprétatif de l'esprit humain qui ne peut être saisi que dans le cadre d'une « distraction » non désirée par la volonté personnelle. Au contraire des surréalistes, le sujet ne cherche pas à se placer dans un état qui lui permette d'atteindre son objectif mais se propose seulement de vivre au hasard des événements la révélation de son propre esprit.

Dans les deux cas présentés, le récit débute par la trouvaille d'un parchemin — dans le ventre d'un requin ou dans la boutique d'un juif — dont le déchiffrement se fait par distraction ou par un quelconque mouvement mécanique. Ces deux trouvailles sont l'expression du *désir* du personnage : célibataires au départ, Paganel et Axel se marient à la fin du récit ; les aventures de la distraction et des écritures mécaniques n'ont, semble-t-il, d'autres buts que de permettre aux personnages de découvrir leur destin et de le consommer. Le personnage vernien ne peut d'ailleurs saisir la raison de cette trouvaille qu'*a posteriori*, une fois toutes les épreuves passées : c'est Graüben qui s'écrie qu'Axel est un héros et n'a donc plus à la quitter, c'est Arabella qui d'abord montre ses sentiments à Paganel, dont le mariage est la « dernière distraction ». [46] Ainsi, l'homme devient capable de réaliser ce que les choses et le monde portent en eux ; l'imaginaire devient une assomption du réel et projette celui qui y est soumis dans son propre futur.

La prise en compte de cette « distraction surnaturelle » qui ouvre aux personnages l'accès à une dimension supérieur de la conscience humaine permet d'établir un réel intertexte ; qui plus est, si l'on considère que les voyages réalisés par ces explorateurs sont le reflet à la surface du globe d'un voyage intérieur à la recherche du « point sublime », alors ces brefs moments d'expérience surnaturelle que vivent Paganel et Axel sont les points de jonction entre le rêve et la réalité, portes ouvertes sur l'inconscient humain. Ce qui reste fondamental chez Jules Verne lors de ces démarches introspectives est que la question s'articule non pas autour de ce que le personnage représente pour le monde mais autour de ce que représente le monde pour le personnage : il est l'image de sa propre conscience et se teinte du X de l'inconnu, à savoir comprendre l'existence de l'homme. [47] Le voyage dans le monde, par un jeu savant de miroirs, est un voyage dans son propre esprit. Les romans des *Voyages extraordinaires* deviennent ainsi un milieu d'expérimentation — n'est-ce pas le propre du genre ? — où l'automatisme psychique peut être évalué et essayé sous différentes formes.

L'intertexte présent entre Verne et Breton pose la question de la philosophie vernienne. S'il est vrai qu'un faisceau logique de démarches narratives et intellectuelles forme, en filigrane, l'armature des *Voyages*, alors Verne n'est pas juste, et de loin, qu'un auteur de romans d'aventures. Enfin, si Breton désire que « l'imagination soit l'ordonnatrice de l'existence », Verne n'avoue-t-il pas avoir toujours eu le « goût pour les récits dans lesquels l'imagination se donne libre carrière ? ». [48] Et quoi de plus imaginatif que le récit mécanique — automatique — de la traversée d'une mer tempétueuse ?

NOTES

1. Mourier-Casile, Pascaline, *André Breton ou la Mère Moire*, Paris : PUF, 1985.
2. Mourier-Casile, Pascaline, *André Breton, explorateur de la mère-moire*, Paris : PUF, 1986.
3. *Ibidem*, p. 133.
4. *Ibid.*, 4e de couverture et p. 133.
5. Ibidem, p. 137 « Blanc taché de noir, le plumage du harfang des *Indes noires* ; blanches effilées de noir, les ailes du fou de Bassan d'*Arcane 17* : l'oiseau de nuit et l'oiseau de mer ont un point commun. »
6. *Ibid.*, p.12 : « A vrai dire, le problème ici n'est pas de recherche des sources […]. Si source il y a, ce sont celles de l'imaginaire, plus que celles qui ont […] présidé […] à la réécriture intertextuelle. »
7. I*bid.*, p. 228.
8. Hale, Terry et Hugill, Andrew, *The Science is Fiction : Jules Verne, Raymond Roussel, and Surrealism* in Smith, Edmund, *Verne, Narratives of Modernity*, Liverpool : Liverpool University Press, 2000, pp. 123-141.
9. Ce terme est défini par Breton dans le *Manifeste* comme étant *une sorte de réalité absolue* : « Je crois à la résolution future de ces deux états, en apparence si contradictoires, que sont le rêve et la réalité, en une sorte de réalité absolue, de *surréalité*, si l'on peut ainsi dire. » Breton, André, *Manifeste du surréalisme*, Paris : Gallimard, coll. de la Pléiade, t. I, 1999, p. 319. Pour la traduction anglaise, voir Seaver, Richard and Lane, Helen R., *Manifestoes of Surrealism by André Breton*, Ann Arbor : University Of Michigan Press, 1972. La définition de ce terme n'est rien que moins clair. En un sens, la surréalité serait l'ensemble des objets corrélatifs des actes psychiques

appartenant à la zone « interdite » : il n'y a pas, par exemple, de désir tout court, mais seulement désir de quelque chose. Le siège de la surréalité serait donc l'esprit du sujet imaginant.

10. Breton, André, *Manifeste du surréalisme*, p. 316.

11. Breton, André, *Manifeste du surréalisme,* p. 328.

12. Janet, Pierre, *L'automatisme psychologique*, 1889. Jean Starobinski dans *La Relation critique* (éd. Gallimard, 1970, pp. 325-326.) présente Janet comme ayant fortement influencé Breton.

13. Breton, André, *Le Message automatique* in *Point du Jour*, Paris : Gallimard, Œuvres complètes, t. II, pp. 385-386, « C'est dire que pour nous la question de l'extériorité de – disons pour simplifier – la « voix » ne pouvait se poser. »

14. Cf. Breton, André, *Les Champs magnétiques*, Paris : éd. Gallimard, coll. de la Pléiade, Œuvres complètes t. I, 1988.

15. L'attitude réaliste dans l'existence, « hostile à tout essor intellectuel et moral (…), faite de médiocrité, de haine et de plate suffisance », est figurée dans le *Manifeste du surréalisme* par Anatole France, p. 313.

16. Breton, André, *Manifeste du surréalisme*, p. 328.

17. *Ibid.* p. 326. C'est Breton qui souligne. Rappelons aussi que pour Breton, la pensée n'est pas autre chose que la langue elle-même : « Il m'avait paru, […] que la vitesse de la pensée n'est pas supérieure à celle de la parole, et qu'elle ne défie pas forcément la langue, ni même la plume qui court. » op.cit, p. 326.

18. Voir par exemple « Eclipses » in *Les Champs magnétiques* et ses variantes (Paris : éd. Gallimard, Bibliothèque de la Pléiade, Œuvres complètes t. I, 1988, p. 1153 ssq.).

19. Verne, Jules, *Les Enfants du capitaine Grant* et *Aventures de trois Russes et de trois Anglais*.

20. Janet, Pierre, *L'automatisme psychologique*, 1889.

21. Verne, Jules, *Les Enfants du capitaine Grant,* Paris : Hachette, *Les Intégrales Jules Verne*, 1977, p. 41.

22. Verne, Jules, *ibid.*, p. 483. Verne n'était pas anglophone, même si cela n'exclut pas que ce choix fut réfléchi. Serait-ce, au contraire, un de ces hasards dont les surréalistes sont friands ?

23. En 1798, le 7 octobre, deux navires commandés par George Brass et Matthew Flinders, le *Norfolk* et le *Nautilus*, avaient pour mission de reconnaître les côtes de la Tasmanie et de vérifier si celle-ci était rattachée à l'Australie. Ils découvrirent et nommèrent la baie de Twofold. Le nom du deuxième navire y serait-il pour quelque chose ?

24. Verne, Jules, *Les Enfants du Capitaine Grant*, Paris : Hachette, 1994, p. 333. Nous soulignons « par hasard ».

25. Verne, Jules, *Les Enfants du Capitaine Grant*, Paris : Hachette, 1994, p. 471. « Je reconnais que votre distraction a été providentielle. »

26 Breton, André, *Manifeste du surréalisme*, p. 327 : « le supernaturalisme employé par Nerval ».

27. *Ibid*. p. 471.

28. Verne, Jules, *Voyage au centre de la Terre*, Paris : Hachette, 1926, p. 247.

29. Nerval, Gérard de, *Aurélia* in Œuvres complètes, éd. Jean Guillaume et Claude Pichois, Paris, Gallimard, «Bibliothèque de la Pléiade», t. 3, 1993. I, 5 ; p. 706 ssq. Voir aussi : Jeanneret, Michel, *Vers l'orient. Sur la mobilité des signes dans Aurélia*, in : *Clartés d'Orient. Nerval ailleurs.*, Paris : Ed. Laurence Teper, 2004, pp. 15-29. Nerval reste, pour Breton, celui qui « posséda à merveille *l'esprit* dont nous nous réclamons » in Breton, André, *Manifeste du surréalisme*, p.327.

30. Butor, Michel, *Le point suprême et l'âge d'or à travers quelques œuvres de Jules Verne* in *Arts et*

Lettres, n° 2, 1949, pp. 3-31.

31. Verne, Jules, *Voyage au centre de la Terre*, p. 267.
32. *Ibid.*, p. 272.
33. *Ibid.*, p. 273.
34. *Ibid.*, p.273.
35. *Ibid.*, p. 23 ; « Axel, jette une phrase quelconque sur ce bout de papier […] » et p. 24, « Je t'aime bien, ma petite Graüben ».
36. *Ibid.*, p. 24 ; « Et mon oncle, à son grand étonnement, et surtout au mieux, lut : […]. »
37. *Ibid.,* p. 272, Paris : Hachette, 1926. C'est nous qui soulignons.
38. *Ibid.*, p. 277.
39. *Ibid.*, p. 276.
40. *Ibid.*, p. 285. C'est nous qui soulignons.
41. Verne, Jules, *Voyage au centre de la Terre*, Paris : Hachette, 1926, pp. 28-29. « J'étais en proie à une sorte d'hallucination ; j'étouffais ; il me fallait de l'air. Machinalement, je m'éventai avec la feuille de papier […]. »
42. L'anhédonie est un symptôme médical dans certaines pathologies psychiatriques qui est caractérisée par l'incapacité du sujet à ressentir des émotions positives lors de situations de vie pourtant considérées comme plaisantes.
43. Psychologue et philosophe américaine. Sa conception de l'expérience des émotions passe par l'idée que le sentiment des changements corporels immédiatement consécutifs à la perception d'un fait excitant est constitutif de l'émotion. James, William, *La théorie de l'émotion*, trad. par Georges Dumas, Paris : L'Harmattan, 2006.
44. Verne, Jules, *Aventures du capitaine Hatteras*, Paris : Folio, p. 655 : « Le capitaine Hatteras marchait invariablement vers le Nord. »
45. Verne, Jules, *Aventures du capitaine Hatteras*, Paris : Folio, p. 636.
46. Verne, Jules, *Les Enfants du capitaine Grant*, p. 501. Les mots sont entre guillemets dans le texte original.
47. Verne, Jules, *Clovis Dardentor*, Paris : Hachette, coll. Les Intégrales, 1992, ch. II.
48. Verne, Jules, *Monna Lisa* suivi de *Souvenirs d'enfance et de jeunesse.* Paris, L'Herne (coll. "Confidences"), 1995, 112 p.

Nicolas Saucy (nicolas.saucy@edu.ge.ch) est professeur de littérature française au Collège et Ecole de commerce Mme de Staël à Genève (Suisse). Il a réalisé son travail de Master à l'Université de Genève sur Jules Verne et le surréalisme, dans l'idée de présenter le roman vernien comme clef du récit surréalisme. Il travaille en ce moment sur une thèse de doctorat à l'Université de Genève portant sur les relations entre Jules Verne et André Breton ainsi que tout le mouvement surréaliste, promettant ainsi un nouvel éclairage des deux auteurs.


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Winter Lights: Disaster, Interpretation, and Jules Verne's Polar Novels

Marie-Hélène Huet

Abstract

"Winter Lights: Disaster, Interpretation, and Jules Verne's Polar Novels" examines the relationship between historical events and their interpretation as fiction. The article does not seek to identify sources but rather to examine how Verne reflects well-known events through the prism of artistic creation. In The Adventures of Captain Hatteras and The Sphinx of the Icefields, the transformation of polar explorations and disasters is illustrated by, among other things, mythological images and the optical figures of the parhelion and the paraselene.

Résumé

"Winter Lights; Disaster, Interpretation, and Jules Verne Polar Novels," explore les liens entre histoire, interprétation et fiction. Il ne s'agit pas ici d'identifier des sources mais d'examiner la façon dont l'écriture vernienne reflète et transforme les récits d'explorations et de désastres à travers des images comparables aux multiples réfractions évoquées dans *Les Voyages et aventures du capitaine Hatteras* et *Le Sphinx des glaces* par des emprunts mythologiques et l'évocation des parhélies ou des parasélènes.

The Fate of Sir John Franklin

During his 1841 expedition to the Antarctic, James Clark Ross named two volcanic mountains after the ships he commanded, the HMS *Terror* and the HMS *Erebus*. The names of the ships may have seemed particularly appropriate for the volcanoes, one extinct, but the other actively spewing red fire and fumes on the desolate landscape. The awe-inspiring names of Ross' vessels were not unusual: the first *Terror* had been launched in 1696 and captured and destroyed by the French in 1704. The *Erebus* was the second war vessel to bear the name of the son of Chaos, or Khaos, the foremost of the primordial Greek deities. In Hesiod's *Theogonia*, Erebus represents darkness and is later changed into the river that runs through the kingdom of the dead.

Transformed from warships into expedition vessels, the *Terror* and the *Erebus* had a glorious and dramatic career. During Ross's Antarctic voyage, the *Erebus* collided with the *Terror* in the course of a particularly difficult navigation among icebergs. But the ships came back to a triumphant homecoming in 1843. Ross, who could claim unparalleled knowledge of both Polar Regions—he had discovered the North Magnetic Pole on a previous expedition with his uncle Sir John Ross—was knighted and received the French Legion of Honor. But the voyages of the *Terror* and the *Erebus* were not over: the ships were fitted with steam engines and propellers, their keels reinforced with thick metal plates, and they sailed again on 19 May 1845 on an expedition in search of the Northwest Passage under the command of Sir John Franklin. They carried enough provisions for a three-year expedition and 138 crew members, five of whom were later sent back to England. The *Terror* and the *Erebus* were last spotted by whalers on 26 July 1845 at the entrance of Lancaster Sound in the Bay of Baffin, never to be seen again: Sir John Franklin's fate, that of his lost crew, and the two famed ships that had carried them so far north launched what must surely be the greatest number of rescue operations ever recorded in naval history. The British Admiralty offered a 20,000 pound reward for finding the vanished men; American expeditions, financed by a rich sea merchant named Cornelius Grinnell, sailed in 1850, and again in 1853. At one point, Elisha Kent Kane, a medical officer on board the American ship *Advance* recorded a gathering of eight vessels in the Bay of Baffin, all in pursuit of the same quest, all navigating, like the *Advance*, "surrounded by the imminent hazards of sudden consolidation of the open sea. . . [a]ll minor perils, nips, bumps, and sunken bergs. . . discarded." [1]

Figure 1 - "The *Terror* and the *Erebus* in the Antarctic," by John Wilson Carmichael, National Maritime Museum, Greenwich, UK.

The first remains of the expeditions were found in 1850: three graves, traces of fire and sledge tracks on the ice. More upsetting news reached England in 1854, when John Rae reported hearing from Inuit hunters that the ships had been trapped in ice, and that men had died from cold and starvation, some resorting to cannibalism. "At a later date in the same Season," he wrote in his report, "but previous to the disruption of the ice, the corpses of some

thirty persons and some Graves were discovered on the Continent, and five dead bodies on an Island near it. . .from the mutilated state of many of the bodies and the contents of the kettles, it is evident to us that our wretched Countrymen had been driven to the last dread alternative—cannibalism—as a means of prolonging existence." [2]

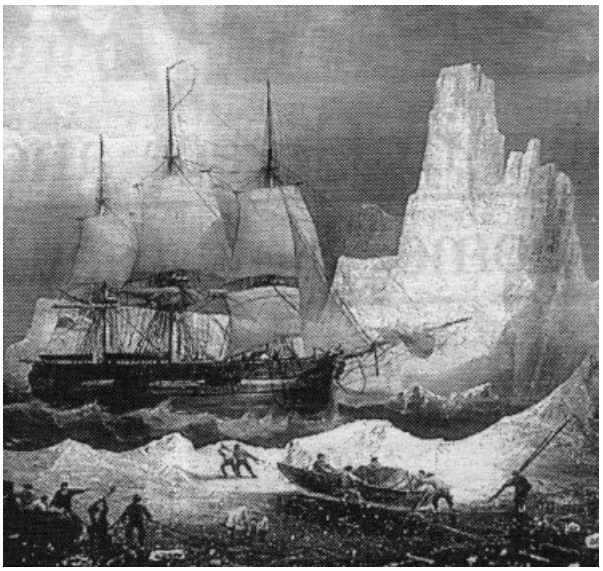


Figure 2 - "The HMS Terror in ice," National Maritime Museum, Greenwich, UK.

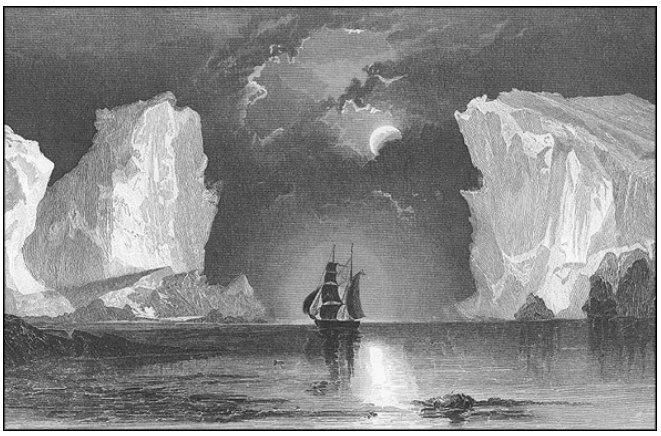


Figure 3 - "The *Advance* near Kosoak," from Elisha Kent Kane, *Arctic Explorations, The Second Grinnell Expedition in Search of Sir John Franklin* (Philadelphia: Childs and Peterson, 1856), engraving by Van Ingen and Snyder after a sketch by Kane. Photo Frank Ward.

Figure 4 - Graves on Beechey Island, from Elisha Kent Kane, *The US Grinnell Expedition in Search of Sir John Franklin* (New York: Harper, 1854), engraving by Hamilton after a sketch by Kane. Photo Frank Ward.

Figure 5 - Graves on Beechey Island. Photograph by, and courtesy of John Delaney.

The report of cannibalism so outraged British society that Rae was discredited. In “The Lost Artic Voyagers,” published in December 1854 by *Household Words*, Charles Dickens wrote a passionate refutation of Rae’s methods and conclusions:

> There is one passage in [Dr. Rae’s] melancholy report, some examinations into the probabilities and improbabilities of which, we hope will tend to the consolation of those who take the nearest and dearest interest in the fate of that unfortunate expedition, by leading to the conclusion that there is no reason whatever to believe, that any of its members prolonged their existence by the dreadful expedient of eating the bodies of their dead companions. Quite apart from the very loose and unreliable nature of the Esquimaux representations (on which it would be necessary to receive with

> great caution, even the commonest and most natural occurrence), we believe we shall show, that it is in the highest degree improbable that such men as the officers and crews of the two lost ships would or could, in any extremity of hunger, alleviate the pains of starvation by this horrible means. [3]

Undaunted by Rae's report, Franklin's widow appealed to the public, raised funds, and won renewed support from the Admiralty. No less than twenty-five additional expeditions were sent in search of the missing Franklin. In 1859, Leopold M'Clintock, commanding officer of the *Fox*, reported the most concrete evidence of the explorer's fate: a "sad and touching relic" with a "double story:" a document found on a cairn on the coast of King William Island. This "relic" and the account given by M'Clintock of its finding deserve special attention:

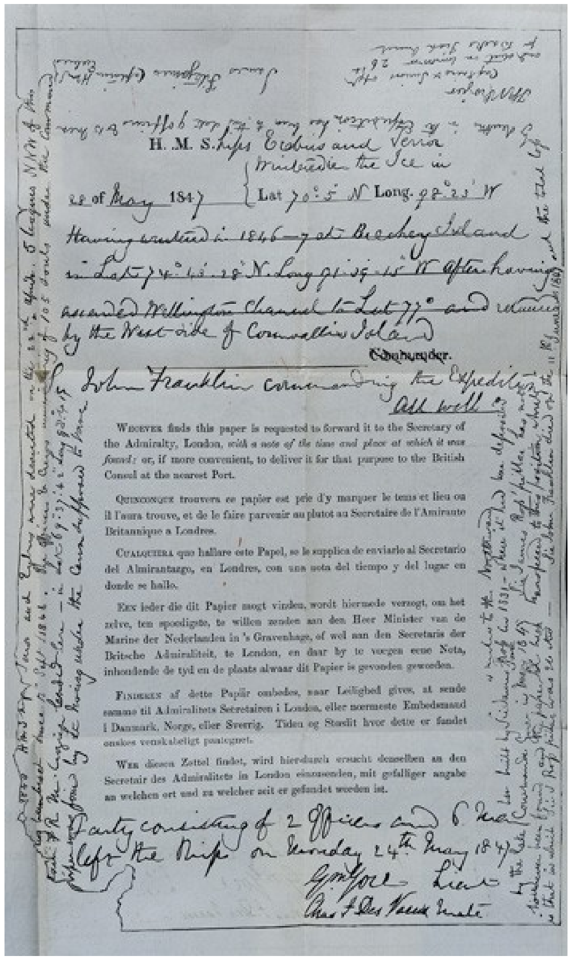
> The record paper was one of the printed forms usually supplied to discovery ships for the purpose of being enclosed in bottles and thrown overboard at sea, in order to ascertain the set of the currents, blanks being left for the date and position. . .Upon it was written apparently by Lieutenant Gore, as follows: '28 of May 1847. H.M. ships 'Erebus' and 'Terror' wintered in the ice in lat. 70° 05'N.; 98° 23'W. Having wintered in 1846-7 at Beechey Island, in lat. 74° 43' 28''N.; long. 91° 39' 15''W.., after having ascended Wellington Channel to lat. 77°, and returned to the west side of Cornwalls Island. Sir John Franklin commanding the expedition. All well. Party consisting of 2 officers and 6 men left the ships on Monday 24th May 1847. Gm. GORE, Lieut. Chas. F. DES VOEUS, Mate." [4]

Here, M'Clintock inserts a long development to celebrate Franklin's accomplishments up to that date: "Seldom has such an amount of success been accorded to an Arctic navigator in a single season" (220). "But, alas!" M'Clintock adds a little later,

> round the margin of the paper upon which the Lieutenant Gore in 1847 wrote those words of hope and promise, another hand had subsequently written the following words: —'April 25, 1848.—H. M. ships 'Terror' and 'Erebus' were deserted on the 22d April, 5 leagues N. N. W. of this, having been beset since 12 September 1846. The officers and crews, consisting of 105 souls, under the command of Captain F. R. M. Crozier, landed here in lat. 69° 37' 42'' N., long. 98° 41' W. Sir John Franklin died on the 11 June 1847; and the total loss by deaths in the expedition has been to this date 9 officers and 15 men. (Signed) F.R.M. Crozier, Captain and Senior Officer, James Fitzjames, Captain H.M.S. Erebus. (221)

A reproduction of the message, with the news of Franklin's death scribbled along the margins, shows the dramatic passage of time on the restricted space of the sheet. To some extent the small piece of paper records the passing of arctic time and the severity of the winter months perhaps more dramatically and more effectively than any calendar or journal. M'Clintock's text, by separating his account of the two messages that had been inscribed a year apart, explicitly tries to convey to the reader the drama and enigma of the year that had been marked but not told: Franklin's career, a last eulogy before the news of his death and that of one of the original signatories of the document:

> There is some additional marginal information relative to the transfer of the document to its present position. . .from a spot four miles to the northward, near Point Victory, where it had been originally deposited by the *late* Commander Gore. This little word *late* shows us that he, too, within the twelve-month, had passed away. In the short space of twelve months how mournful had become the history of Franklin's expedition; how changed from the cheerful 'all well!' of Graham Gore! . . ."A sad tale was never told in fewer words." (222)



H. M. Ships Erebus and Terror
Wintered in the Ice in
28 of May 1847 Lat 70°5' N Long. 98°23' W
Having wintered in 1846–7 at Beechey Island
in Lat 74°43'28" N. Long 91°39'15" W After having
ascended Wellington Channel to Lat 77° and returned
by the West side of Cornwallis Island
Commander.
Sir John Franklin commanding the Expedition
All well

WHOEVER finds this paper is requested to forward it to the Secretary of the Admiralty, London, *with a note of the time and place at which it was found*: or, if more convenient, to deliver it for that purpose to the British Consul at the nearest Port.

QUINCONQUE trouvera ce papier est prié d'y marquer le tems et lieu ou il l'aura trouvé, et de le faire parvenir au plutot au Secretaire de l'Amirauté Britannique à Londres.

CUALQUIERA que hallare este Papel, se le suplica de enviarlo al Secretario del Almirantazgo, en Londres, con una nota del tiempo y del lugar en donde se halló.

EEN ieder die dit Papier mogt vinden, wordt hiermede verzogt, om het zelve, ten spoedigste, te willen zenden aan den Heer Minister van de Marine der Nederlanden in 's Gravenhage, of wel aan den Secretaris der Britsche Admiraliteit, te London, en daar by te voegen eene Nota, inhoudende de tyd en de plaats alwaar dit Papier is gevonden geworden.

FINDEREN af dette Papiir ombedes, naar Leilighed gives, at sende samme til Admiralitets Secretairen i London, eller nærmeste Embedsmand i Danmark, Norge, eller Sverrig. Tiden og Stædit hvor dette er fundet önskes venskabeligt paategnet.

WER diesen Zettel findet, wird hier-durch ersucht denselben an den Secretair des Admiralitets in London einzusenden, mit gefälliger angabe an welchen ort und zu welcher zeit er gefundet worden ist.

Party consisting of 2 Officers and 6 Men
left the Ships on Monday 24th May 1847
Gm. Gore Lieut.
Chas. F. Des Voeux Mate

Figure 6 - Document, from Captain M'Clintock, *The Fate of Sir John Franklin* (Philadelphia: Lloyd, 1860), photo Frank Ward.

M'Clintock's report did not put an end to the search for Franklin's party, however. But in spite of the numerous expeditions launched in the hope of recovering additional remains of the lost explorers and the two glorious ships, remarkably few artifacts have been found, most of them gathered at the London Maritime Museum under the name of "Franklin's relics."

The story of the discovery of the Northwest Passage itself may not be as rich and dramatic as the story of the search for Franklin. Or rather, the two stories became so intertwined that by the end of the nineteenth century the expression going to "search for Franklin" commonly meant going to search for the Northwest Passage, with perhaps an important modification: Franklin was hopelessly lost, but there was hope the mythical passage would be found and sailed. At any rate, the Franklin expedition, the *Terror* and the *Erebus*, could not be forgotten, and together raised a series of recurring questions that would later inform Jules Verne's novels about the nature of exploration and search, the role of interpretation, and the dread of cannibalism.

Rae had faithfully reported the Esquimaux's account of the disastrous end of Franklin's party, interpreting the details of the scene described to him as evidence of cannibalism. Dickens' indignant response constitutes the most serious argument about the necessity and

perils of interpretation. He faults the unreliable nature of the Esquimaux representations, the imperfect understanding of Rae's interpreter, and the specificities of individual languages which make it difficult to find perfect equivalence among them. Yet, reluctantly drawn to the scene, Dickens himself attempts to give Rae's account another interpretation: "Had there been no bears thereabout; to mutilate those bodies; no wolves, no foxes? Most probably the scurvy . . . would of itself cause dreadful disfigurement—woeful mutilation—but, more than that, it would not only annihilate the desire to eat (especially to eat the flesh of any kind), but would annihilate the power." Finally Dickens suggests that the Esquimaux themselves probably killed Franklin's men. "There are pious persons who, in their practice, with strange inconsistency, claim for every child born to civilization all innate depravity, and for every savage born to the woods and wilds an innate virtue. We believe every savage to be in his heart covetous, treacherous, and cruel." [5] Beyond the obvious ideological premises of Dickens' solution, his theory offered a double advantage. It absolved Franklin's men of the most repulsive crime, the universal taboo of cannibalism and imagined them dying valiantly in combat: sick and weakened to be sure, yet morally undefeated.

But the matter could not easily be put to rest, and, the better to prove the innocence of Franklin's party, the second part of "The Lost Arctic Voyagers" reviews the most famous cases of cannibalism, giving the story of the *Medusa* pride of place. Dickens picks up where the *Edinburgh Review* had left off: Unlike the *Terror* and the *Erebus,* the *Medusa* had been placed under the orders of an undeserving captain, "no discipline worthy of the name had been observed aboard the *Medusa* from the minute of her weighing anchor," the crew consisted of "the scum of all countries," "[a]nd is it with the scourged and branded sweepings of the galleys of France, in their debased condition of eight-and-thirty years ago, that we shall compare the flower of the trained adventurous spirit of the English Navy, raised by Parry, Franklin, Richardson, and Back?"

The last paragraph of Dickens's textual analysis also reveals the ultimate purpose of the interpretation of disastrous events as "*Mémoires d'outre-tombe*" and is worth quoting at some length:

> In weighing the probabilities and the improbabilities of the 'last resource,' the foremost question is—not the nature of the extremity; but, the nature of men . . . Utilitarianism will protest 'they are dead; why care about this?' Our reply shall be, 'Because they ARE dead, therefore we care about this . . . Because they lie scattered on those wastes of snow, and are as defenseless against the remembrance of coming generations, as against the elements into which they are resolving, and the winter winds that alone can waft them home, now, impalpable air; therefore cherish them gently, even in the breast of children. Therefore, teach no one to shudder without reason, at the history of their end. Therefore, confide with their own firmness, in their fortitude, their lofty sense of duty, their courage, and their religion." [6]

For all practical purposes, Dickens had given the scattered and mutilated bodies their proper burials, a textual headstone engraved with their glorious stories. The text also throws light on the specific relationship between disaster and interpretation, on the repeated desire for the disaster to be interpreted, to be given the meaning it eludes. To paraphrase Jean-Luc Nancy, interpretation begins after disaster. [7] Not just because the disaster strikes a terror that must be repudiated, a dread that must be overcome by analysis and reasoning; and not just because Erebus, the son of Chaos presides over the enigma of death as return to chaos. Interpretation may be a form of exorcism, to be sure, but independently of the assuaging function it may assume, it also draws from the disaster its resources and its paradoxical

methodology. In this sense, one can apply to the interpretation born from disaster some of the ideas Walter Benjamin applies to translation: “[A]ny translation which intends to perform a transmitting function cannot transmit anything but information—hence, something inessential. This is the hallmark of bad translation. But do we not generally regard as the essential substance of a literary work what it contains in addition to information—as even a poor translator will admit—the unfathomable, the mysterious, the ‘poetic’ something that a translator can reproduce only if he is also a poet?” [8]

For Dickens, Rae acted as a bad translator, not only because his interpreter could not perfectly understand the language of the Inuit, but because the man limited his interpretation to the transmission of information, when what was needed was a deeper comprehension of the mystery of Franklin’s disappearance. What Dickens also makes visible is the desire to endow disaster with its own unfathomable depth the better to decipher it poetically, though without the slightest illusion that the deciphering provided would be the solution to the disaster’s chaotic enigma. There can never be a last word on the understanding of disaster, only the construction of multiple layers of interpretation that together provide an insight into the collective imagination. “By virtue of its translability the original is closely connected with translation,” notes Benjamin, “in fact, this connection is all the closer since it is no longer of importance to the original.” (71) The rhetorical putting to rest of the corpses discovered by the Inuits, of the rumors spread by John Rae, failed however to put the dead to rest; it only signaled that the multiple accounts generated by additional searches and the findings of additional “relics” would yield in equal parts incidental information and the fascinating fragments of an unsolved mystery.

Fictions of interpretation

The passionate interest generated by the loss of the ships *Terror* and *Erebus* and the vanishing of their captains and crews are no doubt responsible for the writing and success of Jules Verne's polar novels, more particularly the 1866 *The Adventures of Captain Hatteras* (*Voyages et aventures du capitaine Hatteras*) and the 1897 *Sphinx of the Icefields* (*Le Sphinx des glaces*). The novels are in great part inspired by the published accounts of the various searches for Franklin, and further demonstrate the relationship between disaster, exploration, and the mythical fascination of polar conquest in the second half of the nineteenth century. [9]

The Adventures of Captain Hatteras was published in two parts, entitled *The English at the North Pole*, and *The Desert of Ice*. [10] The first novel takes place in 1860 and starts with the announced departure of the *Forward* to a mysterious destination, which is later disclosed as the North Pole. Chapter 17 is entirely dedicated to the story of Sir John Franklin, describing King William Island, where some remains of the Franklin expedition were found, as “the scene for the worst tragedy of modern times! A few miles west the *Terror* and the *Erebus* had been lost for ever!” [11] As the small group of explorers proceeds slowly towards what Kane had called “the Polar limit of all northerness,” [12] they experience all the rigors of the arctic winter, and the novel borrows extensively from Kane and McCormick’s narratives, which had been recently translated into French. [13] From the discussion of tropical driftwood carried by counter currents to the coast of Greenland, to fights with polar bears, fox hunting, the phenomenon of red snow, and the description of theatrical activities during the long arctic

night, Verne clearly seems intent on integrating the most precise details of recent explorations in his fiction.

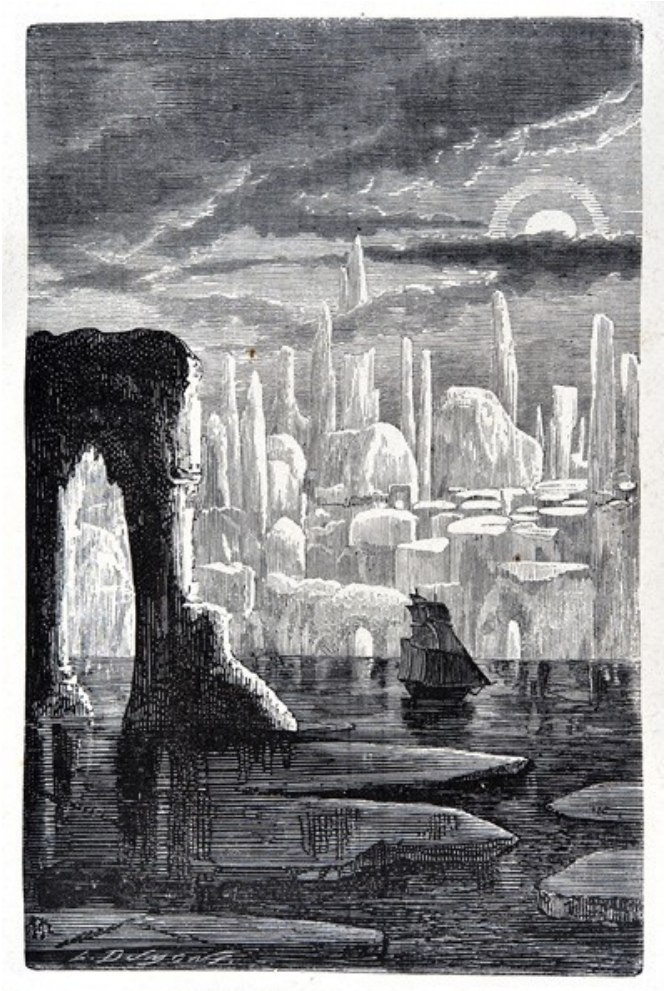


Figure 7 - The Forward with sun halo. From Hatteras, drawing by Riou. Photo Frank Ward.

After multiple adventures that may seem improbable only to those readers who have not read narratives of polar expeditions, Hatteras and his friends approach the polar region, on board a small boat (the *Forward* had been previously destroyed in an explosion):

> At that moment the storm unleashed its power and there came a torrent without name of the aerial waves; the boat lifted out of the water, and began to speed at vertiginous speed; its foresail was torn away, and fluttered off into the darkness like a great white bird; a circular hole, a new Maelstrom, formed in the swirl of the waves. The navigators, enlaced in this whirlpool, moved so fast that the lines of the water seemed motionless, in spite of their incalculable speed. . . .Then they were overcome by dizziness. Within them was the ineffable feeling of the abyss! [14]

They are ejected from the whirling abyss, to discover, in an episode familiar to all readers of Verne, that a volcano occupies the precise geographical location of the pole.

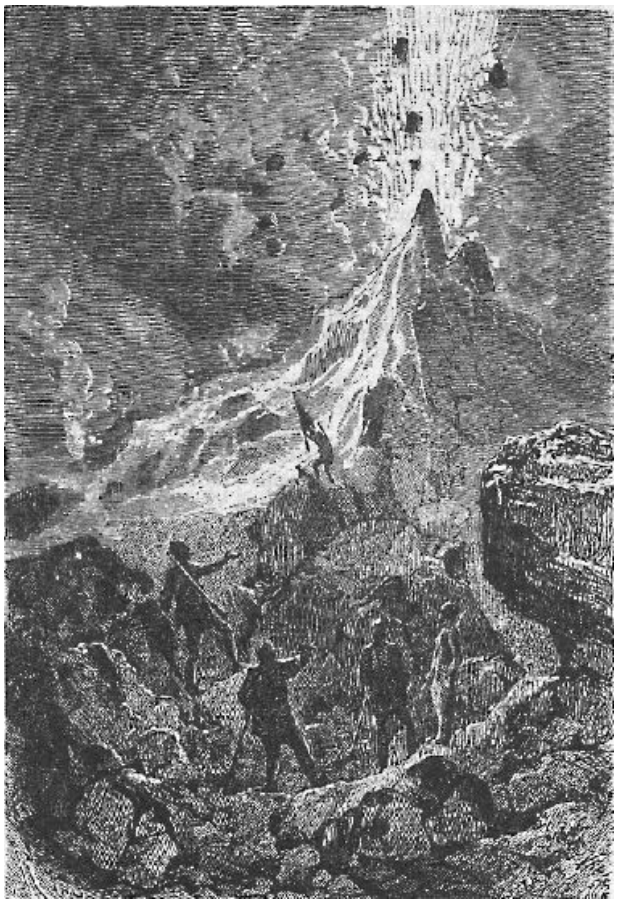


Figure 8 - The Volcano at the North Pole, from *Hatteras*, drawing by Riou. Photo Franck Ward.

> The mountain, in full eruption, was vomiting a mass of burning boulders and labs of glowing rocks ; it seemed to be repeatedly trembling, like a giant's breathing ; the ejected matter rose to a great height in the air amidst jets of intense flames, and lava flows wound down its flanks in impetuous torrents ; here inflamed serpents twisted their way past the smoking rocks ; there burning waterfalls fell through a purple mist ; further on a river of fire, formed of a thousand igneous streams, threw itself into the sea as a boiling outfall." [15]

Hatteras and his friends may have reached an undiscovered territory but the description of the Pole owes much to the lost *Inventio Fortunata,* possibly written in the fourteenth century, which described the North Pole and the Magnetic Pole as one location and showed a black rock occupying the site, surrounded by a giant whirlpool. The *rupes nigra* or black rock, located at the extreme north of the earth, and its surrounding whirlpool were regularly evoked in sixteenth-century texts. In a 1577 letter, John Mercator cited Jacobus Cnoyen to whom we owe a summary of the lost *Inventio*, describing the Arctic region as follows:

> In the midst of the four countries is a Whirl-pool into which there empty four indrawing Seas which divide the North. And the water rushes round and descends into the Earth just as if one were pouring it through a filter funnel. It is four degrees wide on every side of the Pole, that is to say eight degrees altogether. Except that right under the Pole there lies a bare Rock in the midst of the Sea. Its circumference is almost 33 French miles, and it is all magnetic stone." [16]

It is worth noting that Verne's volcano is disclosed when "the fog was split like a curtain torn apart by the wind" to offer the first glimpse of "an immense plume of flames". [17] One recognizes in these pages, as with the evocation of a whirlpool, the influence of Edgar Allan Poe, who would play such an important role in Verne's other polar novel, *The Sphinx of the Icefields*.

As we know, Verne had initially planned to have Hatteras throw himself into the crater and die at the Pole, "The volcano is the only grave worthy of him" he wrote his publisher Pierre-Jules Hetzel. [18] But upon Hetzel's insistence, Verne modified the conclusion: Hatteras returns to England, but he has become mad. "His madness was of a gentle sort, but he did not speak, he no longer understood, for power of speech had apparently departed at the same time as his reason." [19] During his long daily walks, he always follows the same path and comes back walking backward. "The doctor attentively observed such a strange mania, and soon understood the reason for such a singular obstinacy; he guessed why the walk followed a fixed direction, under the influence, as it were, of a magnetic force. Captain Hatteras marched constantly north." [20]

Traces and refractions

In the course of their progress towards the North, Hatteras and his crew discover traces of past expeditions: "It was clear that Hatteras was inadvertently following the signs of a major disaster; he was advancing along the only practicable route, collecting the remains from some horrible shipwreck" (172). Initially the novel strikingly resembles a fictitious search for Franklin: beyond the numerous mentions of the catastrophe and the long account given in chapter 17, multiple allusions weave a tight net of cross-references between Hatteras's adventures and those of his predecessors. Hatteras's ship, the *Forward*, bears a name similar to Kane's rescue ship, the *Advance*. At one point, the explorers kill a fox that had been captured by James Ross twelve years before: "While wintering, James Ross had the idea of trapping a large number of white foxes; he put copper collars on their necks, with engravings of where his ships were, the *Enterprise* and the *Investigator,* plus the food stores. These animals often cover huge distances in search of food, and James Ross hoped that one might fall into the hands of men from Franklin's expedition. This explains everything, and our guns uselessly killed that poor animal, which might have the saved the life of two crews" (142-143). The real-life message reaches only fictitious travelers, a dead end of sort.

During their return from the Pole, the explorers come across the dead bodies of the group of mutinous sailors who had burned the ice-bound *Forward*, and abandoned the expedition. The scene described by Verne is eerily reminiscent of the testimony reported by Rae and so violently attacked by Dickens:

> Not long previously, this valley had been the scene of a last battle against time, against despair, against hunger; and from certain horrible remains, it could be understood that the wretches had fed on human bodies, perhaps living bodies, and amongst them, the doctor recognized Shandon, Pen, and the whole miserable crew of the *Forward. . .* the crew had clearly experienced a thousand tortures and a thousand despairs to come to this terrifying catastrophe; but the secret of their misery is buried with them under the snows of the Pole for ever. [21]

But while the novel follows previous textual traces, borrowing and integrating the multiple relics of previous narratives, its own specific fiction lies in the fact that the extraordinary conquest it describes will leave no trace behind, except for the novel itself. Although the group

reads with passionate interest the signs left by previous explorers, Hatteras himself violently objects to the idea of leaving any message or traces behind. “The doctor had had the idea of building a cairn and depositing a note indicating the passage of the *Forward* and the expedition’s purpose. But Hatteras formally opposed this notion: he did not wish to leave any traces a rival could use” (87). The explosion of the *Forward*, an “immense disaster,” will also make it as hard for future expedition to find as the *Terror* and the *Erebus* themselves. Following Hatteras’ intentions, before leaving the volcanic polar Island, Clawbonny “built a cairn at the precise point where the captain had first landed on the island. . .On the face of one of the stones Bell engraved this simple inscription with a chisel: JOHN HATTERAS, 1861” (340). For all practical purposes, this could be a tombstone, written at the time Verne had planned to conclude the novel with Hatteras’ death in the volcano; [22] if Hatteras’s body returns to England in the final version, his reason has died on the *rupes nigra* of the Pole. But the cairn, Verne is careful to note, may well not survive the volcanic eruption. Indeed, the question of traces remains at the heart of the relationship between the disappearance of Franklin and the searches that followed the disaster on the one hand, and between interpretation and fiction on the other.

Figure 9 - Engraved stone, from *Hatteras*,. Photo Frank Ward.

Parhelia

The specific nature of the Verne/Hetzel project for the *Extraordinary Voyages* required a large measure of scientific information and precision. But the nature of the various discoveries described in *Hatteras* raises a different set of questions. The status of an exploration and that

of a search expedition are strikingly different. One consists in opening the way, the other in retracing a path, and it is at the very least intriguing that, when it came to write his novel, Verne should be more preoccupied with the searches for a missing explorer, than with the explorations themselves. If exploring can be compared to writing on a blank space, delineating new coastlines, giving names to unexplored islands, mapping out a continent, why should the act of writing in *Hatteras* be so absorbed by the entirely different model of retracing a path, looking for clues, a model whose explicit goal is not to create but to duplicate, and whose success would lie in the uncovering of the already discovered?

One of the answers might lie metaphorically in a specific form of optical sign frequently observed in polar areas and carefully noted in the records Kane and M'Clintock wrote during their search for Franklin. The *parhelia*, also called sun-dogs or "mock-suns," appear as sun halos, or as multiple suns formed by ice crystals. Although they can be observed anywhere, they are far more striking in the low temperatures of the Polar Regions. [23] In his 5 October diary, Kane wrote at length of the phenomenon: "The air was filled with bright particles of frozen moisture, which glittered in the sunshine—a shimmering of transparent dust. At the same time we had a second exhibition of parhelia, not so vivid in prismatic tints as that of 5 September, but more complete. The sun was expanded in a bright glare of intensely—white light, and was surrounded by two distinct concentric circles, delicately tinted on their inner margins with the red spectrum." [24] The night-time equivalents of the parhelia, the paraselenae, are also illustrated in M'Clintock's text. At one point in his narrative, he describes a burial in the ice pack under the Arctic night in these terms:

Figure 10 - Parhelion in Antarctica, August 2008. Photo Todor, courtesy of the Australia Antarctic Division.

> The body was then placed on a sledge, and drawn by messmates of the deceased to a short distance from the ship, where a hole through the ice had been cut: it was then "committed to the deep," and the Service completed. What a scene it was! I shall never forget it. . .the deathlike stillness, the intense cold, and threatening aspect of a murky, overcast sky; and all this heightened by one of those strange phenomena which are but seldom seen even here, a complete halo encircling the moon, through which passed a horizontal band of pale light that encompassed the heavens; above the moon appeared the segments of two other halos or paraselene to the number of six. The misty atmosphere lent a very ghastly hue to the singular display, which lasted for rather more than three hours. [25]

The parhelia and paraselenae optical phenomena are not the only refractive effect of the Polar Regions. On 13 September, the captain of the *Advance* spotted a ship. "On looking without the glass, I distinctly saw the naked spars of a couple of vessels. . .the masts, yards, gaffs, every thing but the bowsprits, were made out distinctly," writes Kane in his report, "We changed our course. . .The fog, however, closed around them. Still we stood on. Presently, a flaw of wind drove off the vapor; and upon eagerly gazing at the spot, now less than three miles off, no vessels were to be seen. . . Refractive distortion plays strange freaks in these Arctic solitudes; but this could hardly be one of its illusions. . . As plainly as I see these letters did I see those brigs." [26] The relationship between the refractive phenomena and the acts of reading and writing is thus explicitly stated. The ghost ships of the "Arctic solitudes" and Kane's narrative both obey the principle of refraction, as light deviating through the prism of the ice crystal to produce a second image of far greater proportions. It is significant, too, that an illustration of a parhelion is inserted in *Hatteras* at the moment when "the *Forward* was at the very spot where the American vessels, the *Rescue* and the *Advance . . .* experienced such terrible dangers." Verne adds: "Dr. Kane was on that expedition; at the end of September 1850, surrounded by ice floes, the ships were irresistibly forced back into Lancaster Sound. . . It was Shandon who narrated this disaster." [27] Numerous examples of parhelia and paraselene enrich Verne's text, and refraction plays a dramatic role on several occasions, changing animals into beasts of gigantic proportions.

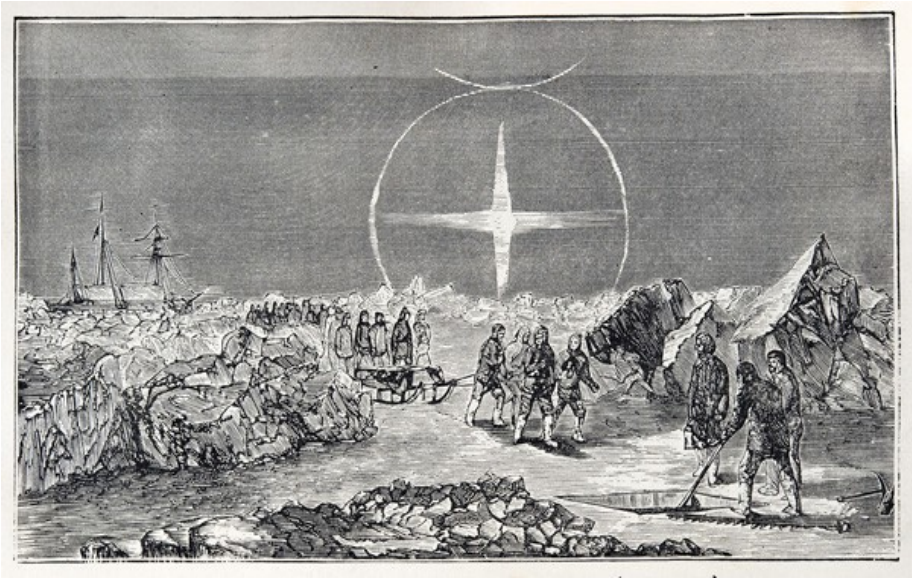


Figure 11 - "A Funeral in Ice," drawn by Captain May, from Captain M.Clintock, *The Fate of Sir John Franklin*. Photo Frank Ward.

Figure 12 - "Funérailles dans les glaces et parasélènes," from Ferdinand de Lanoye, *La Mer Polaire, Voyage de L'Erèbe et de la Terreur* (Paris : Hachette, 1972). Photo Frank Ward.

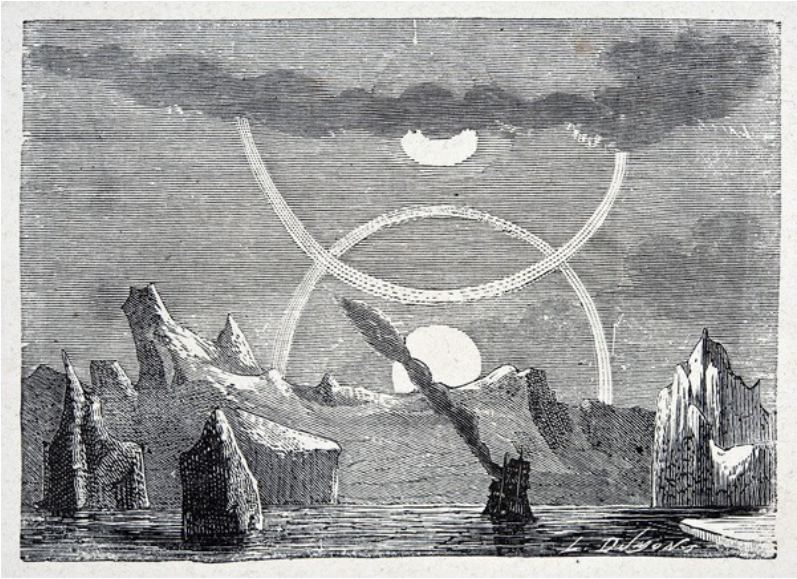


Figure 13 - Parhelia, from *Hatteras*. Photo Franck Ward.

Yet, the most striking parhelion may well be represented in Verne's writing career in the form of an Antarctic novel, his sequel to Edgar Allan Poe's 1838 *The Narrative of Arthur Gordon Pym of Nantucket.* "The North Pole demands the South Pole, this is both a question of rhetoric and geometry," noted Henri Robillat, "the Vernian corpus would have been incomplete if *The Sphinx of the Icefields* had not been placed symmetrically to the great polar novel of the beginning of Verne's career." [28]

Mirage

The *Narrative of Arthur Gordon Pym of Nantucket*, published in 1838 by Edgar Allan Poe was translated in French twenty years later by Charles Baudelaire. For many Americans, the French enthusiasm for Poe remained an enigma, perhaps even a sign of poor taste. “Baudelaire is compromised by his having made himself the apostle of our own Edgar Poe,” wrote Henry James in 1878, “With all due respect for the very original genius of the author of the *Tales of Mystery,* it seems to us that to take him with more than a certain degree of seriousness is to lack seriousness one’s self. An enthusiasm for Poe is the mark of a decidedly primitive stage of reflection.” [29] If James had come across the long article Verne had published two years before the publication of *Hatteras*, in order to introduce the American author to the readers of the *Musée des Familles*, James would no doubt have described Verne as one of those decidedly primitive minds.

Figure 14 - Parhelion, from *Hatteras*. Photo Frank Ward.

The last part of Verne’s 1864 article is dedicated to *The Narrative of Arthur Gordon Pym*, recapping the strange adventures that befell the young man from Nantucket. [30] Verne carefully describes the three distinct but related episodes that compose the *Narrative*: Pym and his friend Augustus Barnard’s ill-fated adventure onboard the *Ariel* and their first shipwreck; eight months later, their second and more tragic adventure onboard the *Grampus* where mutiny, massacre and cannibalism decimate the crew; and Pym’s last journey when he is rescued, along with a sailor called Dirk Peters, by a schooner from Liverpool, the *Jane Guy*. Impelled by Pym’s evil genius to press on and explore the mysteries of the Antarctic, Captain

Guy and his crew discover a new island called Tsalal where everything is entirely black: the people, the birds and the water itself which, although it has the appearance of *limpidity* when falling, writes Poe, presented "to the eye, as it flowed, every possible shade of purple…" [31]

The novel concludes with the destruction of the ship by the natives and the miraculous escape of Pym and Dirk Peters, carried by strong currents towards the South Pole onboard a fragile boat. Verne quoted extensively from the last mysterious entries of Poe's novel which describe "a limitless cataract, rolling silently into the sea from some immense and far-distant rampart into the heaven," and its dramatic conclusion:

> *March* 22. The darkness had materially increased, relieved only by the glare of the water thrown back from the white curtain before us. . . And now we rushed into the embraces of the cataract, where a chasm threw itself open to receive us. But there arose in our pathway a shrouded human figure, very far larger in proportions than any dweller among men. And the hue of the skin of the figure was of the perfect whiteness of the snow. [32]

Figure 15 - Lunar halos, from *Hatteras*. Photo Frank Ward.

These last pages have generated abundant critical interpretations that cover a wide range of possibilities, including the realistic explanation put forward by Richard Kopley, who notes that the cataract described by Poe could well be an aurora australis and the shrouded form

that arises across the path of Pym and Peter that of the very ship which, one presumes, rescued Pym and Dirk Peters after their adventure. In his edition of Poe's *Narrative*, Kopley also notes that the shrouded figure has been interpreted as death (Moldenhauer, Peden) and as a Lazarus figure conquering death (Eakin); as goodness (Stroupe) and as perversity (Cox); as knowledge (O'Donnell, Helen Lee) and as the limits of knowledge (Lévy); as imagination (Liebler, Wells), the narrative itself (Kennedy, *Poe, Death, and the Life of Writing*), and the white at the bottom of the unfinished page (Ricardou); as a Titan (Ljungquist), as a divinity (Bonaparte, Fiedler, Bezanson), and as Pym's unrecognized white shadow (Irwin, Robinson, *American Apocalypse*)." [33]

Marie Bonaparte, a student of Freud, was in fact more precise and saw in the veiled human figure an image of the mother's body, a representation of Poe's death drive, the impossible desire to return to the mother's womb.

Figure 16 - *Halbrane* with sun halo, from *The Sphinx of the Icefields*, drawing by Roux. Photo Frank Ward.

Writing in 1864, Verne commented upon the ending with these words: "And the narrative is thus interrupted. Who will ever resume it?" [34] This is the task Verne would undertake, years later, in his *Sphinx of the Icefields* (*Le Sphinx des glaces*), thus giving himself, to quote Tim Unwin, a "second opportunity to discuss Poe's story." [35] The novel takes place in 1839, 11 years after the events recounted in the *Narrative.* The narrator embarks on the *Halbrane,* whose melancholy captain has been searching the southern seas for Pym's lost companions, and more particularly for his brother, the captain of the *Jane Guy*. Onboard the *Halbrane* is also Dirk Peters, hoping to find Pym whose disappearance Poe had mentioned in a note added to the *Narrative*, speaking of "the late sudden and distressing death of Mr. Pym" that accounted for the interrupted journal. Verne imagines instead that Pym, separated from his companions, had remained in the Polar Regions, while Peters had returned to the United States where he had published the narrative. Like many other Verne novels, and like the search for Franklin, *The Sphinx of the Icefields* thus leads the reader through unexplored territories in search of missing persons. In this case, there are no fabulous machines or superhero, no wars, no conquests, not even the charting out of new territories, but a relentless descent into Poe's nightmarish landscape, and what first appears to have been the ultimate unveiling of the shrouded figure that dominated the *Narrative's* last paragraph. At the conclusion of *The Sphinx of the Icefields* the survivors of yet another shipwreck—that of the *Halbrane* seized by an overturning iceberg—relive Pym's last adventure. Their boat is taken at terrifying speed towards the prodigious mass that gives the book its title:

> With its strange shape, this mountain resembled an enormous sphinx . . . in the seated pose of the winged monster Greek mythology placed on the road to Thebes. . . The monster grew larger as we came near, without losing any of its mythological forms. It stood isolated on this immense plain, producing an effect I could not describe. There are impressions which can be reproduced by neither pen nor speech. And—but it could only be an illusion of our senses—it seemed as if we were attracted to it by the strength of its magnetic attraction" (478, 484). The mountain is indeed a gigantic magnet that explains the tragic conclusion of Pym's adventures: "After having gone beyond the South Pole, Pym, like us, had fallen into the monster's zone of attraction!...and there…seized by the magnetic fluid before having had the time to rid himself of the gun he was wearing on his shoulder, he had been projected against the mountain. (486)

It could certainly be argued that, in keeping with Verne's interest in scientific discoveries and his view of Poe as both a fantastic writer and a rational thinker, the magnetic mountain of the South Pole offers a "natural," if not exactly persuasive, explanation of the mystery of Poe's novel, or rather, an example of what Timothy Unwin has described as the fictionalization of science when he notes: "For Verne, if fiction feeds on science, then science also feeds on fiction, for fiction is what motivates science." [37] Interestingly, 1839, the date of the beginning of Verne's novel, is also the year when Sir James Ross Clark, who had discovered the North Magnetic Pole, had led the expedition to the Antarctic on the *Terror* and the *Erebus*. Clark never reached the South Pole and, as we have seen, his two ships were later lost in the expedition led by Sir John Franklin. It is thus possible to read the *Sphinx* as the hypothetical conclusion of several tragic polar adventures: the fictional voyage of Pym, the real life explorations of the *Terror* and the *Erebus*, and the mysterious end of Sir John Franklin and his crew.

The poles are the place of the "vertiginous attraction of the abyss" Verne had described in *Hatteras* (339), and it is easy to see how the black rock (*rupes nigra)* of the North Pole becomes the white mountain of the Antarctic, which was always imagined to be the exact

opposite of the North. Verne had explicitly rejected the myth of a magnetic mountain in *The Adventures of Captain Hatteras* as hypotheses fed by credulity; neither Ross nor Hatteras and his crew, Verne writes, had found a mountain "capable of attracting vessels, tearing off their iron, anchor by anchor, nail by nail." [37] But the image still held a fascination though, surprisingly enough, Verne dismissed the possibility that the Sphinx stood at the magnetic pole or even close to it: "Did the proximity of the magnetic pole cause such effects?..." he asks when describing its fatal attraction, "[t]his was the first idea that crossed our minds. But upon reflection, this explanation had to be rejected….Moreover, at the place where the magnetic meridians meet, no phenomena other than the vertical position of the magnetic needle in two similar points of the globe can be observed. This phenomenon, already verified by local observations in the Arctic regions [and here, Verne is alluding to Clark Ross], should be identical in the Antarctic. Thus, there was a magnet of prodigious strength in the zone of attraction into which we had penetrated. One of those surprising effects that had been previously relegated to the rank of fables had taken place under our eyes. Who has ever been willing to admit that ships might be irresistibly attracted by a magnetic force, loosing their metal bindings on all sides, their hull opened up, the sea swallowing them into its depths?...yet, it was so." (480) Verne notes that winds bringing a "formidable accumulation" of electric fluid to the polar regions also cause the "luminous magnificence" of both *aurora borealis* and *australis*.

> It is even believed—though the fact has not been observed—that at the very moment when a violent positive electric discharge takes place in the Arctic regions, the Antarctic regions are subjected to negative discharges. Indeed, these continuous currents that make the compass wildly fluctuate, must possess an extraordinary influence, and …for this current to circulate around this sphinx, what was necessary?...nothing but a metallic vein…" (482)

Figure 17 - The sphinx, from *The Sphinx of the Icefields*. Photo Frank Ward.

The sphinx nonetheless occupies the pole of attraction, though its precise location remains unverifiable: "I think that this mountain must have been located in the magnetic axis……but as for determining if it was precisely at the magnetic pole, our compass could not have done so…all I have to say is that its needle, wildly fluctuating and unstable, no longer indicated any orientation." (484) We know of Verne's obsession with maps and the geographical precision of his texts, but here—and in spite of the map inserted in the text showing the location of the sphinx—the travelers have lost their compass, and when Dirk Peters suddenly points to the remains of Pym's body, they know they have entered another dimension: "—There!...yes… there!' I could not describe the impression these three words made upon us: three cries, as Edgar Poe would have said, emanating from the depth of the ultra world." (484) At this precise moment, it could be argued, Verne claims his text as fiction: a very specific form of fiction, to be sure, borrowing Poe's voice the better to put a final end to Poe's creation. Peters does not survive this grim discovery: "He tried to get up closer...to kiss the ossified remains of his poor Pym…his knees gave up. . .a sob compressed his throat…a spasm tore his heart…he fell… dead…" (486)

As Michel Serres and others have noted, Verne's novels invest ancient mythology with the figure of science as modern myth. [38] In *Jouvences sur Jules Verne*, Serres read *Michel Strogoff* as the tale of a modern Oedipus, wandering across Siberia, blind but lucid at last, engaged in a form of initiation. [39] The *Sphinx of the Icefields* is more explicit still, and no less complex, in its recasting of the Greek legend. The novel was first published two years after H.G. Wells' *The Time Machine*, where a sphinx also presides over the futuristic landscape inhabited by the Eloi and the Morlocks. Propelled into futurity, the time traveler first sees the gigantic form of the sphinx through a curtain of hail strangely reminiscent of the vapors and the cataract that opened up to reveal the shrouded figure towering over the last page of the *Narrative of Arthur Gordon Pym*: "A colossal figure, carved apparently in some white stone, loomed indistinctly beyond the rhododendrons through the hazy downpour. But all else was invisible. My sensations would be hard to describe. As the columns of hail grew thinner, I saw the white figure more distinctly. It was very large, for a silver birch-tree touched its shoulder. It was of white marble, in shape something like a sphinx." [40] Like a modern Oedipus, the Time Traveller limps through his adventure, like Pym he comes back to tell his story, only to leave again: "The Time Traveller vanished three years ago. And, as everyone knows, he has never returned." [41]

In ancient Arabic, the word for sphinx meant the "father of Terror," and in another of Poe's stories, the vision of a sphinx blinds the beholder. One of the *Tales of Mystery and Imagination*, entitled "The Sphinx," describes how, during the cholera epidemics that devastated New York—like the plague that had devastated the ancient city of Thebes—a young man, plunged into abnormal gloom by the growing number of casualties, describes the sudden appearance of a frightening and gigantic animal, so terrible that he "instinctively buries [his] face in his hands" covering his eyes as to protect himself from the apparition. [42] The monster is nothing but an insect "of the genus *Sphinx*, of the family *Crepuscularia*, of the order *Lepidoptera*, of the class *Insecta*—of insects." But for all its innocuous and fragile existence—the insect has just been caught in a spider's web—the description taken from a book of Natural History legitimates the fear experienced by the narrator: "The Death's-headed Sphinx has occasioned much terror among the vulgar, at times, by the melancholy kind of cry it utters, and the insignia of death it wears upon its corselet." [43]

Figure 18 - H. G. Wells, *The Time Machine.* Cover of the first American Edition

As Claude Levi-Strauss has pointed out, the various retellings of the story of Oedipus (Freud's included) incorporate similar elements: whether the truth-seekers' infirmities result from an encounter with the sphinx or from a related episode, all the figures of Oedipus suffer from a physical defect (they are lame or blind); the man-devouring monster strikes terror; and of course knowledge or self-knowledge alone can vanquish the monster and lead to her destruction. It is rather remarkable that, eager as he claimed he was to provide a rational explanation for a fantastic tale, Verne opted to revive a myth in such detail. The ice monster devours ships, causing them to lose their bindings, their hulls to burst open and be "swallowed up" by the sea. At the foot of the gigantic mountain lie the wrecks of previous boats, like so many bones testifying to a gruesome feast; Arthur Gordon Pym's whitened remains are themselves transformed into a monstrous form: "a body, or rather a skin-covered skeleton, that the cold of these regions had preserved intact. He had a bent head, a white beard that fell to his belt, hands and feet armed with nails as long as claws." [44] The figures of insight and blindness associated with the Oedipus tale already played an important role in Poe's *Narrative of Arthur Gordon Pym*. The cataract described in the last entries, like a curtain descending over the eye, finally opens to reveal a vision itself covered by another veil: the gigantic draped figure that dominates the last entry of Pym's journal. Perhaps we should resist the temptation to lift the veil, to give meaning to the hidden shape that looms so large over the last entry, and focus instead on its narrative purpose: whatever is there cannot be

identified by human eyes, and the end of the tale will not, should not, be told. Though lifting the prohibition in part, Verne insists on the metaphoric curtain that veils both the mythological truth and the uncertainty of exploration: "Dense fog everywhere," notes the narrator, "not the mist that is dissolved by the first rays of the sun, and disappears with the winds…No! a yellowish fog, rather, with a musty smell, as if this Antarctic January had been the 'brumaire,' the foggy month of the northern hemisphere. From the yellowish sky oozed vesicular mists that covered the top of our ice mountain." [45] In the midst of this thickened fog and as "new vapors accumulated" the narrator describes "one of those strange hallucinations that Arthur Pym's mind must have experienced":

> I thought I was finally seeing what he had seen!...This solid fog was the curtain of mist that hung over the horizon, over his madman's eyes!... I looked for this 'limitless cataract rolling silently into the sea from some immense and far-distant rampart into the heaven.' I looked for the yawning rents behind which was a chaos of flitting and indistinct images agitated by the powerful blasts of wind!...I looked for the white giant, the giant of the Pole!...Finally, reason prevailed."

"This visionary turmoil, this wild distraction disappeared little by little," adds Jeorling, but "not once did the curtain open in front of us, and if the iceberg, which had moved forty miles during the last day, had gone beyond the extremity of the earth's axis, we were never to know!..." [46] (404)

At this point, Verne inserted a long note:

> Twenty eight years later, what Mr. Jeorling had been unable to glimpse, another had seen, another had set foot on this part of the globe, on March 21st, 1868. . . And, at the very moment when the northern horizon cuts the solar disk in two equal parts, he took possession of this continent in his own name, unfurling a flag embroidered with a golden N. In the open sea floated a submarine called the *Nautilus*, and her captain was captain Nemo. (404)

With these lines, it could be argued, Verne tears the veil open for his readers, showing what was doubly invisible to the narrator of the *Sphinx of the Icefields*, what "Mr. Jeorling had been unable to see:" the chaotic volcanic landscape of the pole, littered with basaltic fragments, scoria, ashes, lava, and blackish rocks, and the scene that would take place only at the equinox of 1868. The curtain thus opens briefly, but on another text, another fiction, and another time, to be closed again forever. Nemo appears only as a fleeting vision soon to be eclipsed by the continuing narrative. This curious note however introduces a more complicated twist to the narrative of the Antarctic: *Twenty Thousand Leagues Under the Seas* (*Vingt mille lieues sous les mers*) had been published 27 years earlier, and Verne's fame owed much to the daring adventure he had described as Nemo's submarine odyssey. By referring to a text previously written, though taking place later than the novel he was in the process of completing, Verne also points out to a series of unresolved contradictions: no abyss threatened Nemo, no giant encountered and fatally attracted the iron submarine. The landscape was desolate, with a limited vegetation of lichens, but in the air "life was overabundant" with thousands of birds of various species; on land the "baroque cries" of penguins echoed the "formidable roaring" of walruses. [47] Nemo lists all the travelers who ventured near the Pole without ever reaching it, including Ross Clark's expedition onboard the *Terror* and the *Erebus*, but nowhere does the name of Poe's previous tale of the Pole appear. The fiction of Nemo summoned in the footnote belies the fiction of Pym to which Verne gives credence throughout *The Sphinx of the Icefields,* as the parhelia and refraction belie the evidence of the senses.

It may just be a question of geographical displacement of course: in *The Sphinx of the Icefields*, Verne stresses on several occasions that the travelers have gone beyond the Pole, unable to see it or even to measure their location accurately, since the sun remained invisible behind the persistent fog. [48] But if the Pole is the point of invisibility, the presence of the magnetic mountain seems nonetheless to elucidate a mystery. When Jeorling recognizes the magnetic attraction of the mountain, he writes: “I understood, and in an instant it threw a terrible light on the last catastrophe of which Hearne and his accomplices had been the victims.” [49] This terrible light emanating from the “monster” is the revelation that the members of the crew who had stolen the lifeboat of the *Halbrane* had all died at the foot of the mountain.

Cannibalism

Poe’s *Narrative of Arthur Gordon Pym* itself dwelt at some length on the cannibalism associated with the Greek legend of the man-eating sphinx. Pym at first hesitates to describe the scene where the three starving survivors of the *Grampus* agree to draw lots and then to kill and eat the designated victim: “It is with extreme reluctance that I dwell upon the appalling scene which ensued.” “I must not dwell upon the fearful repast which immediately ensued,” he repeats later, “such things may be imagined, but words have no power to impress the mind with the exquisite horror of their reality.” Yet Pym goes on: “Let it suffice to say that, having in some measure appeased the raging thirst which consumed us by the blood of the victim, and having by common consent taken off the hands, feet, and head, throwing them, together with the entrails, into the sea, we devoured the rest of the body piecemeal.” [50] Though more brutal than common accounts, these pages also echo other nightmarish descriptions from wreck survivors, notably those of the *Medusa.* Verne himself had given the story of the *Medusa* and its episode of cannibalism center stage in *Le Chancellor*, writing to Hetzel that it represented his own *Gordon Pym*. [51]

Dirk Peters first appears as Hunt, and only reveals his true identity half-way through the book. “How did Captain Len Guy and I, who had so often read Edgar Poe’s book, fail to guess that the man who had boarded the ship in the Falklands and the half-Indian Peters were one? . . . Well, both Captain Guy and his passenger Jeorling had a veil over their eyes!... I admit it; we were two blind men.” (275) Blindness is contagious, but for Jeorling the discovery of Peters’ identity brings back “the terrible scenes in which he had participated, events, Arthur Pym tells us, ’so completely beyond the register of human experience, and going beyond the credulity of men.’” (276)

In *The Future of an Illusion*, Freud describes the three instinctual desires that have been uniformly prohibited by civilization: “[These] instinctual desires,” he writes, “are those of incest, of cannibalism, and of murder.” But “the attitude of culture to these oldest instinctual wishes is [not] the same in each case,” he adds, “cannibalism alone seems to be proscribed by every one.” [52] In *Myth and Tragedy in Ancient Greece,* Pierre Vidal-Naquet placed the sphinx in the category of the *subhuman*: “[O]ne is either above in the company of Zeus…or in the monstrous world of whatever is subhuman, in the company of the Sphinx.” [53] “On the shield of Parthenopaeus the Sphinx, which is both female and subhuman (it eats raw flesh), pins down a citizen of Thebes.” [54] Eating raw flesh, and particularly raw human flesh, reduces the human to the monstrous category of the subhuman monster. Pym and Peters, who briefly tasted the forbidden flesh, are united by symbolic destiny at the foot of the man-

devouring monster. They join the fictitious sailors of Hatteras' *Forward*, the real-life men of the Franklin expedition, and the survivors of the *Medusa* in disclosing that other outcome of disastrous events: the return of the human species to the subhuman category of monstrosity.

There is no space to expand here on the links between the murder of the father described by Freud in *Totem and Taboo*, the cannibalistic scene that followed, and the generalized prohibition of incest and cannibalism that founded social rules and religion. But we should note that *The Sphinx of the Icefields*, in re-staging the *Narrative of Arthur Gordon Pym*, the better to erase some of its episodes [55] or to develop some of its themes, also performs a form of literary cannibalism, in the sense of a ritual tribute to the dead father. The boldness that consists in providing a sequel to Poe's work, in daring to lift—if only in part—the veil that hides the human figure, thus replays in various ways the murder of the father and the Oedipus tale. From this perspective, we should not be surprised that, at the end of a voyage whose goal is to retrace that of Pym we should encounter the figure of a sphinx.

A slight displacement however prevents us in the end from reading Verne's novel as the sequel that claims to elucidate the last pages of the *Narrative of Arthur Gordon Pym*. Although the reader is (mis)led in identifying the sphinx with the shrouded human figure that arises in the last entry of Pym's journal, Verne himself carefully abstains from doing so, a rather remarkable omission in a novel so preoccupied with providing a conclusion and an explanation to an unfinished narrative. The sphinx thus does not lift the drapery that covered the gigantic shape, but it is particularly interesting to observe, as Jean-Pierre Picot did, that the mythical position of the sphinx on the map provided by Verne is in the vicinity of the Erebus volcano. In Greco-latin mythology, Picot notes, the Erebus opens the way to the underworld, and the sphinx's "double thanatological functions" are to mount guard [over a threshold] and to propose enigmas: "The enigma is that of human destiny, and the threshold is that of the other world." [56]

I would like to conclude with a painting by Magritte that, I believe, offers an appropriate illustration of Verne's novel. It is entitled *La Reproduction interdite* and shows the image of a young man whose face is doubly withheld from the beholder: his back is turned to us, and the mirror, contrary to all physical laws of refraction, duplicates our own perspective rather than showing the face of the man standing in front of it. Next to the man, on a simple shelf, lies Poe's novel in Baudelaire's French translation: *Les Aventures d'Arthur Gordon Pym*. The book and his title are reflected normally in the mirror, making the withheld face more enigmatic still. This painting can certainly be read as Magritte's own meditation on the *Narrative of Arthur Gordon Pym* and perhaps as a comment on the undisclosed identity of the figure that haunts the last pages of the novel. But this painting seems more appropriate still as an illustration of the *Sphinx des glaces*, if one considers that in French the same word (*glace*) designates both ice and a mirror. In the conclusion of his novel, Verne wrote: "Arthur Pym, the hero so magnificently celebrated by Edgar Poe, showed us the way…May others follow, may others wrest away the last secrets of the mysterious Antarctic!" It could be argued that Jules Verne rewrote the myth of the sphinx, but with a variation, reversing the traditional riddle to ask: "What is man?" or "who is this man, Arthur Gordon Pym, Edgar Allan Poe?" and the book and the mirrored ice, both reply: "an enigma, an illusion."

The painting, too, is a parhelion.

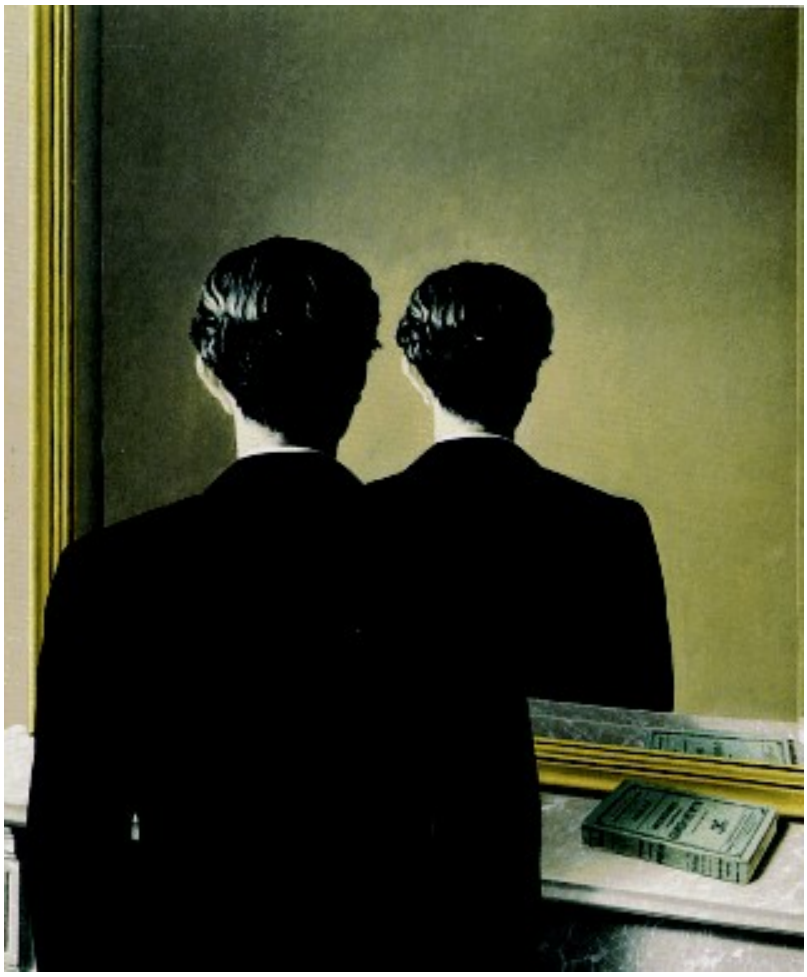


Figure 19 - René Magritte, *La Reproduction interdite*, by permission of the estate of René Magritte. Reproduction, including downloading of Magritte works is prohibited by copyright laws and international conventions without the express permission of Artists Rights Society (ARS) of New York.

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NOTES

1. Elisha Kent Kane, *The U.S. Grinnell Expedition in Search of Sir John Franklin, A Personal Narrative* (New York: Harper, 1864), p. 184.
2. Quoted in Russel A. Potter, “Sir John Franklin: His Life and Afterlife,” *Elisha Kent Kane Historical Society*, p. 2. The complete disappearance of Franklin’s 2 ships and crew remains unexplained,

although recent studies have argued that the tinned food supplies were probably responsible for the disaster. See Owen Beattie and John Geiger, *Frozen in Time: Unlocking the Secrets of the Franklin Expedition* (New York: E.P. Dutton, 1987), and Scott Cookman, *Ice Blink: The Tragic Fate of Sir John Franklin's Lost Polar Expedition* (New York: John Wiley, 2000). To this day, remarkably few remnants of the expedition have been found. A 2008 expedition backed by the Canadian Government failed to locate the ships.

3. Charles Dickens, "The Lost Arctic Voyagers", *Households Words*, vol. X, no 245 (2 December 1854): 362.
4. Captain M'Clintock, *The Fate of Sir John Franklin Discovered in the Artic Ocean*, (Philadelphia, J.T. Lloyd, 1860), p. 219.
5. Dickens, *Op. cit.* . p. 365.
6. Dickens, *Op. cit.* 9 December 1854, pp. 392-393.
7. Jean-Luc Nancy, *After Tragedy*, unpublished keynote address, *Catastrophe and Caesura: Philippe Lacoue-Labarthe Today*, New York University, April 10-12th 2008.
8. Walter Benjamin, "The Task of the Translator," *Illuminations,* ed. with a preface by Hannah Arendt (New York: Harcourt, Brace and World, 1955), p. 70.
9. William Butcher mentions 3 books as the main sources for Verne's *Hatteras*: Ferdinand de Lanoye et Amateur Etienne Hervé's *Voyages dans les glaces du Pôle arctique (Sir John Ross, Edward Parry, John Franklin, Beechy, Black, Mac Clure et autres navigateurs célèbres* (1854); Lucien Dubois, *Le Pôle et l'équateur* (1863), and Lanoye's *La Mer polaire* (1854). This last title is a partial translation of Elisha Kent Kane's reports on the Grinnell expeditions. Captain M'Clintock's *The Fate of Sir John Franklin* was translated into French in 1860 under the title, *La Destinée de Sir John Franklin dévoilée* (Paris: A. Bertrand, 1860). Franklin was well-known in France and the book he had written about his previous arctic expeditions had been translated by M. Dufauconpret under the title *Histoire de deux voyages entrepris par ordre du gouvernement anglais* (Paris: Gide, 1824). Verne's interest in the Franklin expedition is illustrated as well by the number of times it is cited in his novels: Terry Harpold has noted more than 400 mentions of the disaster.
10. The novel was first serialized in Pierre-Jules Hetzel's *Le Magasin illustré d'éducation et de récréation*. On the attraction of the Poles in Verne's novels, see, in addition to the works cited by Butcher, Marcel Lecomte, "Le Thème du grand Nord," in *L'Arc* 29, 1966, pp. 66-68; and *Dossiers du Collège de Pataphysique* 16, "Centenaire de la découverte du Pôle Nord par le Capitaine Hatteras" (July, 1961).
11. Jules Verne, *The Adventures of Captain Hatteras*, trans. with an Introduction and Notes by William Butcher (Oxford: Oxford University Press, 2005), p. 97. William Butcher's superb edition of *Hatteras* includes an extensive bibliography and Verne's initial ending of the novel. It should also be noted that the history of sea wrecks had been a well-established genre since the middle of the eighteenth-century. A particularly illuminating compilation is the *Histoire des naufrages* a 3-volume text initially written by Desperthes, augmented by J.-B.-B. Eyries. The complete edition was published in 1832 by Louis Tenré, in Paris.
12. Kane, op. cit. p. 149.
13. In his biography of Jules Verne, William Butcher notes: "Verne borrows throughout from Hervé and Lanoye, indeed copying about eight pages word for word, mistakes included, making this the lengthiest plagiarism identified in his works." *Jules Verne, The Definitive Biography, with an introduction by Arthur C. Clarke* (New York: Thunder Mouth Press, 2006), p. 156. Verne also owned a copy of Joseph-René Bellot's *Journal d' un voyage aux mers polaires exécuté à la recherché de Sir John Franklin*, published in 1854. The French's enthusiasm for polar expeditions and their passionate interest in the fate of Sir John Franklin is demonstrated in the multiple articles and

communications published in various journals and the bulletins of learned societies. The president of the French Society of Geography, Victor-Adolphe Malte-Brun published an update on all the searches in his *Coup d'oeil d'ensemble sur les différentes expéditions arctiques entreprises à la recherché de Sir John Franklin, et sur les découvertes auxquelles elles ont donné lieu* (Paris : A. Bertrand, 1955). I believe an additional text may well have inspired Verne's description of the ice fields: Léonie d' Aunet, *Voyage d' une femme au Spitzberg* (Paris: Hachette, 1854). Léonie d'Aunet was the only woman onboard an early scientific expedition to the Arctic. Nowadays, she is also remembered as one of Victor Hugo's mistresses.

14. *Hatteras*, p. 319-320, translation modified.

15. Id. p. 321. Jean-Luc Steinmetz comments on the mystique of the Poles and the possible influence of Verne's novel on Rimbaud in "Pacotilles pour un 'Barbare', *Les Illuminations*, un autre lecteur?" *Les Lettres Romanes*, 1994, pp. 65-74.

16. Cited in Taylor, E.G.R. "A letter Dated 1577 from Mercator to John Dee," *Imago Mundi 13(1956)*: 56-68.

17. *Hatteras*, p. 318.

18. Letter dated 25 April 1864. Published in *Correspondance inédite de Jules Verne et de Pierre-Jules Hetzel,* ed. by Olivier Dumas, Piero Gondolo della Riva, and Volker Dehs (Geneve : Slatkine, 1999), vol. I, p. 27.

19. *Hatteras*, p. 348.

20. *Id.* p. 349.

21. *Hatteras*, pp. 345-346. Translation modified.

22. See Olivier Dumas, "La Mort d'Hatteras (avec la fin du manuscrit de Jules Verne)," *Bulletin de la Société Jules Verne*, 73 (January 1985), pp. 22-24 and "Le véritable Hatteras," *Bulletin de la Société Jules Verne*, 168 (Dec. 2008): 33-41.

23. For an explanation of the phenomenon, see David K. Lynch and William Livingston, *Color and Light in Nature* (Cambridge: Cambridge University Press, 2001), pp. 171-175.

24. Kane, op. cit. p.222.

25. M'Clintock, op. cit. pp. 82-83.

26. Kane, p. 187.

27. *Hatteras*, pp. 116-117. See the series of articles written by Edmond-P. Gehu, "La Géographie polaire dans l'oeuvre de Jules Verne" in *Bulletin de la Société Jules Verne*, 9, 10, and 11-12-13.

28. Henri Robillat, "D'un Pôle à l'autre", in *Cahiers du Collège de Pataphysique*, 19 (1961): 31-35.

29. Henry James, *French Poets and Novelists* (New York and London: Macmillan, 1878), p. 76.

30. Jules Verne, "Edgar Poe et ses oeuvres", *Musée des Familles*, April 1864, pp. 193-208. See Arthur B. Evans, "Literary Intertext in Jules Verne's *Voyages Extraordinaires*," *Science-Fiction Studies,* XXIII:2 # 69 (July 1996): 171-187. Terry Harpold discusses another example of Poe's influence on Verne in "Verne, Baudelaire et Poe, *La Jangada* et *Le Scarabée d' or", Revue Jules Verne, 19-20* (2005): 162-168.See also Jean-Yves Tadié, *Regarde de tous tes yeux, regarde! Jules Verne* (Paris : Gallimard, 2005), pp. 25-41.

31. Edgar Allan Poe, *The Narrative of Arthur Gordon Pym of Nantucket*, edited with an introduction and notes by Richard Kopley (London and New York: Penguin, 1999), p. 168.

32. Id. pp. 216-217. Verne quotes the last entries from Baudelaire's translation in their entirety, reproducing the much-discussed error of the last sentence, where Baudelaire translated the "hue of the skin of the figure" as "la couleur de la peau de l'*homme*."

33. Richard Kopley, op. cit. p. 242.

34. Although *The Sphinx of the Icefields* is the only Verne novel to be explicitly presented as a sequel to *The Narrative of Arthur Gordon Pym*, Verne acknowledged the influence of Poe's novel on another of his works when he wrote of *Le Chancellor* "It's my *Gordon Pym*, but truer, and, I believe, more interesting," *Correspondance inédite de Jules Verne et de Pierre-Jules Hetzel (1863-1886)*, ed. by Olivier Dumas, Piero Gondolo della Riva and Volker Dehs (Geneva: Slatkine, 1991) vol. 1, p. 253. As Jean-Pierre Picot has noted, *Hatteras*, written just 2 years after Verne's article on Edgar Allan Poe, offers a tacit homage to the American writer, see "Verne, Poe, Schéhérazade, le ménage à trois?" in *Europe* 909-910 (Jan-Feb 2005): 80-92. By a curious coincidence, a Lieutenant onboard one of the expeditions in search of Sir John Franklin under the command of Sir Edward Belcher, was a certain Pim from Bedford, Connecticut. He is mentioned in several accounts, with a striking description of his quasi-phantasmatic apparition when he reached the ice-bound *Investigator*, commanded by Captain M'Clure, bringing them news of help. Poe's influence on Verne has been well-documented and recognized as early as 1866 by Théophile Gautier in "Les Voyages imaginaires de M. Jules Verne," re-published in *Jules Verne*, ed. by Pierre-Andre Touttain, *Cahiers de l'Herne* 24 (14 October 1874): 85-87.

35. Timoth Unwin, *Jules Verne: Journeys in Writing* (Liverpool: Liverpool University Press, 2005), p. 209. In his work, Unwin provides a detailed examination of Verne's rewriting of Poe's text, and concludes that "if all writing is rewriting, then the example of *Le Sphinx des glaces* demonstrates that the rewritten text is capable of profound originality." (212).

36. Timothy Unwin, "The Fiction of Science, or the Science of Fiction," in *Jules Verne: Narratives of Modernity* ed. by Edmund J. Smyth (Liverpool: Liverpool University Press, 2000), p. 57. See also *Jules Verne: Journeys in Writing* (Liverpool: Liverpool University Press, 2005).

37. *Hatteras*, p. 97.

38. Timothy Unwin also discusses at length "the interplay between the objective and the poetic, the scientific and the fictional" and argues persuasively that Verne's fiction often relies on another text as point of departure.

39. Michel Serres, *Jouvences sur Jules Verne* (Paris: Editions de Minuit, 1974).

40. H. G. Wells, *The Time Machine* (New York: Berkley Highland, 1963), pp. 33-34.

41. *Id.* p. 139.

42. Edgar Allan Poe, "The Sphinx" in *Tales of Mystery and Imagination* with an introduction by Pádraic Colum (London: Dent, 1975), p. 68.

43. *Id.* p. 68.

44. *Sphinx*, p. 486. This scene is reminiscent of the discovery of bones in the *Voyage to the Center of the Earth* (*Voyage au centre de la terre*).

45. *Id.* p. 402.

46. *Ibid.* pp. 403-404.

47. *Vingt mille lieues sous les mers*, ed. by Jacques Noiray (Paris : Folio, 2005), pp. 523, 528.

48. See the map inserted in the text. On the question of maps, see Terry Harpold, "Verne's Cartographies", *Science-Fiction Studies,* vol. 32 (2005), pp. 18-42.

49. *Sphinx*, p. 481.

50. *The Narrative of Arthur Gordon Pym*, p. 117.

51. In a letter to Pierre-Jules Hetzel, he wrote that the "raft of the *Medusa* had not produced anything

as terrifying" as his novel. (15 Sept 1871). For a recent study of the *Chancellor*, see Yves Gilli, Florent Montaclair, Sylvie Petit, *Le Naufrage dans l'oeuvre de Jules Verne* (Paris: L'Harmattan, 1998), pp. 113-137.

52. Sigmund Freud, *The Future of an Illusion*, trans. by W. D. Robson-Scott (New York: H. Liveright, 1928), pp. 17-18. See also "Destins du Cannibalisme," *Nouvelle Revue de Psychanalyse*, 6 (1972).

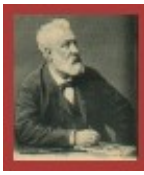
53. Jean-Pierre Vernant and Pierre Vidal-Naquet, *Myth and Tragedy in Ancient Greece*, trans. By Janet Lloyd (New York: Zone Books, 1990), p. 288.

54. Id. p. 292.

55. Lionel Dupuy, *Jules Verne, L'Homme et la Terre : La Mystérieuse géographie des Voyages extraordinaires* (Dôle : La Clef d'Argent, 2006). Dupuy discusses at length both Poe's influence and that of travel narratives such a Dumont d'Urville's important *Voyage au Pôle Sud et dans l'Océanie sur les corvettes L'Astrolabe et la Zélée par ordre du Roi pendant les années 1837-1838-1839-1840*. Dumont d'Urville left just a few years after a cholera epidemic killed his young daughter. He had never given credence to Weddel and Morrell's reports that there was a sea free of ice in the Antarctic, but faithfully tried to fulfill part of the mission defined by the government to penetrate as far South as possible. He came back to France to a hero's welcome but died tragically, along with his wife and son, in a railway accident in 1842. On the space of writing in Verne, see Daniel Compère, "Jules Verne et la modernité," *Europe* 595-596 (Nov-Dec 1978):27-36, and Marie-Hélène Huet, "Itinéraire du texte" in *Jules Verne, Colloque de Cerisy* (Paris : Union Générale d'Editions, 1979), pp. 9-26.

56. Jean-Pierre Picot, op. cit. p. 90.

Marie-Hélène Huet (mhhuet@Princeton.EDU) is the M. Taylor Pyne Professor of French at Princeton University. Her books include *L'Histoire des Voyages Extraordinaires, Essai sur l'oeuvre de Jules Verne* (Minard), *Le Héros et son double* (José Corti), *Rehearsing the Revolution* (University of California Press), *Monstrous Imagination* (Harvard University Press, winner of the 1994 Harry Levin Prize in Comparative Literature), and *Mourning Glory: The Will of the French Revolution* (University of Pennsylvania Press). Her articles have appeared in French and American journals, including *Littérature*, the *Revue des Sciences Humaines*, *Jules Verne*, *Critical Inquiry*, *Representations*, and the *Yale French Review*.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Finding Nemo: Verne's Antihero as Original Steampunk

Mike Perschon

Abstract

In the foreword to his annotated translation of Jules Verne's *20,000 Leagues Under the Sea*, Walter James Miller suggests that Verne's image was in need of rehabilitation due to the plethora of poor English translations his works have suffered. With the emergence of better translations, the same need for rehabilitation has emerged for Captain Nemo, the anti-hero of Verne's underwater adventure tale. In the updated, post-colonial English translations of *The Mysterious Island*, Nemo is revealed to be the antithesis of the Caucasian pop-culture iteration made famous by James Mason and most recently continued by Patrick Stewart and Michael Caine: an Indian prince whose real name is Dakkar, a leader of the Sepoy rebellion against colonial rule in 1857. It is this Nemo, Verne's original character, who embodies the essence of the Steampunk aesthetic of the instability of identity through his repeated death-and-rebirth cycle in both novels. Mixing one part recursive fantasy, one part historical criticism, and one part textual analysis, this paper will demonstrate how Captain Nemo is representative of one of the core elements of the Steampunk aesthetic, namely the redefining of identity.

Résumé

Dans l'avant-propos de sa traduction annotée de *Vingt mille lieues sous les mers* de Jules Verne, Walter James Miller suggère que l'image de l'auteur avait besoin de se faire réhabiliter à cause d'une grande quantité de mauvaises traductions dont son œuvre aurait souffert. Avec l'émergence de meilleures traductions, le même besoin de réhabilitation se présente pour le capitaine Nemo, l'antihéros de cette aventure sous-aquatique. Dans les mises à jour postcoloniales des traductions vers l'anglais de *L'Île mystérieuse*, Nemo est dévoilé comme antithèse de l'itération de culture pop caucasienne rendue célèbre par James Mason et plus récemment représentée par Patrick Stewart et Michael Caine : un prince indien dont le vrai nom serait Dakkar, un des chefs de la rébellion de Sepoy de 1857 contre le régime colonial. C'est ce Nemo, le personnage original de Verne, qui incarne l'essence de l'esthétique SteamPunk de l'instabilité de l'identité par la répétition du cycle mort-et-renaissance qui se trouve dans les deux romans. En métissant la fantaisie récursive, la critique historique et l'analyse textuelle, ce travail démontrera comment le capitaine Nemo représente un des éléments centraux de l'esthétique SteamPunk, soit la redéfinition de l'identité.

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Introduction

Despite a scholarly rehabilitation of the author and his works, one of Verne's most famous characters remains misunderstood and with rare exception, misrepresented. In addition to film, the Captain has appeared around the world in works of fiction, comic books, and in song

lyrics by pop artists Sarah Brightman, *L'Affaire Louis Trio*, and *Nightwish*. Portrayed alternately as hero, anti-hero, or villain, the figure of Nemo is conflated unilaterally with genius: a man of prodigious mental faculties, at times ruled by questionable morality. In Kevin Anderson's Captain Nemo: *The Fantastic History of a Dark Genius*, he is even imagined as the boyhood friend and romantic rival of Jules Verne himself! The irony of "Nemo" meaning "no one" in Latin is how the Captain's ubiquity in Western culture and beyond has made the name self-referential. It no longer represents namelessness, but rather synonymous with the very medium Nemo most revered: the ocean. Consider the intertextual reference in this article's title to Disney Studios, arguably responsible for the most famous portrayal of Nemo by James Mason in *20,000 Leagues Under the Sea* (1954), as well as Pixar's computer-animated family film *Finding Nemo*. If one does a Google search for "Nemo," they will get more results for *Finding Nemo*'s clownfish than the Captain of the *Nautilus*. No longer "no one," it appears Nemo has become everyone and anyone.

In the hope of "rescuing" Captain Nemo from his literary crisis of identity, this paper employs the "gentle fiction" Leslie Klinger utilized in *The New Annotated Dracula*, playfully imagining "that the events…'really took place' and that the work presents the recollections of real persons" (xii), permitting a unique academic exercise one part recursive fantasy, one part historical criticism, and one part textual analysis. Given nationality, motivation, and a past in *The Mysterious Island*, Nemo may be deciphered psychologically as a figure of counterfactual history. Timothy Unwin has suggested the term "Vernotopia" for the counterfactual secondary world of the *Voyages extraordinaires*. Verne himself implied "a network of references" in the *Voyages extraordinaires* whereby the textual history is treated with an attention to detail commensurate with recorded history (2006). Consider *20,000 Leagues* as inter/intratext for *An Antarctic Mystery*, which contains a footnote concerning the flag Nemo placed at the South Pole: "[t]here is no attempt here to present this as 'mere' fiction. On the contrary, Verne recalls this adventure as if it were recorded history" (Unwin 2005 141-42). In treating Vernotopic history as recorded history, the order of Verne's slow reveal of Nemo from a man of mystery in *20,000 Leagues Under the Sea* to Indian prince in *The Mysterious Island* will be reversed to create a chronological portrait of Nemo.

My interest in investigating Nemo as historical figure is related to the euchronic fiction known as steampunk, which Cherie Priest has defined as: "a retro-futuristic neo-Victorian sensibility that is being embraced by fiction, music, games, and fashion" (theclockworkcentury.com). Given the increased interest in steampunk as both fashion sub-culture and science fiction sub-genre, and taking into consideration steampunk's fascination with Verne, either in his own works or pastiches, it is lamentable that this seminal submariner remains doomed to deliver dialogue with the accent of the Empire he hated most of all. It is all the more lamentable when one understands Nemo not only as "Verne's greatest creation, indeed one of the stars of world literature, and a prototype of a major science fiction personality" (Miller xvii), but as a "potential model for oppositional politics", which have been posited as the "punk" in steampunk (Pagliasotti).

It is my contention that Nemo offers an oppositional politic, but not through either his life as Prince Dakkar of India, or as Captain of the *Nautilus*, but rather as the Mystery of the Island. Throughout his Vernotopic existence, Nemo engages in a repetitive cycle of death and rebirth: as Dakkar, he is the rebel, a subaltern member of an oppressed nation and freedom fighter against imperial tyranny; as Nemo he is the mad scientist, genius inventor of the spectacular

Nautilus, and artistic romantic resisting Empire through monstrous violence. As rebel and mad-scientist, Nemo embodies two steampunk types. In addition to these two types, Nemo suggests a third possible type for the future of steampunk: an ecumenical and egalitarian humanist seeking redemption. This third identity's rejection of the oppositional politics of the first two identities posits a possibility for the future the oppositional politics of steampunk through an ethic of compassion and egalitarianism.

Prince Dakkar – Nemo as Subaltern Rebel

Nemo's first identity as the Indian Prince Dakkar explores steampunk's interest in rebellion. Argued as the "punk" in steampunk, this attitude of oppositional politics, of standing against oppression, is common in steampunk literature. Consider the revolutionary forces opposing the totalitarian demi-dieties in S.M. Peters' *Whitechapel Gods*; the numerous anarchists of Thomas Pychon's steampunk-influenced postmodern epic, *Against the Day*; General O.T. Shaw and the denizens of Dawn City engaged in guerilla warfare with the British Empire in Michael Moorcock's *Nomad of the Time Streams*; Sir Robert Bruce's quiet resistance of an all-too colonial world government in Theodore Judson's post-apocalyptic steampunk future of *Fitzpatrick's War*; and the one man war of revenge, echoing Nemo's vendetta in Al Ewing's *El Sombra*, to name only a few.

Prince Dakkar belongs in the ranks of these steampunk rebels: his involvement in the Sepoy Rebellion displays a concern for the sort of issues that, in "a Victorian or pseudo-Victorian setting [might] inspire a punk movement":

> Concern about the impact of pollution caused by the Industrial Revolution. Child labor. Social justice for women and minorities. Imperialism and war. A counter-culture can be built around these things, strengthened by the gadgetry. Opposition to these things should be reflected in song, poetry, art, and fashion. Steampunk should be a true movement within the setting, adding depth and flavor to otherwise superficial trappings of gears and boilers. (Kinsman)

Dakkar is doubly important to steampunk as an exemplar of oppositional politics because of his ethnicity. A number of recent articles at *Racialicious.com,* devoted to race and ethnicity in steampunk, wondered at the inherently Eurocentric nature of neo-Victoriana, and how Persons of Colour (PoCs), specifically, "Steampunks of Colour" (SPoCs) might access the subculture without compromising their heritage. After all, blacks were enslaved by Europeans, the most-emulated culture in steampunk costume. Jha Goh's "The Intersection of Race and Steampunk" reflects on steampunk as a counterfactual exercise, imagining alternate histories of Asia "industrialized enough to take on colonial powers…An Asia that is not the Mysterious Orient, but an assertive culture (or several) that stands on par with Western imperial powers" (racialicious.com). She suggests such counterfactual imaginings could lead SPoCs to explore steampunk's ostensible rejection of Victorian racism, and posit ways to do more than offer protagonists in petticoats or top hats. Nemo matters to steampunk discussions of race and colour because he isn't wearing a top hat; he is not part of the colonial empire, but a subaltern oppressed by that colonial empire. He is a PoC, and as such, can be a model for SpoCs.

Nemo's little known Indian heritage, and even less known revolutionary involvement in the Sepoy Rebellion of 1857, amounts to the literary equivalent of a political conspiracy, beginning with Verne's first imaginings of the character. It has been well documented how Hetzel refused Verne's first iteration of Nemo, given France's political ties with Russia:

> "[Verne's] first draft was influenced by the 1863 Polish uprising against Tsarist Russia. Poland was quashed with a bestial savagery that appalled not just Verne but all Europe. As first conceived, the novel's protagonist, Captain Nemo, was a Polish aristocrat whose parents, wife, and children were brutally slaughtered by Russian troops." (Miller xvi)

Verne acquiesced to Hetzel's suggestion, by leaving "the identity of Nemo and of his great oppressor as something of a mystery, at least in *20,000 Leagues*" (xvi). But Hetzel's censoring only delayed Verne's intent for Nemo's origins. By the time Verne wrote *The Mysterious Island*, he was positioned to refuse any censorship, and able to present an arguably more radical genesis for the Captain, as the leader of infamous Sepoy Rebellion, the Indian Mutiny of 1857: "Indian in his heart, Indian in his longing for revenge, Indian in his dreams of reclaiming his native land, driving out the invaders, and inaugurating a new era of independence" (*Island* 584-85).

While never a mystery to French readers after 1874, the nationality of the enigmatic Captain remained largely unexplained to English readers up until the late twentieth century, due in part to his many on-screen appearances. Since Allen Holubar played the Captain in the silent film of *20,000 Leagues Under the Sea* (1916), a total of sixteen actors have portrayed Nemo in versions of Verne's novels, as well as original works such as *The Return of Captain Nemo* (1978) or *The League of Extraordinary Gentlemen* (2003). The majority of these films portrayed Nemo as older and serious, with the exception of the mid-1970s children's cartoon series *The Undersea Adventures of Captain Nemo* which re-imagined Nemo as a "[b]londe and hunky…ocean researcher and do-gooder named Mark Nemo" (thewellers.com). While a blonde and "hunky" Nemo is as far afield from Verne's Captain Nemo as might be imagined, it is perhaps no better a representation of Verne's anti-hero than those by celebrated actors James Mason, Michael Caine, or Patrick Stewart, who all performed Nemo with British accents, implying citizenship of the nation he hated most.

Nemo has been portrayed *as* an Indian only three times, and played *by* an Indian only once, by Naseeruddin Shah in *The League of Extraordinary Gentlemen* (*LXG*). The identity of Nemo as Indian outside Europe remains to this day largely unknown, so that one reviewer of *LXG* commented: "I didn't even know [Nemo] was Indian in the books; I thought the choice of Shah was innovative casting" (Heroine Content). It might be assumed that Walt Disney is largely responsible for the accidental Occidentalizing of Nemo, given the popularity of Disney's film version in 1954. However, even the earlier audiences of the 1916 version of *20,000 Leagues* were told that Nemo's Indian heritage as seen in the film was not of Verne's invention, with reviewers assuming "it was the invention of the filmmakers" (Taves 209). Even so, the blame for the cover-up cannot be laid solely at the feet of Richard Fleischer, Stuart Paton, or any other film director. Instead, we must look earlier, to the first English translations of *The Mysterious Island*. Miller and Walter identify culprit of the greatest translation misrepresentation of Nemo as "British boys' author," W.H.G. Kingston:

> "Unfortunately, Kingston's rendering of Nemo's biography is not at all faithful to Verne: the Englishman rewrites, cuts, and just plain fabricates, all in an effort to bring this crucial passage into line with the official British propaganda of his day" (389).

A cross-examination of Kingston's translations with post-colonial (and arguably superior) translations of *The Mysterious Island*, such as Jordan Stump's, demonstrates the extent of Kingston's obfuscating revisions. Stump reveals the motive behind Dakkar's father sending

him to Europe as a secret hope that the education "would prepare him to do battle with those he considered the oppressors of his land" (584). This hope is subverted in Kingston as the deflated aspiration "that by his talents and knowledge he might one day take a leading part in raising his long degraded and heathen country to a level with the nations of Europe" (353). Even though Kingston translates Nemo's heritage correctly, he co-opts the Captain's affections to coincide with those of India's oppressors, the British Empire. An entire paragraph detailing Dakkar's all-consuming "implacable resentment" towards "the one country where he had never consented to set foot, the one nation whose advances he continually spurned" (Stump 584-85) is entirely omitted in Kingston, replaced by "an unquenchable thirst for knowledge," ostensibly to enable Dakkar to become ruler of a people in need of colonial enlightenment. Brian Taves argues that to downplay the intensity of Dakkar's love for India and hatred for Britain, makes for a characterization "hardly the rebel leader Dakkar that Verne imagined" (209).

Kingston also reduces Dakkar's active leadership of the Sepoy rebellion of 1857, stating that the Prince's involvement was "[i]nstigated by princes equally ambitious and less sagacious and more unscrupulous than he was" while the revolutionary Indians are diminished as well, rendered as "facile tools of their designing chiefs" (354). Stump's translation reveals Dakkar as the "soul" of the revolt, "he who had organized the entire uprising" (585). The difference is monumental: in Kingston, Dakkar is a dupe, in Stump he is the author of his own fate.

Thankfully, even Verne's choice of the Prince's homeland, the "then-independent territory of Bundelkund" (*Island* 584), argues against a pliant, ideologically feeble Dakkar. Bundelkhand, as it is correctly spelled, has a regional history of insurgence, possessing geography advantageous to a guerilla revolutionary force. Particular to the Sepoy revolt, Hibbert notes that "[n]either the fighting in Malwa nor in Bengal was as fierce or costly…as the battles in Bundelkhand" (377), while Jain argues forcefully that the rebellion in Bundelkhand was an orchestrated effort:

> The complexities of the uprising of 1857 have to be understood in the context of its specificity in time and space. It was through the unique political experience of that summer of 1857 that the rebellion evolved, gathering different strands of protest *into one single concerted defiance*. (226, italics mine)

This is hardly a case of tractable sycophants dragged into a conflict through convincing arguments on the part of a charismatic, but according to Kingston's translation, misguided few. It solidifies Bundelkhand is the birthplace of Prince Dakkar, raised with "an upbringing that inculcated undying dreams of revenge and redress" (*Island* 585). Bundelkhand supports why Dakkar "organized the entire uprising" (585), acting as Vernotopia's Tantia Topi or Lakshmi Bai.

Alternate histories such as Dakkar's provide a social-psychological foundation underscoring the importance of the individual in history. Karen Hellekson highlights how readers of alternate histories "come away with their own lives sharpened and enriched by the realization that history is something possible for an individual to shape" (255) The alternate history changes the perspective of the reader:

> The psychological effects of reading the alternate history are important; it could have happened otherwise, save for a personal choice. The personal thus becomes the universal, and individuals find themselves making a difference in the context of historical movement. (255)

The alternate histories of steampunk represent a mindset where “horizons are infinite and nothing is fixed in stone…a world larger and better suited to the classic adventure story than ours” (Stirling 151). In such cases, the objective truth value of steampunk’s counterfactual propositions is largely ignored, “in favor of examining their perceived plausibility and meaningfulness to the individual” (Roese & Olson 6). The historical reality of Prince Dakkar is superfluous: what matters is the inspiration one draws from his fictional life, and how that might change the way an individual perceives their own role in current events. In perceiving Nemo as an exemplar however, it must be remembered that Dakkar serves only as prologue to the terrible genius of the master of the *Nautilus*.

Captain Nemo: Master of a Terrible Reality

When Aronnax and his companions ask the commander of the *Nautilus* for his name, he replies, “to you I am nothing but Captain Nemo” (67). As “Captain No One,” his name reflects his withdrawal from society: he is the romantic outcast, the “nameless one.” (Miller and Walter 67). While Emmanuel Mickel interprets this as a refusal to reveal his identity (160), it seems more accurate to say that Nemo *is* his new identity: formed by a desire for revenge against the British Empire.

In his second iteration of identity, Nemo provides a cautionary exemplar as a proto-mad-scientist, a monstrous Maker whose do-it-yourself punk ethos produces the *Nautilus*, a marvelously advanced hybrid of marine exploration vessel and lethal war-machine. As the captain of the *Nautilus*, Nemo straddles the liminal zone of brilliant inventor and misanthropic madman, one moment taking Professor Aronnax on a tour of an underwater forest, the next drugging his “guests” to hide the *Nautilus’* terrorist activities. It is this tension which speaks to a number of technological representations in steampunk texts: simultaneously fascinated to the point of fetish, yet cynical about technology’s capacity to truly improve the human condition.

Steampunk engages in a balancing act between loving and hating its anachronistic technologies. In addition to questioning Europe’s colonial zeitgeist, steampunk has acted as a counterfactual antecedent to unrestrained technophilia. In *Nomad of the Time Streams*, airships are the setting for high-flying adventure, but also the delivery device of the atomic bomb; *Wild Wild West* has the heroic Artemus Gordon and the villainous Dr. Arliss Loveless, both brilliant inventors in their own right; the biological warfare which halts the Martian invasion in the second volume of *The League of Extraordinary Gentlemen* also wipes out numerous Londoners; the advent of the computer a century ahead of time in *The Difference Engine* speeds Western society into dystopia. This juxtaposition of awe and dread is ably demonstrated by the Steam Castle of Katsuhiro Otomo’s *Steamboy*. Originally intended to enlighten and entertain, a modified Steam Castle looms over London with an arsenal of advanced weaponry, while its polarized inventors struggle with the controls, resulting in the retraction of weapons and the emergence of carousel-style animals.

In Jeff Vandermeer’s short story “Fixing Hanover,” the narrative centers on steampunk’s technological ambivalence. The remains of a clockwork automaton wash up on a beach, and it falls to the protagonist, who admits he can “fix anything,” to repair the automaton, dubbed “Hanover” (383). The process of repair is highly self-reflexive of steampunk ideas, containing "several leaps of logic" and decisions "that cannot be explained as rational," (388) which sums up steampunk’s approach to technology. There are other examples of this self-

reflexivity, such as the response to the question, "What does it do?" The inventor-protagonist ruminates, "Why should everything have to have a function?" (391), a possible response to cheap criticism leveled against steampunk makings, deprecating the decorating of a steampunk laptop with brass and antique accessories as pointless. Within the context of the story, the inventor of very functional devices seems to prefer making beautiful pointless items. He has seen the dark side of functionality, the ultimate outworking of infernal devices designed for destruction. Like Nemo, the protagonist of "Fixing Hanover" is a brilliant inventor. Unlike Nemo, he *unwittingly* creates weapons of mass destruction. Yet both come to the same conclusion when faced with the horror of their actions: retreating to remote islands to live out their days. This technological ambivalence is aptly demonstrated in the scene when the automaton is finally fixed, as one of the villagers "backs away from Hanover, as if something monstrous has occurred, even though this is what we wanted" (390).

Similarly, Nemo represents a sublime entity to the reader through Aronnax's perspective: attraction to the man of scientific invention and repulsion from the man of violent intention. It is important in understanding Nemo's second identity that neither be stressed over the other. In *20,000 Leagues*, Nemo is neither unilaterally villain or hero, but complex amalgamation of both.

Portrayals of Nemo lacking intensity or ferocity emasculate the character, as Maertens accuses James Mason's portrayal of doing. Maertens contests that a Nemo entirely-on-the-defensive is a false interpretation of Verne's character and, as with Kingston's butchery of Prince Dakkar's history, removes Nemo's power of agency. Maertens states that "[i]n the novel, Nemo always has the advantage over his human opponents" (214) while the Disney version repeatedly portrays a vulnerable Nemo whose suicide "can only be read as the final failure of the heroic scientist, the culmination of accidents and incapacity, and the defeat of intellect by brute force" (223).

Maertens contrasts Disney's frail and vulnerable Nemo with Verne's seemingly indestructible Captain. In the novel, Nemo chooses to bring Aronnax and his companions on board the *Nautilus*; in the film, a carelessly open hatch leaves the *Nautilus* "open to invasion" while Nemo and his entire crew attend to a burial on the sea floor. In the novel, Nemo rescues Ned Land from the giant squids, in return for Ned's rescue of Nemo from a shark; in the film, Ned saves Nemo without any reprisal: "Scientific heroism is shown to be helpless and in need of rescue by the older ideal of muscular manliness" (220).

In addition to the reductionism of science as power, the Disney film omits the secret language of the *Nautilus'* crew, which Maertens states is a loss of "the sense that Nemo has achieved a discursive superiority over the whole institution of Western science, by, as it were, containing it inside his own language" (217). Maertens does Nemo a slight disservice in this statement—the creation of a language implies more than the mastery of a single discipline—as the Librarian tells Hiro in Neal Stephenson's *Snow Crash*, "In many Creation myths, to name a thing is to create it" (239), which Hiro concludes means that to have the keys to language is to be able to construct the "operating system of society" (240). The construction of a language is to be able to control a perception of reality. By having his crew speak a language of his invention, Nemo does more than bar Aronnax and his companions from comprehending conversation: he imbues his crew with his perception of reality. In *20,000 Leagues*, Nemo focuses this reality through the obsessive lens of retreat from and revenge upon the civilized world.

The Captain of the *Nautilus* is not engaged in aggression for the sake of power, or glory, but for revenge, a continuance of the resistance he started in 1857. Politically-motivated retribution is a key aspect of this second identity: if his "political purpose in seeking warships" becomes a solely a personal quest for reprisal, then there is "no rationale as to why Nemo went to all the trouble of building a submarine in order to seek revenge" (Taves 209). Removal of political motivation renders Nemo a mere caricature of mad scientist:

> "Nemo [is] changed to a monstrous character, a Jekyll and Hyde type with an island fortress full of modern science, from television to…death rays, ready to destroy the world at his vengeful whim" (212).

Verne's Nemo does not possess the genocidal drive of comic-book villains; his quarrel is with the British Empire alone. His attacks indicate both precision of target, as well as restraint of violence. The *Scotia*, a passenger ship for the Cunard line "had not struck, she had *been* struck" (*20,000 Leagues* 9). Was this an accident on Nemo's part, or is his motivation to cripple British communication, seeking to thwart the Cunard line's "systematic improvement of transatlantic travel and communication" (Miller and Walter 7)? He obviously wanted to only damage, not sink the ship. Nemo repeats this restraint with the *Abraham Lincoln*: as with the *Scotia*, Nemo only incapacitates the frigate by breaking the ship's propeller and rudder. The intentional restraint of Nemo towards the *Scotia* and the *Abraham Lincoln* is emphasized by the attack on the ironclad: "The *Nautilus* did not intend to strike the double-decker *at* its waterline, where it was clad in impenetrable iron armor, but below its waterline, *below* the metal carapace" (377-78). All prior restraint is cast off in this encounter: "[c]arried by its great momentum, the *Nautilus* had passed right through the warship like a sailmaker's needle through canvas" (378). Nemo's murderous intent is unquestionable on this occasion, evidenced by Aronnax's description of the damage: "I could see its half-opened hull into which the sea was rushing with a sound of thunder" (378), a stark contrast to the "clearly defined" isosceles triangle-shaped gash in the *Scotia*'*s* hull (9).

Nemo's unprovoked attack on the *Scotia* does not prove fatal as his later attack on the ironclad does—both by rule of choice—demonstrating that Nemo possesses, however questionable, a code of ethics for warfare. Shannon French argues that such a code separates the warrior from murderers, terrorists, or psychopaths. However, she also stresses how "important it is to the warrior to have the conviction that he participated in an honorable endeavor" (1-8). It is an oversimplification to label Nemo solely as a terrorist or madman, randomly "venting his anger in useless destruction … [a] symbol of the alienation of vengeance, the bitterness that eats away and isolates a man's soul from human compassion and justice" (Nickel 52). Indeed, Verne has given readers a complex and rich character, whose ambiguous morality produces vacillating reactions, from horror to attraction and back again. This complexity is what must be maintained, to render Nemo neither as pure evil, nor reluctant aggressor.

In the aftermath of the episode with the ironclad, the Captain obviously rejects the reality he has constructed; convicted by the consequences of his vendetta, he utters the final words overheard by Aronnax: "O Almighty God! Enough! Enough!" These words are not vain entreaties to an abandoned deity, but rather a genuine desire for inner transformation (384). The monstrous nature of the Nemo identity must be discarded in order for the Captain to repent and "regain his identity as a human being" (160). The time has come for the inhuman Nemo to die in the maelstrom, to allow something new to emerge.

The Mystery of the Island: Unseen Samaritan Seeking Redemption

At the close of *20,000 Leagues*, Aronnax wonders at the fate of the *Nautilus* and its Captain, with the hope that "the dispenser of justice will die, and that the man of science will … continue his peaceful studies of the seas" (388). Unbeknownst to Aronnax and Verne's contemporary readers alike, the dispenser of justice had died, while the man of science survived, abandoning his quest for revenge and retreating to Lincoln Island in self-exile. Here, he is "no longer…unreconciled to God and man" (Mickel 496). Nemo's benevolence toward Cyrus Smith and his castaway companions is evidence of a "man at peace with himself, one who has overcome the inner hatred which consumed him" (496). Nemo seeks atonement for his actions as dispenser of justice, calling upon Cyrus Smith and his companions to grant him absolution.

Smith pronounces Nemo as ultimately mistaken, not evil, and gives the premature eulogy that "your name has nothing to fear from the judgement of history" (590). Nemo supposedly goes to his grave with a clear conscience, confident as he is of an afterlife whereupon he may be watching the endeavors of Smith and company "from above" (593). Perhaps Nemo believes he has achieved *samsara*, "a clean escape from the…wheel of birth, death, and rebirth" (Fisher 87), into *moksha*, "the cessation of birth and death" (Moreman 105).

Maertens sees the entire narrative of *20,000 Leagues* as symbolic, with the action building is a "careful, contrapuntal structure to Nemo's ultimate crisis of soul" (214), ending in the episode with the Lofoten maelstrom. Walter James Miller applauds Verne's use of this real, albeit fantastically exaggerated confluence of tidal currents off Norway as a "magnificent symbol [of] classic death-and-rebirth" calling it a "moral maelstrom" (xvii), a downward spiral of the soul, or perhaps even the wheel of Dharma, from which Nemo emerges into a new life. It is noteworthy to consider the motto of the *Nautilus* in light of this discussion of death-and-rebirth. Aronnax translates the motto, "Mobilis in mobili," as "Mobile within the mobile element" (Miller and Walter 56) while other English variations interpret as "*flexible within flux*, *changing with change*, or … *free in a free world*" (56). The "exact facsimile" Aronnax produces for the reader renders the motto's words encircling the letter N within another circle. This seems evocative of the Dharma wheel or wheel of life, which in pre-Buddhist India had two primary meanings: a weapon, and in a derivative sense, "any kind of cyclical motion" (Rinpoche 30). In Hindu belief, the wheel of life involves the cyclical journey of birth, death, and rebirth, a journey the Captain has been engaged in throughout his life.

Nemo's potential religious belief is no digression while investigating this "last" iteration of identity. Nemo's religious affiliations have been conjectured rather comprehensively by Jess Nevins in *Heroes and Monsters: The Unofficial Companion to The League of Extraordinary Gentlemen*. The graphic novel of *The League of Extraordinary Gentlemen* by Alan Moore and Kevin O'Neil was "the first Nemo to be shown wearing Indian clothing" (40). While having the laudable distinction of acting as an effective revelation of Nemo's true heritage, Moore and O'Neil keep the Captain stuck in his second, monstrous identity.

In Moore and O'Neil's vision, Nemo is a combination of Sikh warrior and Hindu devotee to Siva. Nevins reports that "Moore has said in interviews that Nemo must be a Sikh, the most warlike of the Indian peoples" (40). Indeed, Moore and O'Neil portray Nemo as a bloodthirsty madman in the first volume of *The League of Extraordinary Gentlemen*, eschewing his electric guns for an automatic weapon utilizing tiny harpoons as its ammunition with gratuitously gory

results. In this way, Moore reduces both Nemo and the religion of Sikhism to a caricature, with Nemo shouting "Come forward men of England; tell the gods that Nemo sent you" (Moore and O'Neil 140). Moore and O'Neil's Sikh Nemo focuses on the use of the sword in battle, without considering its purpose in initiation rituals symbolizing the combination of both bravery and compassion for Sikhs (418). While Sikh leader Guru Gobind Singh "admonished Sikhs not to feel enmity toward Islam or Hinduism, the religions of the oppressors" (422), Moore's Nemo fires a full sized harpoon at close range through several men he deems "Mohammedan rabble" (2000 17-18). Sikh Gurus "denounced the religious sanction behind birth distinctions and refused to admit that there were any divinely ordained classes and castes among mankind" (Singh 35), going so far as to invite untouchable castes to communal meals, and treating women with greater respect than Indian society. Despite maintains a naval hierarchy upon his submarine vessel, Nemo could hardly be said to be a perpetrator of the Indian caste system. If we understand Sikhism as less of a caricature, the idea of Nemo as Sikh is appealing: not only because Sikh beliefs "have been interpreted as a synthesis of the Hindu and Muslim traditions of northern India" (Fisher 412), which references Nemo's Indian heritage and the Islamic practice of Prince Dakkar's ancestor, Tippu Sultan (Nevins 41), but because of Sikhism's determination to "defend the weak of all religions against tyranny" (Fisher 416).

This attitude of compassion and egalitarianism is displayed further in the Captain's fourth appearance, which I would include as an extension of this third post-*20,000 Leagues* identity, in Verne's *Journey Through the Impossible*. In it, Nemo [1] is still sailing in his *Nautilus*, but proclaiming himself to be "[v]ery devout, and firmer in his beliefs than those whom I see displaying an atheism born of pride or fear" (87). This Nemo decries such atheism, and the civilization it creates:

> Ah what a wonderful civilization it is! And on what an unshakable foundation this modern society rests, a society that steals from the disinherited of this world the hope of a better world to come. But if there is no life anywhere but on earth, if we have no expectation of any future punishment or reward, virtue is a fraud. (88)

In Verne's texts, both *Mysterious Island* and *Journey Through the Impossible* present a gentler, more altruistic Nemo, a possible pattern for the portrayal of Nemo in the made-for-television film, *The Return of Captain Nemo* (1978), where the brooding misanthrope of *20,000 Leagues Under the Sea* was resurrected as a "comic book hero that had more in common with [Irwin] Allen's 1960s movie and television series *Voyage to the Bottom of the Sea*" (Taves 243). While Taves decries this portrayal, a Nemo who is "entirely beneficent… docile, without a hint of anger or misanthropy" (244) seems, all issues of cinematic quality aside, to be truer to the anonymous philanthropist of Lincoln Island than the continuation of the mad scientist or crazed terrorist favored by a number of authors: Philip José Farmer in *The Other Log of Phileas Fogg*, Michael Mallory's "The Secret of the Nautilus," and as discussed, Moore and O'Neill's *League of Extraordinary Gentlemen*.

The Captain's final transformation of identity, at least within Verne's texts, offers a new type for steampunk characters. While steampunk texts are able to ask difficult questions of history and culture through counterfactual scenarios, as is the case in Paul Di Filippo's clever denunciation of racism in "Hottentots", Moorcock's slow burn to the rejection of colonial Empire in *Nomad of the Time Streams*, or Greg Broadmore's brilliantly ironic satire of firearm fetish, and by extension, hunting and warfare in *Doctor Grordbort's Contrapulatronic Dingus*

Directory, the genre is largely bereft of characters that perceive charity or hospitality as the solution. While aficionados applaud steampunk media and culture for being counter-culture to real-world Victorian values such as ethnocentrism, racism, and technophilia, the literature of steampunk provides few exemplars of non-violent solutions to these real-world problems. Granted, it's far more exciting to have heroes overthrow an oppressive regime through force of arms, but if one accepts Verne as one of the inspirations for steampunk(as many do), then the absence of steampunk types imitating this final iteration of Nemo's journey seems remiss. Verne concludes Nemo's character arc in acts of charity and benevolence; why are there not more steampunk heroes who do likewise?

This is not to say there are no attempts to do so. Amidst the ultra-violence and standard plot-by-numbers narrative, the eponymous hero of Al Ewing's *El Sombra* contemplates the efficacy of his mission of vengeance against the Nazis who have occupied his Mexican village:

> He had spent a great deal of time learning everything he needed to know to conduct a one-man war against his enemies – and virtually no time learning how to help his friends…He had amassed an arsenal of guns and ammunition for the people to enact his personal vengeance, but had not bothered himself with bringing them hope." (134-35)

He has learned that the oppressed villager's reticence at joining in his violent resistance is not a matter of cowardice, but rejection of violence as the solution to the Nazi problem. A resistance has been going on, a resistance of education. El Sombra's contemplation that "Things would have to change," (135) mirrors Nemo's cries of "Almighty God, enough, enough!" as the *Nautilus* plunges into the maelstrom. Despite this ethical detour, the hero of *El Sombra* lives in a universe where violent solutions remain the chosen path—at the end of the book, he is clearly journeying towards what are unarguably more blood-soaked adventures.

Nemo, on the other hand, moves through two identities predicated on violence, before concluding that there is no redemptive value in it. He has opposed the law of Empire, become a man of lawlessness, before finally concluding that the best law of all is one which echoes the religious impulse. As has been suggested, steampunk heroes are often outlaws of one stripe or another. They exist at the periphery of law-abiding society, or are thrust from the comfort of a structured, moral and ethical society into the realm of lawlessness and chaos. In general, they are opposed to concepts of Empire and oppressive authoritarianism. Nemo's final identity suggests that the best opposition of Empire is an ethic of compassion and egalitarianism. While steampunk fans claim interest in such an ethic, rejecting colonial hegemonies of race and culture, their literatures do not. I would suggest that for steampunk literature to effectively write against itself, it should look to Nemo's third identity as a paradigm.

Conclusion

The literary manifestation of Steampunk is moving away from homages to adventure tales, turning towards social criticism and commentary, as evidenced by the anti-Empire, anti-pax Americana subtext of Theodore Judson's *Fitzpatrick's War*. Steampunk culture attracts and embraces a diversity of ethnicities, genders, and personalities. It has the potential to be subversively counter-cultural through its playful performativity and light-hearted romanticism.

If it is to be anything more than another fan culture however, it will need to engage in a more serious transformation of identity, taking the same journey its literature has begun to. It must seek a steampunk modification of the world beyond subculture and subgenre, the world beyond fantasy, sci-fi, and comic book conventions. What does the steampunk aesthetic look like when it is applied to the world at large? If Verne's writings are, as many Steampunk adherents claim, source-texts for Steampunk, then Nemo presents a possibility of real-world change to this subculture, and subgenre.

While steampunk culture shares Nemo's rejection of current society, the transformation of self in fictional identity does not necessarily result in actual change. Like the Steampunk camera which is only an antique shell with a digital camera inside, the aesthetic rejection of the modern is merely a covering of the eyes, a retreat with the head in the sand, or in Nemo's case, beneath the waves, unless it finds some means to go further. Unfortunately, the alternatives steampunk suggests are currently whimsical, aesthetic alterations to existing technologies: "building a blazing-fast, modern computer into antique fine cabinetry" (Datamancer). While steampunk rejects dystopic elements of the "real world" and suggests more hopeful alternatives, the question remains: are these significant changes, or just another fan culture interested in costume and performance?

In tracing Captain Nemo's fictional life it is necessary to recollect how that the quest began in revolution against oppressive Imperialism, was fueled by a monstrous sense of political agency, but concluded in anonymous philanthropy toward complete strangers, leading Cyrus Smith to conclude that "However posterity might judge the course of what could be called his extra-human existence, Prince Dakkar would forever remain engraved in the minds of men, a unique and unparalleled figure in human history" (*Island* 595). Nemo's three transformations speak to the potential of not being stuck in a single iteration: there are alternatives to rebellion or revenge. For Nemo, those alternatives are redemption, and in some sense, reconciliation. Nemo moves through each of these spaces, fully inhabiting them, and shedding them like outgrown clothing, demonstrating that identity is not a singularity, and that the greatest resistance of oppression, is not retaliation, but compassion.

NOTES

1. In *Journey Through the Impossible*, Nemo is one of three disguises adopted by Volsius, a character who acts as a spiritual conscience for the hero of the play. Nevertheless, since Volsius uses Nemo's infamous line, "I am not what you call a civilized man" (87), the reader assumes that his sham Nemo closely resembles the real Nemo. *Journey Through the Impossible* has an oneiric tone to it at times, with Volsius nearly becoming the famous characters he clothes himself in, to act as the tale's spiritual guide and guardian.

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Mike Perschon (mikeperschon@shaw.ca) is a graduate student working on his PhD at the University of Alberta, as well as an adjunct faculty member of the English departments at both King's University College and Grant Macewan University. He can be found online at www.gotthammer.com.


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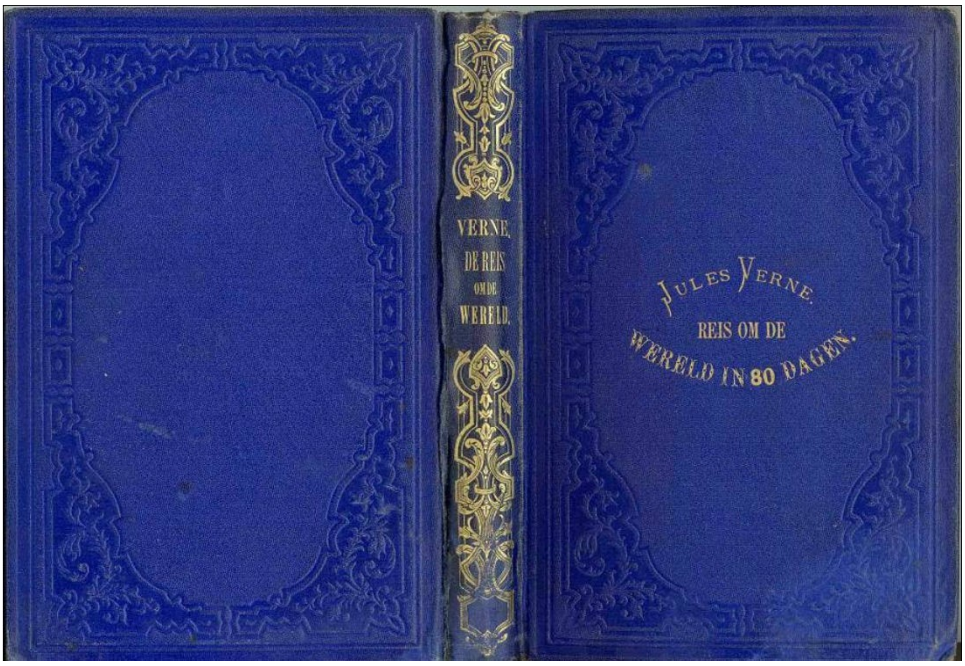
Souvenirs d'enfance et autres textes de Jules Verne

Dave Bonte

Jules Verne. Jeugdherinneringen en andere teksten. Jules Verne Genootschap, 2008, 210p.

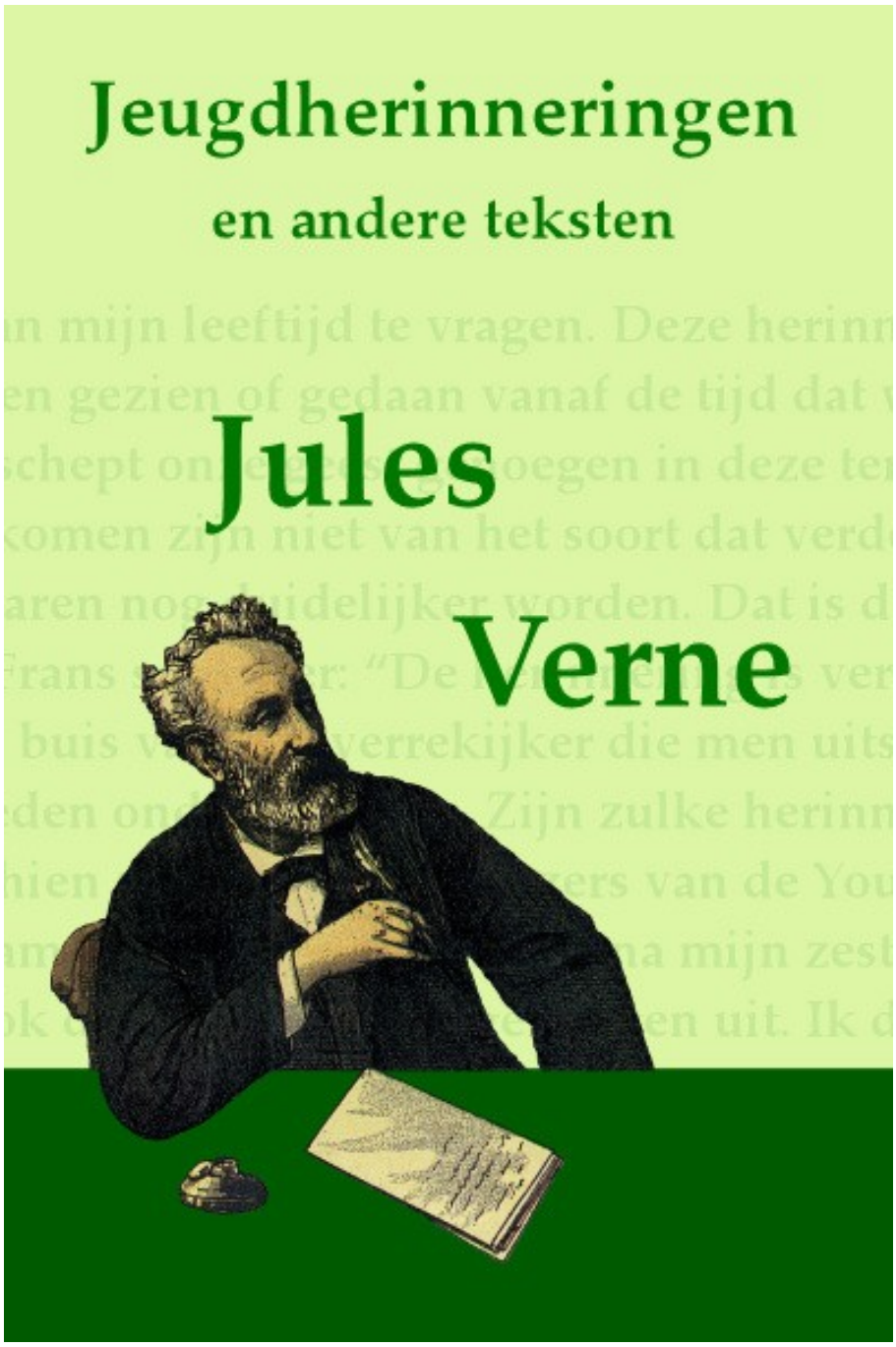
Les Pays-Bas ont toujours été une terre propice à la réception de l'œuvre de Jules Verne. À partir de l'année 1875, l'éditeur Pieter Van Santen (1838-1877) a lancé les premières traductions des *Voyages Extraordinaires* sur le marché néerlandais. [1] C'est le début d'une série qui comportera en tout 51 titres et qui est communément connue sous le nom des « reliures bleues » (cf. illustration). Chez Van Santen, dix tomes ont paru en moins de deux ans avant que Jacobus G. Robbers (1838-1925) ne prenne le relais pour y ajouter 31 autres traductions entre 1877 et 1887. Ensuite, les droits de publication ont été obtenus par la maison d'édition Elsevier qui a continué énergiquement à compléter la série. Une dispute avec Hetzel fils sur les droits d'image a néanmoins mis fin à la traduction de nouveaux romans. [2] Elsevier a continué bon gré, mal gré à soigner des rééditions tandis que plusieurs autres éditeurs se sont occupés ultérieurement de la publication des romans manquants de la série ainsi que des publications posthumes. Cette riche histoire éditoriale fait qu'aujourd'hui il ne reste plus que quatre titres des Voyages extraordinaires non traduits en néerlandais. [3]

Si les *Voyages Extraordinaires*, tout comme les nouvelles parues chez Hetzel, ont connu une large diffusion, il n'en est pas ainsi des autres textes de Jules Verne, restés majoritairement inconnus aux Pays-Bas. C'est dans le souci de combler cette lacune qu'est né le livre *Souvenirs d'enfance et autres textes de Jules Verne* [4] de Garmt de Vries-Uiterweerd (cf. illustration). Le président de la Société Jules Verne des Pays-Bas y rassemble plusieurs textes qui n'ont pas encore de traduction dans la langue de Vondel.



Comme le titre du recueil laisse deviner, on y retrouve avant tout les Souvenirs d'enfance et de jeunesse (1891), le seul document autobiographique détaillé écrit par Verne. L'ouvrage comporte par la suite quelques morceaux de poésie tirés des carnets retrouvés à Nantes à la fin des années 80 avec des poèmes du jeune Verne [5] (il s'agit notamment de : « Hésitation » ; « Acrostiche » ; « La Vapeur » ; « La Fille de l'air » ; « Ma douce amante, pourquoi » ; « A Herminie » ; « A la potence » ; « Monsieur *** a beaucoup d'enfants »). Ensuite il y a l'opéra-bouffe Monsieur de Chimpanzé (1857) et deux essais de Verne, l'un portant le titre « A propos du Géant » (1863), l'autre sur les méridiens et le calendrier, écrit en 1873 et prononcé lors d'une conférence de la Société de Géographie de Paris. Le lecteur néerlandophone pourra aussi découvrir l'article « Jules Verne à Philippeville » (1884) sur la visite de l'auteur en Afrique du Nord, son discours prononcé lors de l'inauguration du Cirque Municipal d'Amiens (1889) ou encore l'interview de R.H. Sherard avec Verne, paru en janvier 1894 dans McClure's Magazine. Finalement, le volume contient les cinq premiers chapitres de *Voyage d'études* (1904), roman inachevé dans lequel l'espéranto occupe une place privilégiée.

Bref, on a affaire à des documents variés et soigneusement traduits, soit par de Vries lui-même, soit par un de ses collaborateurs. Tous les textes sont en outre accompagnés d'une introduction écrite par un spécialiste (international) dans la matière, comme par exemple William Butcher pour les *Souvenirs d'enfance et de jeunesse*, Volker Dehs pour le texte sur le *Géant* ou encore Lionel Dupuy pour l'essai sur les méridiens et le calendrier. La mise en page de l'ouvrage est agréable, même si la qualité de certaines illustrations laisse parfois à désirer. Passons néanmoins sous silence ce petit défaut et louons Monsieur de Vries pour cette nouvelle initiative qui contribuera à une plus grande diffusion de l'œuvre vernienne aux Pays-Bas et en Belgique !



NOTES

1. Avant cette date d'autres éditeurs avaient déjà publié, de manière plutôt disparate, quelques traductions des premières œuvres de Verne. Van Santen a été le premier à oser publier en série les *Voyages Extraordinaires*, pourvus de leurs illustrations originales (voir : Roest, Frits et Waij, Kees, *Jules Verne bibliografie*, Tweede druk, Jules Verne Genootschap, 2007).

2. Waij, Kees, *Een stukje negentiende-eeuwse uitgeversgeschiedenis*, in: Luijters, Guus, *In de ban van Jules Verne*, Soesterberg, Aspekt, 2005, p. 168.
3. Il s'agit de *Mistress Branican* (1891), *Seconde Patrie* (1900), *Un secret de Wilhelm Storitz* (1901) et *Bourses de voyage* (1903). En mars 2020, une première traduction de *Mistress Branican*, de la main de Gerrit Boers, sera publiée par la Société Jules Verne des Pays-Bas.
4. Titre original : Verne, Jules, *Jeugdherinneringen en andere teksten*, Jules Verne Genootschap, 2008, 210p.
5. Verne, Jules, *Poésies inédites. Manuscrit inédit appartenant à la Ville de Nantes*, Paris, Le Cherche Midi, 1989.

Dave Bonte (davebonte@scarlet.be) est membre du conseil d'administration de la Société Jules Verne des Pays-Bas et rédacteur en chef de *Verniaan*, la revue officielle de cette même société. Ces dernières années il a, entre autre, traduit *Voyage d'études* et la pièce de théâtre *Voyage à travers l'impossible*. Amateur de Jules Verne, il est aussi un fervent lecteur de science fiction et s'intéresse particulièrement à l'utopie. Actuellement, il travaille comme enseignant de français et d'italien dans une école de langues en Flandre-Orientale (Belgique).

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Jules Verne et Jules Hetzel : co-auteurs ? — un compte-rendu de la thèse de Masataka Ishibashi

Samuel Sadaune

Masataka Ishibashi. *Description de la Terre comme projet éditorial. Voyages extraordinaires de Jules Verne et système de l'éditeur Hetzel*. Ecole doctorale « Pratiques et théories du sens », Université Paris VII – Vincennes – Saint-Denis. Doctorat de littérature et civilisation française. 2007, 372 p.

Qui est le véritable auteur des V*oyages extraordinaires* ? Jules Verne ou Jules Hetzel ? Une telle question, qui frise le crime de lèse-majesté, peut paraître totalement absurde. Pourtant, elle a été posée récemment par un jeune chercheur, ce qui lui a valu le titre de docteur.

En réalité, Masataka Ishibashi ne pose pas ainsi cette question. Jules Verne est bien l'auteur des romans qui composent les *Voyages extraordinaires*. En revanche, en est-il le seul auteur ? Quel degré d'importance a eu l'intervention de son éditeur dans la création romanesque ? Et Hetzel n'est-il pas le créateur du concept global des *Voyages*, et de ce fait, indirectement, le coauteur des romans qui composent le cycle romanesque ? Autant de questions que le chercheur a posées et auxquelles il a tenté de répondre tout au long de sa thèse intitulée : *Description de la Terre comme projet éditorial. Voyages extraordinaires de Jules Verne et système de l'éditeur Hetzel*. [1]

Cette thèse de plus de 350 pages, jamais publiée, datant déjà de plus de deux ans, a été injustement ignorée d'autant plus que le jury lui a assigné la meilleure mention. Ce compte-rendu tardif a pour but de la faire connaître, d'inciter les chercheurs verniens à la lire et ce sera ensuite à eux de juger.

L'auteur

Masataka Ishibashi est l'un des quatre fondateurs de la Société Japonaise Vernienne qui a vu le jour en 2006 [2]. Il est le rédacteur de la publication annuelle de cette Société, Excelsior!, où sont proposés des textes de haute qualité. Excelsior! entre en mars 2010 dans sa 4e année. Masataka Ishibashi a prononcé une intervention à l'Ecole Centrale de Nantes en 2005, lors d'un colloque consacré à « Jules Verne, les Machines et les Sciences » (son article s'intitule : « Les valeur littéraires d'un objet technique : le ballon chez Verne et

quelques autres écrivains » [3]). Il est également membre de la Société pour la promotion des sciences. Surtout, il a fait partie du comité d'organisation d'un colloque sur Michel Butor qui a eu lieu en septembre 2008 à l'Université Rikkyo (Japon). Masataka Ishibashi vient de traduire en japonais les romans Autour de la Lune et Sans dessus dessous.

La thèse

Cette thèse repose sur l'idée suivante, fort audacieuse et qui peut à juste titre en faire sursauter plus d'un : Hetzel serait « pour Verne un quasi-coauteur ». Dans son introduction, M. Ishibashi annonce de plus le paradoxe suivant : pour que le « système », à partir duquel le processus éditorial des *Voyages extraordinaires* fonctionne, puisse perdurer, il est justement indispensable qu'Hetzel ne soit pas reconnu comme coauteur. D'où cette remarque :

> Ainsi le « système » se charge de réaliser ce double paradoxe : plus Verne s'annihile comme auteur en acceptant largement les interventions de l'éditeur, plus il devient auteur ; plus Hetzel intervient comme auteur, plus il devient éditeur. » (*Thèse,* p. 8)

M. Ishibashi se propose donc de nous montrer le fonctionnement de ce système et de nous démontrer qu'Hetzel est le coauteur de Verne. Mais il a un autre but : expliquer comment le cycle romanesque se transforme en une description totalisante de la Terre.

La première partie de la thèse s'intitule « Comment ils ont écrit certains de ses livres ». C'est de loin la plus audacieuse des deux. Le premier chapitre détaille la carrière d'Hetzel de 1836 jusqu'à 1864, mais aussi examine certaines caractéristiques de l'édition à l'âge romantique : dès ce chapitre, M. Ishibashi insiste sur le caractère interventionniste, non seulement d'Hetzel, mais de nombre d'éditeurs, lesquels, bien entendu, cherchent à minimiser ces interventions aux yeux du public (sont cités notamment les rapports de Goethe avec Cotta ou de Hesse avec Fischer). Il rappelle également le fait qu'Hetzel est lui-même auteur sous le pseudonyme de Stahl et décrit la façon dont l'éditeur crée, organise et intervient dans l'écriture des *Scènes de la vie privée et publique des animaux*. Le chapitre II s'intéresse au mécanisme de la collaboration Verne-Hetzel et relate de façon détaillée le système des livraisons, celui des différents types d'édition : d'abord la prépublication sous forme d'un feuilleton dans la revue mensuelle créée par Hetzel : le *Magasin d'éducation et de récréation* ; puis l'édition en in-18 petit format et sans illustration ; enfin, l'édition in-8° grand format avec les illustrations (celle qui intéresse tant bien des collectionneurs). Dans ce chapitre, l'intervention d'Hetzel dans la réalisation des ouvrages est tout autant mise en valeur que l'intervention de Verne dans le système éditorial :

> On tend à recourir trop facilement au titre « éducation et récréation » pour décrire les romans de Jules Verne. Mais c'est plutôt Verne qui a révélé la portée de ce titre, tout comme il a révélé Hetzel à lui-même. (*Thèse,* p. 104)

Il n'empêche qu'Hetzel parvient à mettre en place un système qui a pour première raison d'être une unité de forme, de longueur, de thème, voire de style pour l'ensemble des romans.

Enfin, le chapitre III de cette première partie nous fait entrer dans les coulisses des « Voyages extraordinaires ». S'appuyant sur la correspondance entre Hetzel et Verne, M. Ishibashi tente de démontrer que, peu à peu, l'éditeur intervient de plus en plus dans la mise en place de l'intrigue, s'assurant notamment que les éléments « verniens » soient présents dans les romans. Il s'appuie sur les nombreuses variantes entre les manuscrits et les différentes publications, notamment sur de nombreux passages supprimés ou modifiés d'*Hatteras,* de *Vingt mille lieues sous les mers* ou encore des *Enfants du capitaine Grant,* déjà relevés notamment par William Butcher ou Olivier Dumas. S'agissant de *Michel Strogoff,* Hetzel aurait pu donner des recommandations à Verne avant même que celui-ci ait écrit la moindre ligne.

La seconde partie de la thèse s'intitule « Terre et roman ». Elle est plus classique dans son approche, mais non moins intéressante. Dans le quatrième chapitre, cependant, on revient quelque peu sur le thème abordé dans la première partie en constatant à quel point les « obsessions personnelles » de Verne sont souvent systématiquement supprimées par Hetzel : il s'arrête sur plusieurs romans, terminant par *Les Indes noires* pour lesquelles Hetzel aurait au minimum réécrit certains passages. Dans le cinquième chapitre, il décrit la manière dont le cycle se globalise et a pour ambition de montrer un « tout » : la Terre entière. Alors que les premiers romans du cycle montraient un monde à part (le centre de la Terre, le pôle Nord, la Lune…), peu à peu chaque « Voyage » va présenter simplement une partie d'un tout plus vaste qui englobe l'ensemble du cycle. Sur ce point, c'est à nouveau Hetzel qui est l'organisateur, l'initiateur et, d'une certaine façon, le coauteur. Le sixième chapitre s'arrête sur trois titres : *Cinq semaines en ballon, Les Enfants du capitaine Grant* et *Mathias Sandorf,* pour appuyer son argumentation

Parmi la documentionqu'a fournie M. Ishibashi, deux directions de recherche sont significatives. La première est sa connaissance profonde de la correspondance entre Verne et Hetzel, souvent citée en bas de page de la thèse. Le lecteur n'est pas obligé de tirer les mêmes conclusions que lui de certaines remarques de l'éditeur, mais la documentation sur laquelle le chercheur s'appuie est fournie.

Plus intéressant encore est la deuxième : les manuscrits de Jules Verne. En appendice, il reproduit de nombreux passages qui ont été remaniés par la suite. Ainsi, *L'Archipel en feu* (roman peu cité par les chercheurs), le (désormais) célèbre chapitre XIII des *Indes Noires* (intitulé "Une métropole de l'avenir") et de nombreux passages de *Mathias Sandorf* (qui n'est pas non plus l'ouvrage le plus cité de la recherche vernienne). Ces extraits et bien d'autres dont cette thèse fourmille dénotent le fait que ce jeune chercheur a su s'exercer à la lecture des manuscrits et de l'écriture de Jules Verne, à une époque où ceux-ci n'étaient pas encore numérisés et rendus disponibles en ligne par la médiathèque de Nantes.

Même si la thèse ainsi présentée peut sans doute choquer au premier abord, M. Ishibashi présente des éléments qui méritent l'examen et il nous montre l'histoire de la mise en œuvre du cycle sous un éclairage intéressant. C'est un travail qui représente une étape essentielle dans l'étude des rapports Verne-Hetzel et qui doit être recommandée à tout chercheur vernien.

NOTES

1. ISHIBASHI, Masataka, *Description de la Terre comme projet éditorial. Voyages extraordinaires de Jules Verne et système de l'éditeur Hetzel*, Ecole doctorale « Pratiques et théories du sens », Université Paris VII – Vincennes – Saint-Denis. Doctorat de littérature et civilisation française. Thèse dirigée par le professeur Claude Mouchard et soutenue le 6 avril 2007 devant un jury composée de M. Philippe Dufour, Mlle Marie-Eve Thérenty et M. Christophe Pradeau.
2. *La Feuille de Jules* n° 4, janvier 2009, bulletin de liaison du CIJV, éd. L. Sudret et M. Douchain, p. 2.
3. ISHIBASHI, Masataka, « Les valeurs littéraires d'un objet technique : le ballon chez Verne et quelques autres écrivains », in *Jules Verne. Les Machines et la Science,* Actes du Colloque international de l'Ecole centrale de Nantes, éd. P. Mustière et M. Fabre, Nantes : Coiffard, 2005, pp. 150-158.

Samuel Sadaune (samuel.sadaune@wanadoo.fr)est écrivain. Ses livres sont publiés principalement aux éditions Ouest-France et aux éditions Millefeuilles. Il est membre de la Société Jules Verne à Paris et du Centre international Jules Verne à Amiens. Pour le compte de ce dernier, il a participé à l'organisation et animé plusieurs colloques, notamment le Mondial Jules Verne 2005, les Rencontres internationales 2007 spécial Editions Jules Verne en ligne et les Rencontres internationales 2009 spécial Maître Zacharius. Il a rédigé une trentaine d'articles sur Jules Verne et a plusieurs fois coordonné la *Revue Jules Verne* du CIJV. Deux ouvrages publiés chez Ouest-France concernent Jules Verne : l'édition des *Contes et nouvelles* de Jules Verne (Ouest-France, 2003) et *Les Soixante Voyages extraordinaires de Jules Verne* (Ouest-France, 2005). Enfin, il est l'auteur d'une thèse, soutenue en 2001, ayant pour titre : *L'hygiène dans l'œuvre de Jules Verne.*

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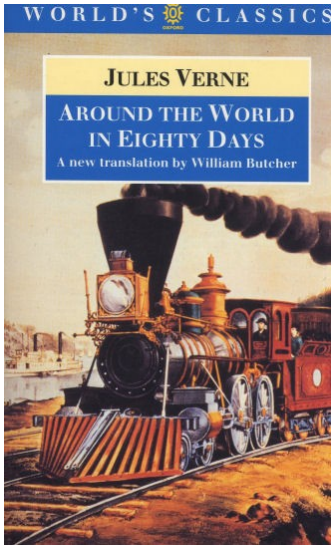
Le Tour du monde en quatre-vingts jours — édition de William Butcher

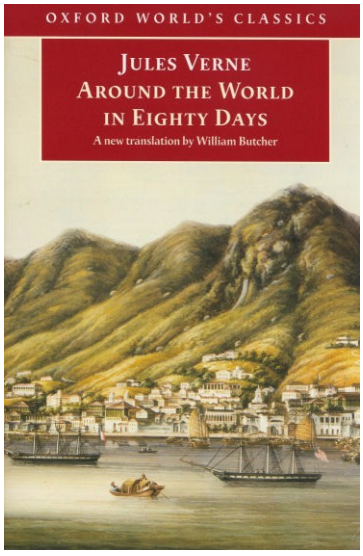
Jean-Pierre Picot

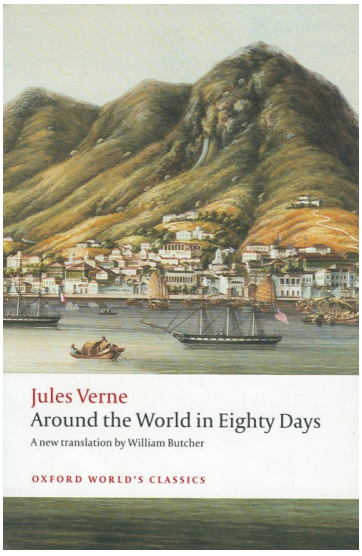
Jules Verne. *Le Tour du monde en quatre-vingts jours*. Paris, Gallimard (coll. *Folio*, no 4934). Edition présentée, établie et annotée par William Butcher. 2009, 416 p.

La parution de cet ouvrage dans la collection *Folio classique* chez Gallimard est un événement. Voici la première fois que le récit le plus universellement célèbre de Jules Verne paraît sous la forme d'une véritable édition critique, établie et annotée par un vernien « de l'étranger », et de surcroît en une collection de poche.

William Butcher ne s'est pas contenté ici de traduire en langue française l'édition dont il avait accompagné, voilà une dizaine d'années, sa traduction en anglais du *Tour du monde* : c'est tout un travail nouveau et inédit que le lecteur francophone a ainsi à sa disposition, et c'est aussi un *Tour du monde* nouveau. [1]







Les trois éditions (1995, 1999 et 2008) du Tour du monde en anglais traduit et annoté par William Butcher

Il arrive un moment où, après des décennies de lectures de Jules Verne, et des décennies de lectures critiques sur Jules Verne, on est parfois tenté de céder à un certain fatalisme, et de croire qu'il n'y a plus grand-chose à dire sur notre auteur. Et puis, chacun de nous, universitaire, amateur, chercheur, a sûrement rencontré une ou deux fois dans sa vie une personne ne se gênant pas d'affirmer que, après la parution de sa thèse, ou de sa biographie, ou de sa « somme », il n'y avait plus rien à trouver de nouveau !

L'édition de William Butcher [2] apparaît donc non seulement comme un événement, elle est aussi une cure de jouvence : voici un Jules Verne tout neuf, et voici un *Tour du monde* débarrassé des mythes et légendes pour analphabètes, débarrassé des agressions perpétrées contre lui par les psychanalystes, les occultistes, les « astrologistes », les structuralistes, les néoscientistes, les postpavlovistes et tant d'autres spécialistes en –istes qui oublient tout simplement que Jules Verne est un écrivain, et un *vrai*.

C'est donc en écrivain qu'il faut le traiter, et non en prétexte à produire des sous-produits comme des timbres-poste ou des assiettes décorées. Le traiter en écrivain suppose que l'on se reporte aux manuscrits s'ils existent, que l'on compare les différentes éditions, que l'on relève et que l'on corrige les coquilles, errata et orthographes fautives ; que l'on cherche les

sources et les références explicites et implicites ; que l'on interroge le va-et-vient entre auteur, éditeur, illustrateur d'où le texte revient modifié, embelli *ou* mutilé ; que les encyclopédies, revues, récits de voyages, almanachs et journaux soient passés au crible afin de repérer quelle part ils ont eu — admiration, imitation, *innutrition* comme disait du Bellay dans sa *Défense et illustration* — dans la genèse du texte [3]. Il faut aussi s'interroger sur le statut des « produits dérivés », non pas les foulards Jules Verne ou les stylos-billes Phileas Fogg, mais bien d'éventuelles *adaptations*, novélisations, simplifications *ad usum populi* : et là, il se trouve que pour le *Tour du monde*, il y a deux pièces de théâtre, l'une avant, l'autre après.

Il faut avoir l'élégance de ne pas se vouloir exhaustif, et d'ouvrir des pistes, de signaler des hypothèses, et de laisser du travail pour *les autres*, par exemple pour les étudiants qui, lisant par hasard ou par choix ce petit Livre de poche à la couverture superbement évocatrice recevront le choc en plein intellect, et accueilleront la révélation dont beaucoup s'obstinent encore à douter : Verne est un écrivain, c'est une Californie, c'est un Klondyke, et il faut que les chercheurs d'or s'y précipitent pour creuser et extraire les pépites d'or qui y sont cachées. Et, ajouterons-nous avec perfidie, il y a au moins soixante volumes *en plus* à prospecter.

Le Tour du monde en quatre-vingts jours est un chef-d'œuvre à redécouvrir. Voici une œuvre tout en os et tout en muscles, sans un atome de graisse : pas une phrase inutile, pas une digression superfétatoire, pas d'enlisements descriptifs : c'est un mouvement à l'état pur, c'est un *work in progress* impeccable où l'on chercherait en vain la moindre « prolepse », *id est* la moindre révélation anticipée. C'est le récit du *hic et nunc* absolu, c'est le récit du *projet* au sens étymologique, c'est le récit de la dimension héraclitéenne de l'individu mise à l'épreuve. Comprenez : je suis ici maintenant, il faut qu'au plus vite cet ici et ce maintenant soient ailleurs et le plus loin devant possible, et je n'existe que parce que je suis une trajectoire. On verra bien une fois revenus à Savile Row…

Mais nous n'en sommes pas encore partis. Les pages 7 à 26 sont occupées par une *Préface* de William Butcher qui, d'emblée, donne le ton : « Jules Verne n'a plus besoin d'être présenté. […] Or, malgré ces progrès, le roman classique sans doute le plus populaire de tous les temps reste encore inconnu ». C'est à une exploration toute scientifique de ce roman que nous convient les premières lignes, et l'on aura pu voir, déjà, p. 6, certains des véhicules qui permettront cette exploration : une *Liste des abréviations*, où l'on remarque, outre les BSJV, Gallica, MdF ou MER obligés [4], un TM1 et un TM2 énigmatiques à première vue. Mais on l'a déjà compris : il s'agit du « premier manuscrit » et du « second manuscrit » du roman.

Et voilà en partie pourquoi cet ouvrage nous donne un sentiment de nouveauté et de dépaysement des plus *JulesVernistes* : sa lecture est fondée sur une approche génétique (avec l'hommage qu'il mérite à Philippe Scheinhardt [5]) et sur une approche encyclopédique : William, ou plutôt Bill, *a lu tous les livres*, à l'instar du moi de Stéphane Mallarmé, mais il n'en est pas triste pour autant : bien au contraire, il va deviner, de TM1 à TM2, quels mystères de la chair — car cette Aouda, vraiment, c'est une belle femme ! — recèlent les non-dits de Jules Verne, si aisément amateur du crypto-érotique.

Donc, la Préface est *neuve*, et nous invite à une lecture *neuve*. Édouard Cadol est réhabilité, et d'Ennery remis à sa place ; le *TM* en tant que problème de topologie expérimentale est exposé avec clarté : linéarité, loxodromie, homéomorphie espace/temps. Et puis, si l'on n'avait pas compris, Passepartout a un faible pour Aouda – et ne serait-il pas

tenté par le voyeurisme, ici ou là ? Et puis, en véritable universitaire qu'il est, Bill repère à merveille en quoi la « psychologie » mise en œuvre dans le *TM* révèle une inattendue convergence de Verne et de Zola, au-delà de celle repérée par Jacques Noiray à propos des machines [6]. Phileas est-il une mécanique ? Fonctionne-t-il à l'électricité ? Est-ce qu'il pense ? A-t-il un inconscient qui le mène par le bout du… par le bout du quoi, au juste ? Si vous vous souvenez avoir été diversement impressionné par l'éblouissante parabole satirico-politique de Stanley Kubrick, *A Clockwork Orange* [7], vous ne trouvez pas que les Longs-Nez du cirque Batulcar chez qui Passepartout s'engage le temps de tout faire dégringoler, sont affublés d'un accoutrement qui annonce curieusement celui l'Alec et des trois malfrats qui l'assistent ?

Mais il y a plus : c'est que William Butcher est l'un des personnages du *Tour du monde*, et comme tel il en connaît le secret. Écossais de Hong Kong, il y vit et y travaille depuis longtemps ; plus longtemps qu'il ne l'avoue, peut-être, car comme les vrais verniens, Bill ne vieillit pas et reste éternellement adolescent : et c'est pourquoi, à défaut d'être l'un des deux témoins, il a très probablement assisté au mariage civil de Fogg et d'Aouda, lequel, d'après le *TM*, a eu lieu… à l'endroit précis où la montée se mue en descente, où le départ se mue en retour, de Londres à Londres : à Hong Kong, et c'est dans les manuscrits ; et Verne ou bien n'a pas retenu cette version, ou bien, pour lui-même, a tenu caché ce mariage « de convenance » en supposant qu'il se trouverait peut-être quelque lecteur sagace pour lire entre les lignes des ch. XVIII-XX. La morale est sauve… et l'on peut commencer la lecture du roman.

Après avoir lu l'éclairante préface de Bill Butcher, on est tout prêt à croire que c'est lui l'auteur véritable du *Tour du monde*. Et l'on arrive à la dernière ligne, p. 335 : « En vérité, ne ferait-on pas, pour moins que cela, le Tour du monde ? », superbe mot de la fin, et si dramaturgique dans sa tonalité « baisser de rideau ».

Mais il nous reste à faire le tour du dossier qui vient alors, de la p. 341 à la p. 412, même si, en cours de lecture, l'on n'aura pas manqué de se reporter régulièrement aux Notes, p. 375 à 404. Et ce dossier réserve aussi beaucoup de nouveautés : une chronologie de la vie de Verne, puis, dans la Notice, une chronologie de l'œuvre, puis la révélation d'une ébauche de 500 mots, « Un Anglais de haute distinction », suivie par les examens des sources encyclopédiques, le relevé des diverses coquilles infligées au texte vernien par les éditions successives, le traditionnel dossier bibliographique, *etc.* : en somme, en un simple livre de poche, une édition universitaire rigoureuse et exigeante, qui nous offre de plus nombre d'extraits des manuscrits raturés ou non ; enfin, l'Index des noms propres sans lequel le lecteur de bonne foi se retrouverait perdu en pleine jungle.

D'où vient ce sentiment de nouveauté ? D'abord, de la Chronologie qui résume la vie de Verne d'une manière inattendue, alimentée qu'elle est par le travail de biographie accompli précédemment par Bill Butcher. Les légendes s'évanouissent (« 1839. […] Le garçon fait une fugue, peut-être pour chercher le capitaine Sambin, à bord de l'*Octavie*, long-courrier à destination des "Indes" ». Ouf ! C'en est fini de la *Coralie* et du collier de corail !), des vérités sortent du puits (« 1855. […] Fréquente des maisons de passe ». « 1828. […] Prudent Allotte de la Fuÿe, négrier célibataire »). Il y a aussi une vigoureuse mise au point quant aux interférences roman/pièce de théâtre, qui conclut à la nécessité de reconnaître la part de Cadol dans la genèse du récit ; et puis il y a les notes, qui à elles seules méritent l'acquisition de ce Folio classique n° 4934 : non, Bill n'a pas recopié et paraphrasé les précédentes

éditions du *TM*, non, il a tout repris à zéro ; et les 30 pages de notes (jusqu'à 5 notes par page du récit) se muent à elles seules *en texte vernien : érudites, encyclopédiques, exhaustives parfois et toujours instructives* : que l'on soit en Indes, à Hong Kong (c'est évident), ou chez les Mormons, tout est élucidé, expliqué et décrypté, mais en laissant intact le désir du lecteur d'aller voir par lui-même : allusions à Stendhal, à Hugo, à Lesage ; épopée sanskrite, nids d'hirondelles, traités géographiques de Strabon, d'Arrien ou d'Artémidore à propos de la mer Rouge ; et puis Bill Butcher ne cherche pas à masquer ses incertitudes d'un quelconque argument d'autorité : p. 169, par exemple, pourquoi les Chinois âgés ont-ils le droit de s'habiller en jaune, eux qui le sont déjà ? Trois hypothèses sont énoncées, aucune n'est privilégiée.

À cette édition pour amateur désargenté, il ne manque même pas les illustrations, et l'on retrouve avec bonheur Passepartout à dos d'éléphant, Passepartout en albatros à long nez, Aouda conduite au sacrifice, Aouda au bras de Phileas, et Fix qui a déjà la physionomie d'un Aristobulus Ursiclos (cf. *Le Rayon vert*).

Et lorsque l'on arrive au bout de ce *Tour du monde* en 412 pages, on n'a qu'une envie : c'est de repartir, et de relire le livre intégralement depuis le début : Bill nous a transformés en Sindbad le Marin, pour qui chaque retour à Bagdad est un deuil, chaque nouveau départ de Bagdad une résurrection.

Un événement, donc. Certains verniens du type utopistes bienheureux ont lancé voilà déjà quelques années le projet, pharaonesque s'il en est, d'un « corpus vernien » intégral. Je leur souhaite bon courage. Cette édition du *TM* par Bill Butcher apparaît d'emblée comme le modèle que se devrait de suivre la publication de chaque volume : il n'y a donc qu'à faire la même chose, multipliée par 60 ou 70. Le seul problème sera de trouver 60 ou 70 Bill Butcher, et cela, ce sera le plus difficile !

NOTES

1. Jules Verne, *Around the World in Eighty Days.* New York, Oxford University Press, *World's Classics*, 1995, 252 p.

Jules Verne, *Around the World in Eighty Days.* New York, Oxford University Press, *World's Classics*, 1999, 258 p.

Jules Verne, *Around the World in Eighty Days.* New York, Oxford University Press, *World's Classics*, 2008, 248 p.

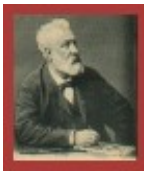
2. Jules Verne, L*e Tour du monde en quatre-vingts jours*. Edition de William Butcher, Illustrations par de Neuville et L. Benett. Paris, Collection *folio classique* no 4934, octobre 2009, 414 p., ISBN : 978-2-07-035775-8.

3. Joachim du Bellay, poète français du seizième siècle, appartenant au groupe dit de la Pleïade, a publié en 1649 un manifeste intitulé *Deffense* (sic) *et illustration de la Langue française* dans lequel il établit un programme permettant de renouveler la poésie et la langue nationales, à partir de la pratique des écrivains grecs et latins. Trois étapes s'imposent au poète : 1) la traduction en français

de ces écrivains ; 2) l'imitation des poèmes de langue française des dits écrivains ; l'innutrition, c'est-à-dire l'imprégnation de l'intellect et de l'imaginaire du poète par les modes de pensée et de créations des modèles choisis. Chacun a pu faire cette expérience : lorsque l'on a passé des années à s'imprégner de l'oeuvre d'un écrivain, on finit par deviner ses processus intérieurs de création.

4. BSJV : *Bulletin de la Société Jules Verne*, Gallica est le site de la Bibliothèque nationale (BN) française, MdF : *Musée des familles*, MÉR : *Magasin d'éducation et de recréation*.
5. Philippe Scheinhardt, *Jules Verne. Génétique et poétique (1867-1877)*, thèse de doctorat, Sorbonne nouvelle-Paris III, 2005.
6. Jacques Noiray, *Le romancier et la machine. L'image de la machine dans le roman français (1850-1900). Jules Verne - Villiers de l'Isle-Adam*. Paris, Librairie José Corti, 1982, 424 p.
7. Stanley Kubrick, *A Clockwork Orange*. Film de Warner Bros. sorti le 2 février 1972, basé sur un roman de Anthony Burgess, publié en 1962 avec le même titre.

Jean-Pierre Picot (jean-pierre.picot5@wanadoo.fr) enseigne depuis 1992 la Littérature générale et comparée à l'Université Paul Valéry de Montpellier ; il a été en poste quatre années (2001-2005) à l'Université de Gabès (Tunisie) dans le cadre d'un détachement auprès du Ministère français des Affaires étrangères. Ses premières études verniennes sont parues en 1978 dans le *Bulletin de la Société Jules Verne* ("Le Jeu subversif et souriant de Kéraban-le-Têtu") et peu après dans le n° 3 de la série Jules Verne des Lettres modernes ("Véhicules, nature, artifices"), revue qui était à l'époque dirigée par François Raymond. Il a fourni, depuis, diverses études à ces deux revues : en 2009, il a dirigé le n° spécial du *Bulletin de la Société Jules Verne* n° 169-170 consacré au Centenaire de la disparition d'André Laurie ; il a consacré une étude à la scène du cimetière de l'île Antekirtta dans "Mathias Sandorf", qui doit paraître dans la prochaine livraison (n°9) de la *Série Jules Verne* à présent dirigée par Christian Chélebourg.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An Annotated Bibliography of "Imaginary Subterranean Worlds"

Lisa Raphals

Guy Costes & **Joseph Altairac**. *Les Terres creuses : Bibliographie commentée des mondes souterrains imaginaires*. Amiens: encrage & Paris: Les Belles Lettres, 2006. 800 pages. ISBN : 9782251741420.

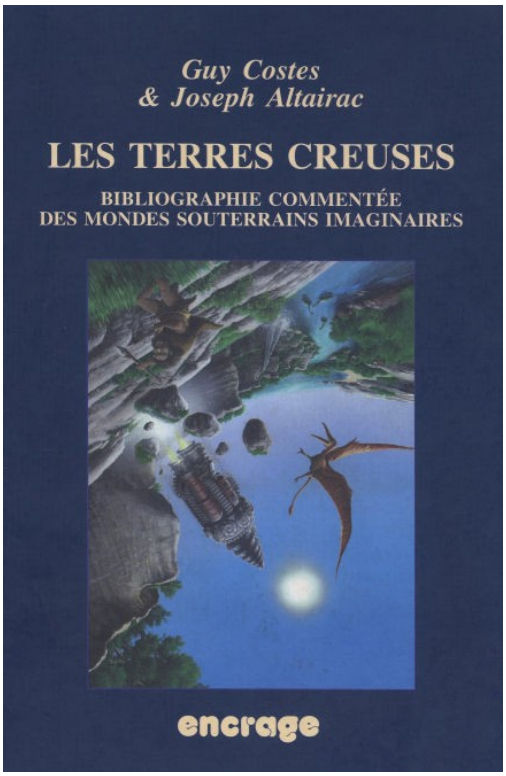
The idea that the earth is hollow has an illustrious history. The invention of the idea of a hollow earth has been attributed to René Descartes, who speculated that the earth's interior was dotted with gigantic subterranean cavities. It is also indebted to the astronomer Edmond Halley, who speculated that the interior of the earth was composed of concentric spheres that were inhabited by creatures of various kinds. These possible worlds have drawn writers of utopias, fantasy and science fiction alike.

In *Les Terres Creuses* [1], Guy Costes and Joseph Altairac present an annotated bibliography of "imaginary subterranean worlds." The authors attempt an exhaustive compendium of references to a hollow earth. Their 2211 entries are arranged in chronological order, from the accounts of Atlantis in Plato's *Timaeus* and *Critias to 2*005. Each entry provides brief entries on initial publication, French editions (if any), and representative passages. The authors also provide an excellent and very readable introduction, which introduces the history of hollow earth theories. An annotated critical bibliography presents some 125 key references.

This is not an academic book, but it is well researched and clearly written. One of the book's charms is its illustrations; every page (though not every entry) contains at least one black and white illustration of a book or magazine cover or author, with the science fiction pulps well represented. Its lists of the initial publication, sometimes in obscure magazines, is particularly useful, as is the lists of French translations. Less complete or useful is the index, which makes no distinction between authored works and secondary references.

Jules Verne is well represented by both well known and lesser know works, beginning with *Aventures du capitaine Hatteras* (*Les Anglais au pôle Nord* and *Le Désert de glace*) (No. 94), *Voyage au centre de la Terre* (95), *Vingt mille lieues sous les mers* (105), *L'Ile mystérieuse* (116), *Hector Servadac* (124), *Les Indes noires* (125, not listed in the index), *La Maison à vapeur* (135), *Les cinq cents millions de la Bégum* (137), *Voyage à travers l'impossible* (149), *L'Etoile du Sud* (156), *In the Year 2889* (189b, again not in the index), *Sans dessus dessous* (190), *Face au drapeau* (258), *Le Sphinx des glaces* (268), *Le Testament d'un excentrique*

(299), *Maître du monde* (353), *Les Naufragés du "Jonathan"* (445) and *L'Oncle Robinson* (1998). This list also shows some of the difficulties of a chronological listing, partly remedied by a separate index of titles.

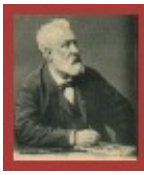


The book does have its weaknesses and omissions. Its perspective is not global; its subterranean world are limited to European and North American imaginaries, mostly of the nineteenth and twentieth century. Curiously, it omits the two most famous subterranean voyages of antiquity: the Nekyia, or journey to the underworld by Odysseus in Odyssey 11 and accounts of the journey of Orpheus to retrieve his dead bride Eurydice from the land of the dead (both in the original myth and in modern retellings, such as Cocteau's Orphée). From Plato it jumps to Dante's Divine Comedy; only the first 44 entries address texts published before the 19th century. Nonetheless, this volume is a pleasure to browse, and shines in its true focus, the coverage of twentieth-century popular culture.

NOTES

1. Guy Costes & Joseph Altairac, *Les Terres creuses : Bibliographie commentée des mondes souterrains imaginaires.* Amiens: encrage & Paris: Les Belles Lettres, 2006. 800 pages. ISBN : 9782251741420.

Lisa Raphals (lisa.raphals@ucr.edu) is Professor of Chinese and Comparative Literature at the University of California, Riverside. Her primary specialty is the comparative philosophy of early China and ancient Greece, with extensive research on early Daoist literature. She also writes on science fiction, and is one of the developer's of UCR's science fiction program.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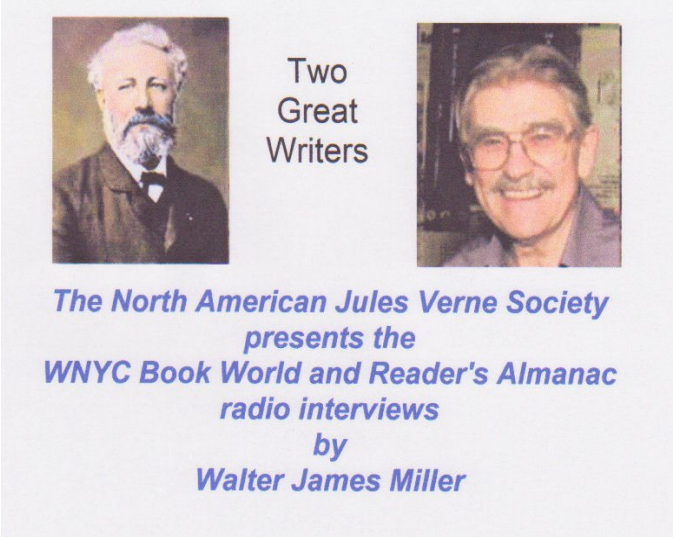
Des documents résonnants : Walter James Miller parle de Jules Verne

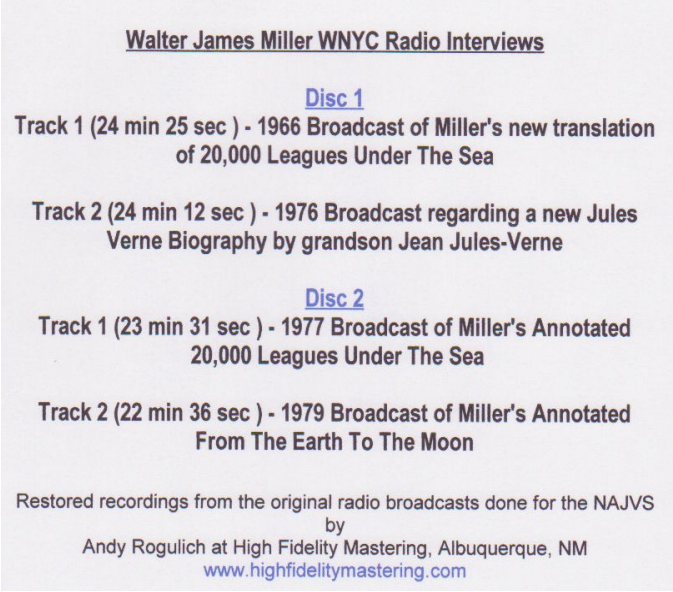
Volker Dehs

Two Great Writers. The North American Jules Verne Society presents the WNYC Book World and Reader's Almanac radio interviews by Walter James Miller. Restored recordings from the original radio broadcasts done for the NAJVS by Andy Rogulich at High Fidelity Mastering. 2009. 2 CDs, 48 min. 41 sec., 46 min. 10 sec.



Parmi les diverses histoires nationales de la réception de Jules Verne, celle des USA est une des mieux documentées ; de nombreuses études récentes en témoignent. [1] Tous les auteurs sont d'accord sur le fait que Walter James Miller – poète, essayiste, professeur de lettres anglaises – a mérité une place privilégiée dans les méandres de cette évolution qui va d'ailleurs chronologiquement du pire au meilleur. Aussi, en se rapportant à une demande de Brian W. Aldiss formulée dans un article de 1965 de se mettre à une réévaluation littéraire de l'œuvre vernienne par une amélioration de ses traductions, Miller a été le premier – et pendant bien longtemps le seul – à prendre au sérieux cette réclamation et à la réaliser. Sa traduction de *Vingt mille lieues sous les mers*, constamment améliorée depuis 1965, puis

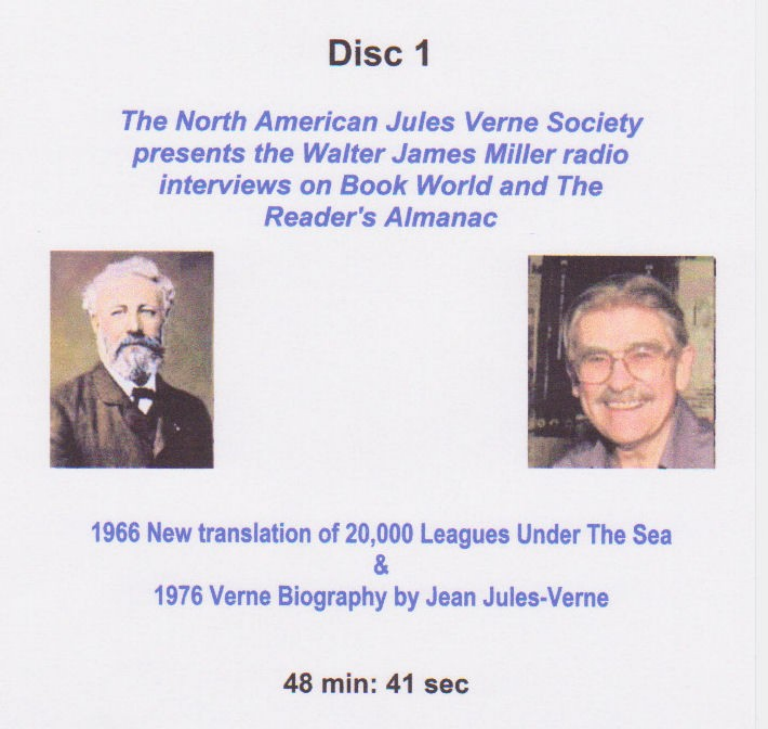
enrichie de notes et de commentaires, est restée un des modèles du genre et n'a trouvé un équivalent en langue française qu'en 2005 ! L'idée d'un *Annotated Jules Verne* était donc lancée ; elle fut continuée en 1978 par une édition critique de *De la Terre à la Lune* et trouva des successeurs dans les traductions commentées, éditées par William Butcher et Arthur B. Evans.



Les quatre dialogues enregistrés sur les deux CDs témoignent de l'enthousiasme et de l'engagement de Miller déployés tout au long de cette évolution. Le premier entretien, diffusé en 1966 dans le feuilleton « Book World » (New York) incrimine la place déplorable que les Américains accordaient alors à Jules Verne, tout bon à servir aux scénarios des productions cinématographiques d'Hollywood, considérablement « améliorés » (ceci va de soi) par les scénaristes ne respectant pas la trame originale qu'ils ne connaissent évidemment qu'à travers des traductions tronquées et mutilées. L'exemple de *Vingt mille lieues sous les mers* lui permet de rejeter et de relativiser avec humour les nombreuses légendes et lieux communs qui s'étaient établis dans les pays anglophones autour de « Joulsvern » le « merveilleux prophète ».

L'arrière-fond biographique de Jules Verne est le sujet du deuxième entretien consacré au livre de Jean Jules-Verne (1973), traduit en anglais en 1976. Entre 1970 et 1986, Walter James Miller avait animé un feuilleton radiophonique hebdomadaire intitulé « The Reader's Almanac » où il interrogeait les écrivains sur leurs œuvres et qui lui procura la réputation d'avoir vraiment lu les livres présentés avant d'en parler… exception notable dans le travail journalistique de tous les pays et de tous les temps ! [2] Phénomène tout aussi rare et paradoxal dans notre contexte : la traduction du Jules Verne de Jean-Jules-Verne, établie par Roger Greaves (qui a aussi publié une biographie remarquable sur Nadar) est bien supérieure au texte original bien que (ou parce que) des 383 pages initiales ne subsistent que 245. Pour une fois, le « cannibalisme littéraire » qu'est l'adaptation s'est révélé réellement avantageux. Causant avec son confrère Dean Donald Collins, Miller présente aux auditeurs notamment les deux éléments considérés alors comme novateurs dans la biographie de

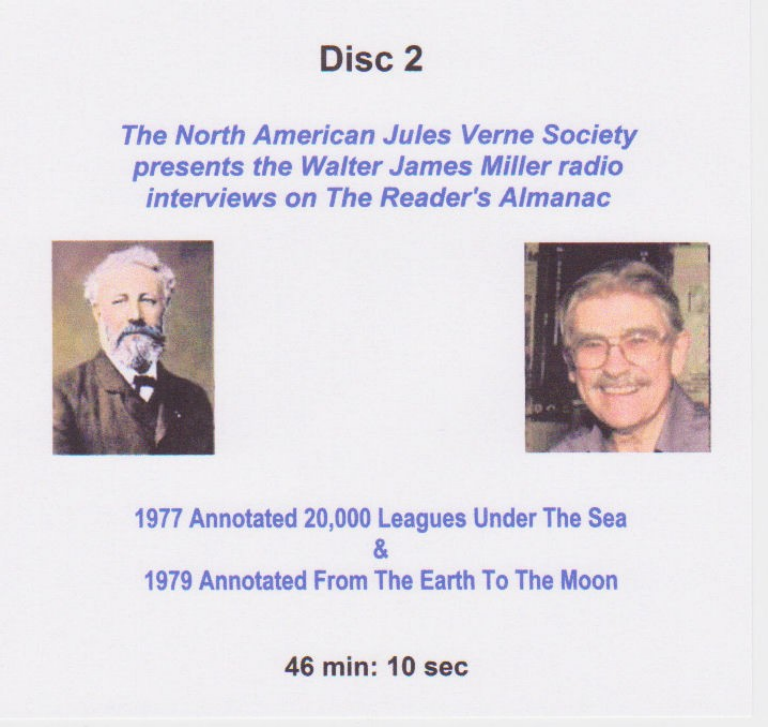
Verne : la révélation d'une maîtresse, « Mme Duchesne », ainsi que des problèmes graves que réunissaient ou opposaient l'écrivain et son fils Michel. Bien qu'on dispose actuellement de plus de précisions sur ces aspects, les informations contribuaient à l'époque considérablement à modifier l'image bienséante et asexuée d'un Jules Verne prophète et conteur d'enfants, tout en se basant sur une documentation authentique et sérieuse. Est-ce que la lecture de ce livre a apporté beaucoup de nouveaux lecteurs à Verne, comme l'a prédit Collins dans sa conversation ? La question reste posée.



Pour les deux autres entretiens, qui abordent les traductions commentées de *Vingt mille lieues sous les mers* (1977) et *De la Terre à la Lune* (1979), Walter J. Miller a changé de côté et se laisse à son tour interroger par William Pankin et Jack Sullivan. Miller ne cesse pas d'insister sur des éléments négligés pendant trop longtemps, l'humour des *Voyages extraordinaires*, la satire sociale et l'ambiguïté de son écriture. C'est à raison, me semble-t-il, qu'il parle d'une « double life » de l'écrivain, l'une assez conventionnelle de sa vie privée, l'autre bien plus inhabituelle qui s'exprime dans ses écrits. Miller se contente de constater ces faits et n'essaie pas d'y plaquer une explication simpliste. On a déjà trop abusé de confondre l'homme et son œuvre littéraire. Bien sûr, les méfaits – ou bien les « crimes » – des traducteurs sont un sujet récurrent dans les conversations, mais le spécialiste sait aussi émettre des questions novatrices qui, jusqu'à nos jours, ont été peu ou même pas été exploitées de manière satisfaisante. Je ne nomme que les rapports littéraires et les parallèles entre Verne et James Fenimore Cooper (dont il fut un lecteur avide et connaisseur dès son enfance) et la question si les allusions sexuelles qu'on peut repérer dans les textes verniens ont été introduites intentionnellement par leur auteur (comme le pense Miller), si elles traduisent les obsessions de son inconscient ou si elles ne sont que les reflets imposés postérieurement par la perspective de ses interprètes. Les suggestions de Miller sont là pour animer ces discussions toujours actuelles et ne se réduisent donc pas à des aspects

muséologiques.

Plus de 35 ans après les deux premiers *Annotated Jules Verne*, les efforts de Walter James Miller – dont les activités impressionnantes sont toujours intactes [3] – portent donc leurs fruits ; mais il est également évident qu'une meilleure traduction des *Voyages extraordinaires* ne constitue qu'une des étapes nécessaires – quoique indispensables – en vue d'une réévaluation littéraire de Jules Verne. Celle-ci n'est point un fait accompli ni aux pays anglophones ni d'ailleurs en France ; c'est un processus continuel demandant son temps pour s'imposer difficilement à l'esprit de ceux qui préfèrent les clichés à l'expérience de la lecture. Les deux CDs édités par les soins de la North American Jules Verne Society auront désormais leur place dans ce développement, non seulement comme l'hommage des plus mérités à un grand vernien/verniste, mais aussi comme des documents sympathiques, raisonnants et résonnants, dans l'histoire de la réception internationale de l'écrivain Jules Verne.



NOTES

1. Brian Taves : "Jules Verne. An Interpretation", in B. Taves & Stephen Michaluk jr.: *The Jules Verne Encyclopedia*. Lanham/Md., London: The Scarecrow Press 1996, pp. 1-22 ; Arthur B. Evans: "Jules Verne's English Translations", in *Science Fiction Studies* vol 32, #95, March 2005, pp. 80-104 ; Jean-Michel Margot : "Jules Verne aux États-Unis", in *Revue Jules Verne*. Amiens : Centre International Jules Verne, vol. 10, Nr. 19/20, 2005, pp. 35-40 ; Walter James Miller: "As Verne Smiles", in *Verniana* vol. 1, 2008-2009, pp. 1-7.
2. Parmi les centaines des conversations qui composent cette bibliothèque radiophonique ont été récemment publiés trois entretiens avec Kurt Vonnegut : *Essential Vonnegut*, un CD édité par K. A. Ryan (Caedmon 2006).

3. Comme en témoigne son édition du Superbe Orénoque, traduit par Stanford L. Luce : *The Mighty Orinoco*. Middletown/Conn. : Wesleyan University Press 2002.

Volker Dehs (volker.dehs@web.de), né en 1964 à Bremen (Allemagne) se voue depuis 25 ans à la recherche biographique et à l'établissement de la bibliographie vernienne. Éditeur de plusieurs textes ignorés de Jules Verne, il est co-éditeur (avec Olivier Dumas et Piero Gondolo della Riva) de la *Correspondance de Jules et Michel Verne avec leurs éditeurs Hetzel* (Slatkine, 5 vols, 1999 à 2006). Il a traduit plusieurs romans en allemand et en a établi des éditions critiques. Ses textes sur Jules Verne ont été publiés en français, allemand, néerlandais, anglais, espagnol, portugais, polonais, japonais et turc.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À propos de la géométrie sphérique dans *Mirifiques aventures de maître Antifer*

Jacques Crovisier

Abstract

Recently Garmt de Vries-Uiterweerd suggested that the different geographic locations which are at the heart of the plot of *Mirifiques aventures de maître Antifer* were not established by trigonometric calculations, but by drawing lines on a globe. This is confirmed by the presence of a circle drawn in red on one of Jules Verne's globe. Presently in exhibition at the Maison Jules Verne in Amiens, this globe also shows the drawings of Albert Badoureau made in preparation for *Topsy-turvy*.

Résumé

Garmt de Vries-Uiterweerd a récemment suggéré que les différentes positions géographiques qui sont au cœur de l'intrigue des *Mirifiques aventures de maître Antifer* n'ont pas été déterminées par un calcul trigonométrique, mais par une construction géométrique sur un globe. Les traces d'une telle construction sont effectivement apparentes sur un globe terrestre ayant appartenu à Jules Verne.

Les *Mirifiques aventures de maître Antifer* sont un jeu de piste à l'échelle planétaire. Le but à atteindre, l'île Julia où est caché le trésor, est au centre d'un cercle déterminé par trois points qui nous sont successivement révélés. Les positions des trois points et de ce centre nous sont données dans le roman avec une précision de la minute d'arc. Cependant, un calcul de trigonométrie sphérique montre que le centre calculé diffère du centre indiqué de près d'un degré. Dans un article publié récemment dans Verniana, Garmt de Vries-Uiterweerd (2009) nous suggère que Jules Verne n'aurait pas déterminé ces positions par le calcul, mais par une construction géométrique simple sur un globe terrestre. Cette méthode approximative expliquerait cette erreur.

On imagine donc que Jules Verne, ayant déterminé d'avance le lieu final du roman, l'île Julia, a cherché au compas, en partant de ce point comme centre, un cercle passant par des lieux propices pour son récit. Et effectivement, un tel cercle est apparent, tracé en rouge sur le globe terrestre de Jules Verne exposé à la Maison Jules Verne à Amiens, dans le bureau reconstitué de l'écrivain. Le visiteur ne peut l'approcher, mais ce cercle est parfaitement visible sur des reproductions du globe (celles, par exemple, que l'on retrouve dans le *Catalogue* de la Maison Jules Verne ou sur la couverture du *Titan Moderne).* On peut s'en

rendre compte sur les Fig. 1, 2 et 3. Ce cercle passe par les points remarquables énumérés dans le roman :

> Mascate, détroit de Bab-el-Mandeb, Équateur, Ma-Yumba, îles du Cap Vert, Tropique du Cancer, cap Farewell au Groënland, Île Sud-Est du Spitzberg, îles Amirauté [1], mer de Kara, Tobolsk en Sibérie, Hérat en Perse. [2]

Figure 1

Le globe terrestre de Jules Verne. © Bibliothèques Amiens Métropole.

L'hypothèse avancée par Garmt de Vries-Uiterweerd est donc confirmée. Le globe a un diamètre d'environ 20 cm soit deux fois plus petit que ce que Garmt de Vries-Uiterweerd supposait ; une erreur d'un degré correspond à 1,7 mm, ce qui est tout à fait explicable à la fois par l'incertitude du tracé lui-même et par l'imperfection de la construction du globe. Ce globe est celui même qui a été annoté par Albert Badoureau lors de la préparation de *Sans dessus dessous* et qui est décrit dans *Le Titan moderne* (« J'ai l'honneur de remettre à Monsieur Jules Verne son globe sur lequel j'ai marqué... le lieu des points de la Terre au dessus desquels passent les boulets... le nouvel équateur » [3]).

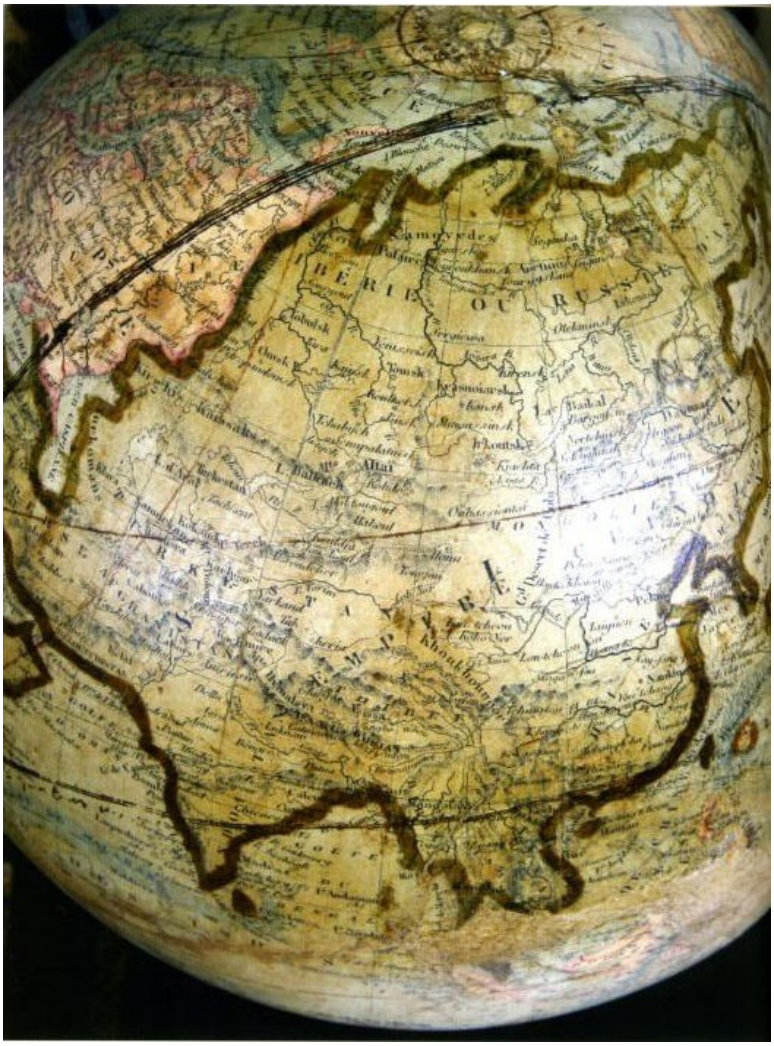

Figure 2

Une partie agrandie du globe terrestre de Jules Verne (© Bibliothèques Amiens Métropole).

Tout comme les précieux manuscrits annotés de Jules Verne, son globe terrestre « ajoute une troisième dimension aux coulisses rédactionnelles » [4] de certains Voyages extraordinaires. Ce globe a déjà parlé à propos de *Sans dessus dessous* et des *Mirifiques*

aventures de maître Antifer. Il présente d'autres surcharges (comme le contour du continent asiatique) qui restent encore à interpréter. De quels autres romans ce globe porte-t-il les croquis préparatoires ?

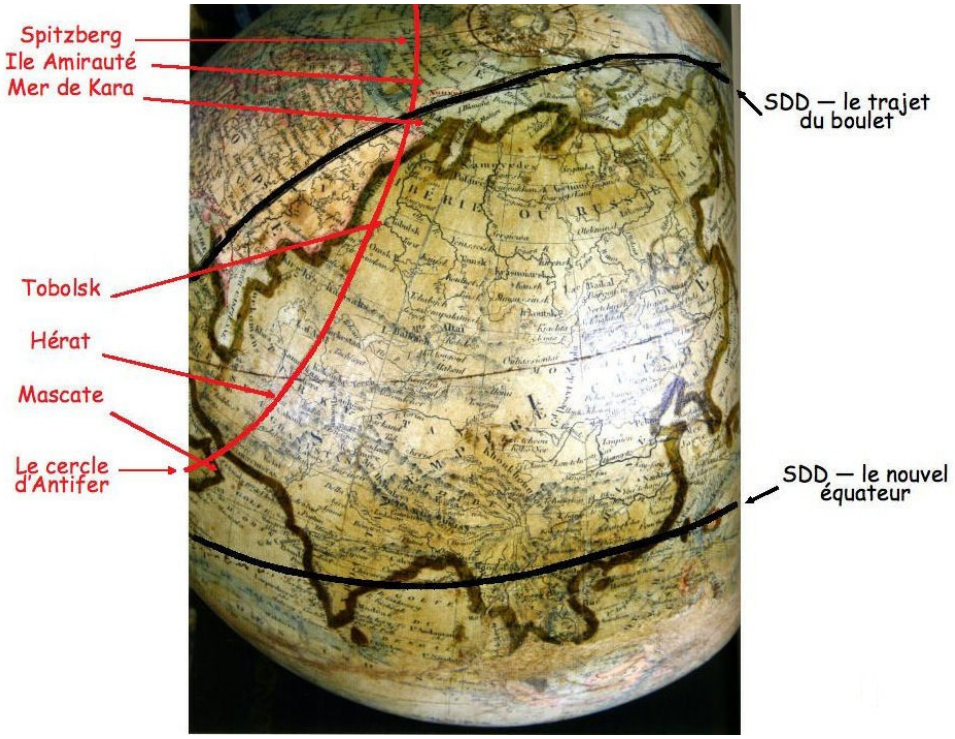

Figure 3

Une partie agrandie du globe terrestre de Jules Verne (© Bibliothèques Amiens Métropole) avec les identifications des tracés relatifs à *Sans dessus dessous* (SDD, en noir) et à *Mirifiques aventures de maître Antifer* (en rouge).

Références

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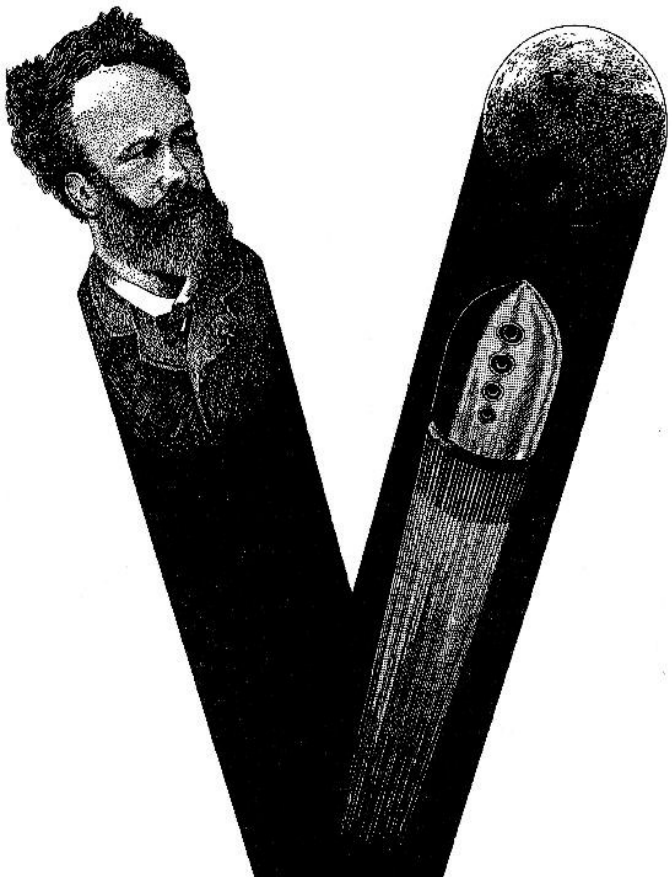
Notes

1. On peut se demander ce que sont ces « îles Amirauté », qui devraient se trouver entre le Spitzberg et la mer de Kara. Sur les cartes modernes, on ne trouve que la « Poluostrov Admiralteystva », péninsule rattachée à la Nouvelle Zemble *(Times Atlas of the World*). Mais sur le globe de Jules Verne figure bien une « île de l'Amirauté » en plein milieu de la mer de Barents.
2. Jules Verne, *Maître Antifer*, partie II, chap. XV.
3. Albert Badoureau, *Le Titan moderne*, p. 141.
4. Selon les termes de la note de Colette Le Lay et Olivier Sauzereau, in *Le Titan moderne*, p. 142.

Jacques Crovisier (jacques.crovisier@obspm.fr) est astronome à l'Observatoire de Paris, spécialisé dans l'étude des comètes. Il s'intéresse aux aspects astronomiques de l'œuvre de Jules Verne, auxquels il a consacré un site internet (http://www.lesia.obspm.fr/perso/jacques-crovisier/JV/verne_gene.html).

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The 150th anniversary of the passage of Jules Verne and Aristide Hignard through Oakley in 1859

Ian Thompson

Abstract

A group of enthusiasts in the Archives Department of Dunfermline in Fife decided to celebrate the 150th anniversary of the passage of Jules Verne and Aristide Hignard through Oakley in 1859. They established a magnificent series of events over three days, 26, 27 and 29th August 2009.

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Résumé

Pour célébrer le 150e anniversaire de la visite de Jules Verne dans le comté de Fife, un groupe d'archivistes de Dunfermline a organisé trois jours de festivités. Celles-ci comprenaient une reconstitution en costumes d'époque de la marche de Jules Verne, accompagné d'Aristide Hignard et du Révérend Smith, de Crombie Point à Inzievar House. Le lancement d'une nouvelle traduction du *Rayon Vert* eut lieu à la bibliothèque Carnégie de Dunfermline. Des acteurs recréèrent à Inzievar House l'arrivée de Verne au château; des prix furent attribués aux enfants des écoles primaires d'Oakley pour leurs peintures sur des thèmes verniens; une réception fut organisée à l'Hôtel de Ville de Dunfermline par l'adjoint au maire suivie de la projection de deux films basés sur les œuvres de Verne. Tous ces événements furent organisés par des acteurs enthousiastes et furent l'objet de nombreux reportages dans la presse et à la télévision.

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A group of enthusiasts in the Archives Department of Dunfermline in Fife decided to celebrate the 150th anniversary of the passage of Jules Verne and Aristide Hignard through Oakley in 1859. They established a magnificent series of events over three days, 26, 27 and 29th August.

The first event on the 26th was a reconstruction of the walk from Crombie Point where Verne disembarked from the steamer from Edinburgh where he was met by the Reverend Mr Smith. By studying old maps it was possible to reconstruct the route taken by Verne. Members of the Dunfermline Dramatic Society were dressed in period costume as Verne, Hignard and the priest. The start of the walk was covered by Scottish Television in its evening news programme and there was substantial press coverage including a two page article in the Daily Mail national paper.The walk started from the pier, paused at the Black Anchor Inn,

where Verne had had a whisky and then traversed fields to Inzievar House (which Verne refers to as Ockley Castle in *Voyage à Reculons*) the baronial mansion of the Smith family. Many of the tracks that Verne took have disappeared so the leaders had to get permission from farmers to cross fields to follow the route exactly. Needless to say the walk was accomplished in pouring rain just as when Verne did it! Because of the problem of crossing fields, the walk took almost twice as long as Verne.The participants were rewarded with a badge bearing a humorous cartoon of Phileas Fogg and Passepartout!

Actors recreate the arrival of Verne at Oakley Castle. From left to right: a servant girl, the Reverend Smith,Verne, Hignard and Amelia. In front is the present Catholic priest of Oakley.

The main event on the 27th was an evening book launch of *The Green Ray* in Dunfermline in the magnificent setting of the Carnegie Library (Carnegie was a native of Dunfermline before making his fortune in the States).

I gave a talk on the relationship between *The Green Ray* and Verne's own voyage to the Hebrides. There was an audience over 50 including some local Councillors and also an exhibition of photographs of underground mining scenes taken by a former miner which gave some impression of conditions in *The Underground City*.

The audience had a convivial evening with wine supplied by the publisher, Luath Press.

Saturday 29th was the busiest day of the programme. A reception for twenty guests was held in the very magnificent entrance hall where Verne arrived. While we sipped champagne we were treated to a short performance by the actors. A young lady took the part of Amelia Bain and read from her diary an account of Verne's visit to her home in Edinburgh. The other actors played the arrival of Verne in Inzievar... dressed in costume and spoken in a French accent! Among the guests was the present catholic Cannon of the parish, now in his eighties who enjoyed the portrayal of the Reverend Mr Smith. After the reception we were taken on a guided tour of part of the estate garden which Verne had admired so much.

Actors recreate the arrival of Verne at Oakley Castle. From left to right: Hignard,Verne, the Reverend Mr Smith and Amelia.

From Inzievar we moved on to Oakley village Community Centre, the focal point of this now rather depressed mining village which Verne had seen in full activity before the closure of the ironworks and mines. Here we had an audience of c50 for the award of prizes to young children from both the Catholic and State schools who had participated in a painting

competion of scenes from Verne. The actors repeated their presentation and I gave a very short talk on Verne and writing for children. This was followed by an address by the Deputy Provost of Dunfermline, then another by the General Secretary of the Franco-Scottish Society (like Verne a Breton) who then presented the prizes (children's editions of Verne's novels) and then unveiled a plaque commemorating Verne's visit. It is decided that the Oakley Council will name a street after Verne... the first in the UK as far as I know.

From Oakley we progressed to Dunfermline to the superb City Council Chambers for a buffet reception hosted by the Deputy Provost. About 50 people were present including Councillors from both Dunfermline and Oakley. I said a few words about Verne's role as a town councillor and then a few gifts were given to people involved in the events. I was offered two excellent framed photographs of the Black Anchor Inn (the photo that I posted was inaccurate although almost identical...this time there is no doubt of the authenticity but I will need copyright clearance before I can post them).

The reception finished with the unveiling of an enormous iced cake in the form of a book and covered in Verne motifs.

The final event was the showing of two films in the Carnegie Hall: *Around the World in 80 days* and *Twenty Thousand Leagues under the Seas*. The children were all given a packet of "Phileas Fogg" potato chips the brand name used by a local biscuit company.

It was a marvellous celebration,entirely the result of hard work and research by a group of enthusiasts, without commercial sponsorship.

A wonderful three days, and apart from myself not an academic in sight!

Ian Thompson (Ian.Thompson@ges.gla.ac.uk) graduated in Geography from Durham University (UK) in 1957 and completed a Masters degree at Indiana University in 1958 and a PhD from Durham in 1960. Subsequently he taught at Leeds and Southampton Universities and was an Associate Professor at Miami University Ohio before becoming Professor of Geography at Glasgow University, Scotland in 1976. He is presently Emeritus Professor and Senior Research Fellow at Glasgow University. His research interest has been in the economic and social geography of France and North Africa and has written, edited and translated numerous books on this area. He was made an honorary Life Fellow of La Société de Géographie de Paris and in 2007 was promoted to Commandeur dans l'Ordre National des Palmes Académiques by the French Government. He was for many years President of the Alliance Française de Glasgow. Since retirement he has researched Verne's Scottish connection and published numerous articles on this subject.


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Jules Verne, theater, and scientists — a Portuguese Adaptation of *Monsieur de Chimpanzé*

Mário Montenegro

Abstract

A Portuguese adaptation of Jules Verne's play *Monsieur de Chimpanzé* produced by the MARIONET theater group was presented at the Museum of Science of the University of Coimbra, Portugal, on September 25, 2009. It was included in the Researchers' Night 2009 event. This report describes the presentation and the challenges that arose during the adaptation of Verne's play for the event.

Résumé

La pièce théâtrale de Jules Verne *Monsieur de Chimpanzé* a été présentée par la troupe portugaise MARIONET au Musée de la Science de l'Université de Coimbra, Portugal, le 25 Septembre 2009. Elle faisait partie des commémorations de la Nuit des Chercheurs 2009. Ce compte-rendu contient une description de cette présentation et commente les défis à résoudre pour adapter cette pièce de Verne à cet événement particulier.

Introduction

September 25th, 2009 marks the day a Portuguese theater production of a Jules Verne play reached the stage. But wait… there was no stage there. There also weren't any actors on that nonexistent stage! Was there any theater at all? Any Verne? Well, we'd better rewind.

Every year since 2005, on the fourth Friday of September, a particular happening occurs: scientists across Europe try to get closer to other citizens. On that specific day, the so-called Researchers' Night, [1] they generally open their research facilities to the public and engage in activities that aim to promote that union, showing and talking about their lives and work. They try to present a more "human" image, in opposition to certain strange images (e.g., mad scientist) that some people might still have when they think about scientists and what they do.

This year, the selected means for the scientists to approach the public in Portugal was theater, so the organizers of the event got in touch with several theater groups to have them collaborate in the organization of this event.

In Coimbra, one of the organizers of Researchers' Night was the University's Museum of Science. [2] The museum asked MARIONET, [3] a local theater group that creates science-themed plays, to collaborate in development of a play with a theme related to Charles Darwin (with 2009 being the 200th anniversary of Darwin's birth and the 150th anniversary of the publication of his *On the Origin of Species*). MARIONET's suggestion was to produce Jules Verne's *Monsieur de Chimpanzé*, a play that would fit the museum's intentions in an interesting way: it premiered in 1858, [4] the year before the publication of Darwin's famous work, and its subject is a man's impersonation of a chimpanzee.

Things were then settled. MARIONET would produce Verne's *Monsieur de Chimpanzé,* the play was to be presented on the museum premises, and, last but not least, an additional requirement: keeping with the spirit of Researchers' Night, the characters would be played by scientists. Ten volunteers were willing to remove their lab outfits and get into the skin of Verne's characters. Thus the adaptation of Verne's play to the Museum of Science and to 10 fearless scientists began.

The four challenges

This adventure presented four main challenges. Below is a brief outline of those challenges and the ways in which we addressed them.

1. Translating Verne's words into Portuguese

Verne's play is a comic opera first performed at the Théâtre des Bouffes Parisiens on February 17, 1858. It has some characteristics typical of this genre, which was presented regularly at that time in that Parisian venue. The translation intended to both preserve the typical characteristics and maintain the exotic references introduced by Verne in the play. There was no intention to adapt it in any way to some kind of Portuguese reality. All specific references, such as Baptiste's and Van Carcass's origins, were maintained.

On the other hand, some sentences did require adaptation, particularly in parts meant for singing, to keep the rhyme that colors and enriches Verne's text.

2. Creating a museum's environment inside a museum

The action of *Monsieur de Chimpanzé* takes place in a zoological museum. The Museum of Science of the University of Coimbra is located in an ancient chemical laboratory, and we decided to present the play its the most characteristic room, a chemical laboratory with furniture and some equipment from the late 19th century. This environment suited perfectly the ambience of Van Carcass's museum. Additionally, some embalmed animals, borrowed

from the zoological museum of the university, were placed in the scene to enrich the scenario of Van Carcass's museum. The action would take place between two long lab benches about four meters apart, and the audience would be placed around this acting zone.

Rehearsal in the room of the Museum of Science, where the play was presented. (©Pedro Coelho)

3. Ten scientists to four characters

There were ten scientists to play the four character roles. How to distribute them? Because of the musical nature of the play, we decided to create a chorus to strengthen some of the sung parts of the discourse. So, four scientists would embody the characters and the other six would form the chorus. The way we integrated the chorus into the play was to make it a group of "embalmed" animals lying around the museum.

One additional adaptation was needed: there were only two men among the scientists, but three were needed for Verne's play: Dr. Van Carcass, Baptiste, and Isidore. We decided to turn Dr. Van Carcass into a woman, mother of Etamine and an eminent scholar. Considering the cast available, this was the least disruptive option, and, given the fact that women are increasingly assuming important positions in the world of science, it resulted in a plausible update to Verne's play.

Brazilians are the biggest immigrant community in Portugal. One of the scientists/actors happened to be Brazilian and thus was a natural choice for the role of Baptiste, Van Carcass's Spanish servant. This, of course, required some adaptations (not originally considered in the translation) regarding Baptiste's origins, references, and discourse, but the end product was very successful and in accordance with Verne's idea of a somewhat exotic and comical character.

A view of the première. Several animals constitute the chorus (with the hands on their knees), and behind them is part of the audience. ©Museu da Ciência da Universidade de Coimbra

Dr. Van Carcass is threatening to cut off Isidore's skin, under the worried gaze of her daughter and Isidore's lover, Etamine. Photo from a rehearsal. (©Pedro Coelho)

Baptiste tries to make friends with the chimpanzee, who is Isidore in disguise. Photo from a rehearsal. ©Pedro Coelho

4. An operetta without music

What about the music? One of the defining characteristics of an operetta is, of course, its music. What do you do when you don't have an orchestra? The creation of a chorus was an important step to give "Sr. de Chimpanzé" (its Portuguese title) a musical identity. The parts in rhyme that were sung by the actors were supported, in places, by the chorus. In other parts,

the chorus engaged in a kind of musical dialogue/dispute with the actors, which created an interesting musical movement. The melodies for the musical parts were created by the ensemble, resulting from improvisations during the rehearsals.

With the aims of enriching the musical parts and introducing a bit of the scientists' work into the play, the chorus also used laboratory instruments (pipettes, Petri dishes, etc.) to make sounds during the play.

Isidore and Baptiste at the table. Baptiste will eventually get drunk. Photo from a rehearsal. ©Pedro Coelho

Meeting the public

Thus after 3 months of part-time rehearsals, on September 25th 2009 "Sr. de Chimpanzé" premièred in Coimbra, Portugal, not on a stage, and with no actors. The play was presented at 8:30 and 11:00 pm that day, with both performances sold out, meaning an audience of about 150 people per session.

It was the first time, as far as I know, that a Verne play had been translated and presented in Portugal. Verne is well-known for his adventure stories, but his dramatic work remains unknown to the vast majority of people. This production contributed to revealing that somewhat "hidden" facet of Verne.

The play's audience was heterogeneous. There were many families with small children—a typical audience for the Museum of Science—and the play's coloring, with its songs and stuffed animals, had a very good reception among the little ones. But with this kind of

audience comes several levels of understanding. Verne's depiction of the relation between the master and the immigrant servant, his comments about race, his irony on the similarities between man and other animals, his representation of the all-knowing scientist with high self-esteem, all these allowed a deeper interpretation of the play by the adult audience. And considering the exhibition on Charles Darwin also being presented at the museum at that time, Verne's play was conversing in an interesting way with Darwin's theories on the origin of species and on natural selection. In fact, Verne's words in this play (not only the central masquerade created but also some references regarding the similarities between man and apes, i.e., Comte de Buffon) enlarged the panorama of the exhibition.

Baptiste (left) and the chorus (lower right). We can see the audience "invading" the scene. ©Museu da Ciência da Universidade de Coimbra

With all this mixing—theater in a museum, scientists as actors, a chorus of embalmed animals, laboratory equipment as musical instruments—I'm sure the exotic Verne aimed at in his operetta gained a new dimension in this Portuguese production of *Monsieur de Chimpanzé*.

NOTES

1. Researchers' Night 2009 website: http://ec.europa.eu/research/researchersineurope/events/researchersnight09/index_en.htm
2. Museum's website: http://www.museudaciencia.pt
3. MARIONET's website: http://www.marioneteatro.com

4. Pourvoyeur, Robert. "Jules Verne aux Bouffes Parisiens." *Bulletin de la Société Jules Verne* 57 (1er trimestre 1981): 2-10.

Mário Montenegro (blacmount@gmail.com) is a PhD student in Faculdade de Letras da Universidade de Coimbra, Portugal, investigating the interactions between the performing arts and science. He holds a degree in Electronics and Telecommunications Engineering from the Universidade de Aveiro and an MA in Dramatic Text from Faculdade de Letras da Universidade do Porto, where he presented in 2007 the thesis *Dramatic text with science for theme: the particular case of Carl Djerassi*. He has been a professional artist for the last 14 years. He founded the theatre company MARIONET in 2000, where he has conceived, written, produced, and directed several professional science and theater plays/performances, including *Revolution of the Celestial Bodies* (2001), *The Nose* (2003), *The Lusíads in the Museum* (2005), *LED – inner voyage in a computer* (2006), *Blind's Cane – the discovery of Pedro Nunes* (2006), *Look at the Distant – Look at Before* (2008) and *[zoom] – what do we want from the stars?* (2009). He translated and directed Jules Verne's *Monsieur de Chimpanzé*.