## Notes to The Mysterious Island

## William Butcher

1. In French Cyrus is a homonym of "cyrrhus" (cirrus), implying majesty. The Bible (Chronicles 2 36:22) refers to Cyrus the Great (c. 600-529 BC), the king of Persia who defeated Nebuchadnezzar II. But the name, and the idea of the omnipotent engineer, must come from Cyrus (West) Field (1819-92), the American merchant and financier who installed the Atlantic Cable (1858 and 1865-66). Field and Verne crossed the Atlantic together on the *Great Eastern* in 1867 and exchanged correspondence afterwards. *Round the Moon* refers to "the intelligent Cyrus Field, [who] aimed even to cover all the islands of Oceania with a vast electrical network, an immense enterprise and one worthy of American genius" (ch. 20)

2. In 1851 Verne published "A Balloon Journey," revised as "A Drama in the Air" (1874), which includes a history of aerostats; and his first novel for Hetzel was *Five Weeks in a Balloon* (1863). Verne was Comptroller of the Society for the Encouragement of Aerial Locomotion by Means of the Heavier-than-Air, run by his friend, the famous photographer Nadar, and wrote an article describing his aerostat, "About the Géant" (1863), ending with the famous quotation: ALet's go then for the helicopter, and adopt Nadar's motto: Everything which is possible will be done." The paradox is that although Nadar used balloons, both he and Verne believed that the heavier-than-air was the way forward, as there was no way to steer a balloon, except by using the air currents at different altitudes. The novelist's first ascent took place from Place Longueville in Amiens on 28 September 1873, when he was hard at work on MI. The trip, with the aviator Eugène Godard, a friend of Nadar's who distinguished himself during the Siege of Paris in 1870, is described in his "Chronique locale: Ascension du Météore," in the Journal d'Amiens, 29-30 September 1873 (reprinted in *Textes Oubliés*, 191).

3. This would be true only if both the displacement and the rotation, which would have to be very slow, were at a constant speed. In "About the *Géant*" Verne says that "In a balloon, no movement, whether horizontal or vertical, is perceptible," just as in moving water, it is hard to detect a ship's motion.

4. Verne invariably emphasizes the view from the air, creating a different perspective on human affairs; what is missing from *MI*, in contrast, is any sight of external reality.

5. The arrival on the Island is a self-conscious rebuttal of the hyper-conventional shipwreck, although it derived from a suggestion by Hetzel.

Also, the publisher wrote to Verne on 25 July 1873 (*Corr.*, 200): AHave you received the manuscript of the engineer M. Rollier, the one who did that fine [crossing to Norway] by balloon and to whom you reportedly promised a preface?" Rollier's trip was recorded in Emile Cartailhac, *Voyage en ballon de Paris en Norvège du capitaine Paul Rollier* (1871). A distinct possibility remains, in sum, that Verne borrowed ideas for the ballooning episode from Rollier.

6. Verne does not tell his readers which war or which country. The chapter heading in the French text lists "the Civil War," or the War between the States (1861-65), between the Union and the eleven Confederate States, mainly about the issue of slavery. The Civil War is featured in *From the Earth to the Moon*, AThe Blockade Runners," and *North against South*, where Verne approves of the liberation of slaves and paints a favorable portrait of Black Americans.

7. Ulysses S[impson] Grant (1822-85), Unionist general, and American president (1869-77) at the time of writing.

8. "Smith" means of course "worker of metal." Carpentier (41) claims the letters of "Cyrus Smith" are an anagram of "Jesus Christ." Certainly there are Biblical echoes in MI — "where shall we begin?' Pencroff asked ... 'At the beginning,' replied Cyrus Smith." (I, 13) — as well as miracles, such as bread from a single grain of wheat (I, 20-21) or "He took Top's head between his hands, detached the collar the animal carried on his neck and broke it in two parts, saying: / 'Here are two knives, Pencroff!'" (I, 13)

9. An earlier version of the quotation is "Point n'est besoin d'espérer ..." (There is no need to hope ...). The quotation is often (dubiously) attributed to William I, the Silent, Prince of Orange (1533-84), or to the House of Orange in general; but occasionally also to the heraldic device of a fifteenth-century Francesco Foscari. William III, Prince of Orange (1650-1702), king of Britain and Ireland (1689-1702), led the army that defeated James II and his Irish supporters at the Battle of the Boyne. Verne's mention of "William of Orange" may derive from the support that Defoe gave William III, calling him "William, the Glorious, Great, and Good, and Kind."

10. Grant seized Paducah, Kentucky, in September 1861. He made an inconclusive raid on Belmont, Missouri, then, appointed commander in the West, he won at Chattanooga (Verne: "Chattanoga") in November 1863, and in March 1864 was given command of all the Unionist armies. The Battle of Pittsburg Landing, on 6 April 1862, was one of the worst of the war. The following day Grant attacked the Confederates with reinforcements, making them withdraw to Corinth, Mississippi, but without a conclusive victory. The Battle of the Wilderness was fought on 5-6 May 1864 in northeast Virginia. 11. Gideon (Ahewer" or "warrior" in Hebrew) was a hero of Israel in the Old Testament (e.g. Numbers 1:11). Perhaps from Gideon Pillow, a Confederate general, Gideon Welles, Lincoln's Secretary of the Navy during the Civil War, Gideon Mantell (1790-1852), who discovered the first dinosaur in 1822, or, most probably, Gédéon Baril, known simply as "Gédéon," who illustrated Verne, was the editor of the *Journal d'Amiens* that published the account of Verne's balloon ascent, and joined the Académie d'Amiens in 1875 (Verne's speech of welcome was published (*Textes oubliés*, 231)). While "Spilett" is not authentic, "Spillett" which occurs in part of the manuscript is a real surname.

12. Sir Henry Morton Stanley (1841-1904), Anglo-American journalist, explorer, and colonizer. During the Civil War he served with the Confederates and was captured; he joined the *New York Herald* in 1867. Dispatched to Lake Tanganyika in 1869 by editor Bennett, he is reported to have said "Dr. Livingstone, I presume?"

13. This is slightly inconsistent with the earlier point: AHe did not burden the telegraph wires incessantly". In *Michel Strogoff* (ch. 17), the British journalist similarly telegraphs the beginning of Genesis to block his French rival. The real-life *New York Herald* of 18 May 1863 contained a dispatch headed "Our Expeditionary Correspondence. South Side of Big Black River, Masterson's Ferry, May 8, 1863," which mentions the un-named reporter's "depending on the courtesy of returning officers to take our communications." Verne is therefore mistaken in implying there was a telegraph available at Black River.

14. Nebuchadnezzar II, king of Babylon (605-562 BC), conquered much of southwest Asia Minor and in 586 destroyed Judah and its capital Jerusalem.

15. After being repulsed by Lee at Cold Harbor, just north of Richmond, Grant bypassed the Confederate capital. He advanced towards Petersburg, Virginia, a railway center critical for supply lines, but failed to isolate Richmond. On 20 June, Grant laid siege to the city, but the defenders held out for nine months, bringing his operations in Virginia to a halt.

16. Benjamin (J.) Butler (1810/18-93), Unionist general and politician.

17. Probably from Jonathan Forster (1804-79), author of *Biblical Psychology* (1873).

18. Robert E. Lee (1807-70), brilliant Confederate general.

19. Verne's "The Blockade Runners" (1865) centers on the siege and blockade of Charleston in 1863. There is a parallel between Smith's escaping the siege of Richmond by balloon and the siege of Paris, during which Verne received two letters from Hetzel in Paris by pigeon or balloon (Antoine Parménie, *Histoire d'un éditeur et de ses auteurs, P.-J. Hetzel* (1953) 537). There is also

a parallel between Verne's remark about the Commune, "They should shoot the socialists like dogs," and the way the pirates are massacred. Indeed, the decision is taken before the invaders do much harm, with even the narrator declaring "[they] would have to destroy them to the last man." (III, 2)

20. In MS2 he is called "Cracroft," an authentic surname. "Pencroff" seems to have been invented by Verne, although the name "Pencroft" exists. The origin may be "Bancroft" a sailor in "The Mutineers of the *Bounty*," in the chapter entitled, like Part II of *MI*, "The Abandoned One."

21. There was an authentic Harbert Brown, a private in the Fifth Regiment of Guilford County, North Carolina (*Muster Rolls Soldiers of the War of 1812 ... Published ... [by] Uzzell State Printers and Binders 1873* (WWW)). Harbert is a common French name, of German origin.

22. They will also leave the island on a 24 March (1869). By a remarkable coincidence Verne died exactly forty years later, on 24 March 1905, also a Friday.

23. Lithodomes, or date-shells, are a genus of small mussels which burrow in rock or stone.

24. The deodar, or Himalayan cedar, is celebrated for its beauty, longevity, size, and durability.

25. The Juan-Fernandez Islands, probably discovered by Juan Fernandez (1563), are a sparsely inhabited group in the south Pacific, about 400 miles west of Valparaiso. The islands, now Chilean, are rocky and volcanic in origin, with an area of about seventy square miles and rising to 5,415 ft. Verne's phrase "l'archipel des Auckland" is unconventional. The Auckland Islands are uninhabited, about 290 miles south of New Zealand.

26. Jacamar is the name for about eighteen species of birds of South and Central America, usually metallic green or blue and with long sharp bills.

27. The South American couroucou, or *Trogon curucui*, is the smallest bird in the world apart from the humming bird family.

28. Izaak Walton (1593-1683), The Compleat Angler, or the Contemplative Man's Recreation (1653).

29. "[2 February 1873] I'm fully devoted to the *Robinson*, or more exactly *MI*. Until now it's been downhill all the way; but I'm also spending my time with professors of chemistry ... for *MI* will be a chemical novel. I'm managing with the greatest care the interest deriving from Nemo's unsuspected presence on the Island, in such a way as to have a successful climax, like caresses of a pretty woman that one wants to take where you know!" (*Corr.*, 189)

30. The capybara, Hydrochaeris hydrochaeris, or water-hog, lives near the

rivers of tropical South America. Close to the guinea-pig, it is the largest quadruped rodent, at up to 110 pounds. Although the settlers find it "excellent," it is normally judged merely edible.

31. The description of the mountain system of a country, as opposed to the hydrographical.

32. A genus of birds typified by the moor-hen (Gallinula chloropus).

33. A pheasant of the genus *Ceriornis* with a pair of erectile fleshy horns, found in south and east Asia.

34. A wild mountain sheep, especially *Ovis musimon*, native to southern Europe.

35. Verne's word "éventrement" (deep opening) is absent from the dictionaries and from Gallica.

36. Antares, also Alpha Scorpii, a first-magnitude, supergiant variable binary red star.

37. Fomalhaut, a blue-white star twenty-two light-years away, the brightest star in the constellation of (Alpha) Piscis Austrinus, the Southern Fish, best seen in the evening.

38. Animals belonging to the *Mollusca*, with the middle part of the foot expanded into a pair of wing-like lobes, used for swimming.

Guermonprez ("Notes," 16) suggests the Island's shape is like Cyprus or Rawaki (Phoenix) island in Kiribati, south of Hawaii. Faivre (136) suggests Celebes; Margery Fisher, that it is whale-shaped (*The Bright Face of Danger* (1986), 308-13 (308)); Jean Varmond, that it is like a sleeping squid or Jan Mayen ("Trois îles: L'Ile heureuse," *BSJV* (First Series) 8 (1937): 117-31 (124)). Poirier writes of a "troubling resemblance [with] the right part of the island of Saint-Pierre with its three islands at the entrance," part of his wider, but weak, thesis that the "weather conditions, folkways, and mores [of Lincoln and Saint-Pierre are] curiously similar" and that Verne had sustained links with families from Saint-Pierre and Miquelon, off Labrador.

39. George Washington (1732-99), commander-in-chief in the War of Independence and president (1789-97), and one of Nemo's heroes in *Twenty Thousand Leagues*, AWashington, the founder of the American Union." (II, 8) There exist many Washington Bays in the US. The real-life Mount Franklin is an extinct volcano with an accessible crater, in the Franklin Mountains State Park, northwestern El Paso County (31E 50' N, 106E 30 W). There is a Grant Lake at 37E 49' N, 119E 7' W, now part of the Los "ngeles aqueduct system.

40. Abraham Lincoln (1809-65), sixteenth American president, maintained the Union during the Civil War and abolished slavery. In *Twenty Thousand* 

*Leagues* he is another of Nemo's heroes, ALincoln, who fell shot by a supporter of slavery" (II, 8).

41. Karl Bischoff (Verne: "Bischof") (1792-1870). Verne's information is copied from "The experiments of Bischof [*sic*] on basalt seem to prove that, to pass from the liquid to the solid state, to cool down from 2,000 to 200 degrees, our globe needed 350 million years" (Camille Flammarion, *Astronomie populaire* (1854-57) (Gallica)).

42. What seems to be Verne's spelling mistake ("tussac") is in fact a variant form of tussock(-grass), dense clumps of low perennial grasses covering about ten percent of the Outback.

43. Verne is commenting satirically on the hackneyed status of the coconut tree, as for instance in Beaulieu's *Le Robinson de douze ans* (ch. 3) or, especially, Bernardin de Saint-Pierre's *Paul et Virginie* (1788).

44. The mara is a large hare-like cavy from Patagonia, *Dolichotis patachonica*. The agouti is a genus of rodents, belonging to the cavy or guinea-pig family, with the common species (*Dasyprocta agouti*) resembling a hare. Verne may have got the terms from Beaulieu (ch. 2) or from *Le Magasin pittoresque* ("Les Animaux domestiques," 1864, 156 (Gallica)), which describes "the agouti, which lives in the West Indies and North America, and the mara, which lives on the pampas of Buenos-Aires and Patagonia." In other words, the mara is not really a sort of agouti. The article continues that the mara is like a hare whose "tail and ears have been cut," again unlike Verne's description.

45. Casuarinas are a genus of trees with jointed leafless branches resembling gigantic horse-tails, native to Australia and Indonesia. AThe Banksias ... grow most luxuriantly in the southern and temperate parts of Australia" (Charles Lyell, *Elements of Geology* (1839) (XV, 231)).

46. The Liliaceae family belong to the order of amaryllids, commonly known as the giant lily. The stem is leafy and fifteen or twenty feet high, with at the top a cluster of large crimson blossoms.

47. The source is probably *Océanie, ou CinquiPme partie du monde* (1826) by M. G. L. Domeny de Rienzi (Gallica), which cites both philedons and lyrebirds.

48. The word "*crejimba*" is not recorded in either French or English. AUR" reads: Aa certain species known under the name of *airi* or *crejimba*, whose wood serves to construct the best bows of the South American Indians" (159). "Airi" is not in the dictionaries or encyclopedias either, although Jean de Léry, *Histoire d'un voyage fait en la terre du Brésil* (1578) (Gallica) refers to "Airi, a spiny tree and its fruit" (175).

49. The bark of Hibiscus heterophyllus, or Queensland sorrel or green kur-

rajong, is often used to make nets.

50. Kaolin is a fine white clay used in the manufacture of porcelain, invented by the Chinese but now employed more widely.

51. A genus of fungi, allied to mushrooms, toadstools, and sap-balls and sometimes used to make tinder.

52. Wormwood is a genus of plants (order of *Compositae*) with a bitter or aromatic taste, including common wormwood, mugwort, and southernwood. Citronella is a fragrant Asian grass, *Cymbopogon nardus*, used in cooking and perfumery.

53. Verne erroneously wrote "macrophizum." Caladiums are classified in the genera *Caladium* and *Xanthosoma*.

54. A rhizome is a fleshy underground stem that grows horizontally as a food-storing organ and enables the plant to reproduce itself. The *Dictionary of Medical Terminology* (1854-67) defines Portland sago as "Portland arrow-root, a fecula prepared from *Arum maculatum* in the 'Isle' of Portland, a peninsula on the coast of Dorsetshire." Aronnax and his friends in *Twenty Thousand Leagues* marvel at a sago tree they find on Gueboroar.

55. The sextant is used to measure the elevation of the sun or the stars, and hence calculate the latitude or longitude.

56. The study of mollusks.

57. The brilliantly colored, polished phasianella, or pheasant-shells, from the Australian seas, belong to the gastropod genus *Phasianella*. "Terebratula" was formerly used more widely for any members of the *Terebratulidae* and related families; the lamp-shells. Bivalve mollusks of the genus *Trigonia* have triangular shells. Verne's source is presumably Henry Hollard, *Nouveaux éléments de zoologie ou étude du régne animal* (1839) (Gallica), which describes all three sorts of shell.

58. Verne's "koula" must be a mistake for "koala," distinct of course from the sloth, although his description seems to cover both.

In the heading of chapter 15, but not in the main text, Verne includes "Capture of an echidna." The echidna, or spiny ant-eater, is a toothless burrowing egg-laying mammal of the order Monotremata, resembling a hedgehog and found in Australia and New Guinea.

59. "Tubal-Cain, the forger of every cutting instrument of brass and iron" (Genesis 4:19).

60. The coot, or purple gallinule, is either the swamp-hen, *Porphyrio por-phyrio*, or a similar North American bird, *Porphyrula martinica*. Macrodactyls are long-toed wading birds.

61. The manatee, or lamantin, is a large aquatic herbivorous cetacean of the family Trichechidae, living in rivers and estuaries of the tropical Atlantic.

62. A large aquatic herbivorous mammal (the family Dugongidae in the order Sirenia; classified as *Dugong dugon*) native to the western Pacific and Indian Ocean. Verne's etymological explanation is highly dubious.

63. The maximum weight of a dugong in real life is slightly over 2,000 pounds.

64. Also called fuming sulphuric acid or oleum, made by dissolving trioxide in concentrated sulphuric acid.

65. "Granite House" (in English in the French text) is Verne's equivalent of Wyss's "Felsen-Heim" (in German in the French translation), although "Felsen-Heim" is called "Rock House" in English translations of Wyss: a symbol of the difficulty of translating texts across multiple languages.

66. The power elevator was developed in the 1850s; an elevator using a vertical screw was installed in the Fifth Avenue Hotel in New York in 1859. Verne stayed there twice in 1867, and refers to the elevator in *A Floating City* (chs 34 and 39) and *Twenty Thousand Leagues* (I, 2).

67. Verne wrote "monardes didymes," a scientific term but in an unusual, Gallicized form, as so often in his works: Oswego Tea, a herbaceous perennial plant, *Monarda didyma*, also called bergamot, belongs to the family Labiatae.

68. Olein is the liquid portion of fats and oils; or, in more specialized usage, the trioleate of glyceryl,  $C_3H_5(C_{18}H_{33}O_2)_3$ , one of the most widely diffused natural fats. Margarine is made from edible oils and meat fats with water or skimmed milk; the French word dates from 1813, and margarine was introduced commercially in 1873, in Paris. Stearin is the most abundant solid constituent of fats and oils.

69. "Acer" is Latin for "maple"; *Acer sacchar(in)um*, the scientific term for sugar maple.

70. Verne's term "culpeux" is not in most dictionaries, although "culpeu," meaning an American wolf, occurs in both Darwin's *Voyage of the Beagle* (1842-60) and Victor Hugo.

71. Smith's idea of a Pacific continent was highly controversial, for it was only in the twentieth century that the concept of moving continents received general acceptance.

72. Chimborazo (20,561 feet) is a snow-capped volcano in the Ecuadorean Andes.

73. Verne's term, "suilliens," is not in the French dictionaries, although it derives from *suilla* (Latin for "pig" or "pork").

74. Gregarious quadrupeds of South and Central America: the collared peccary as far north as Texas and the white-lipped peccary of South America. Not only is the narrator intrusive in naming the animals while the characters remain for the moment in ignorance, but also by providing information about their classification and behavior. The animal in the illustration (p. xxx) is not a peccary, but a piglet.

75. Verne's French term, "tajassous," is apparently mis-spelled (for "tajacus"). Amongst the peccaries making up the Tayassuidae family, the common peccary is classified as *Tayassu tajacu*.

76. Why doesn't Smith raise the panel?

77. The bustard is a kind of wild turkey from the plains of Europe, Asia, and Africa.

78. Verne's term for "molar," "mâchelière," is rare, visible mainly in Raymond Roussel, probably being borrowed from palaentological descriptions of mammoths' teeth, particularly Buffon's *Des Epoques de la nature* (1749).

79. The manuscripts of Part I of "UR" similarly end with the words "It was indeed a lead bullet." Verne has been much criticized for ascribing the bullet to Nemo, when the captain has his special electric capsules. But Nemo never actually admits responsibility, and in any case sometimes uses conventional weapons when on land, for he gives the settlers "two flintlock guns, two percussion cap guns, two carbines with central ignition" (II, 2), plus, in one of the manuscripts, "two bags of bullets and shot." More inconsistent is to find the bullet in a peccary since, in *Twenty Thousand Leagues* at least, Nemo says "I never make use of the flesh of earthbound animals" (I, 10).

80. Journey to the Centre of the Earth creates a self-conscious poetic effect by mixing "trees from highly different countries … the Australian eucalyptus leaning on the Norwegian fir, the northern birch mingling its branches with the New Zealand kauri" (ch. 39). The kauri pine, *Agathis australis*, yields valuable timber and resin.

81. The bodies of the Chelonians, including the different species of tortoises and turtles, are enclosed in a double shell. Verne's "mydase" in the following sentence is an error for "mydas."

82. Either a tree of the genus *Celtis*, belonging to the order Ulmaceae, or an Australian tree of the genus *Laportea*.

83. The Lardizabalaceae (Verne's "lardizabalées" is apparently an error) are an order of evergreen twining shrubs, often seen in greenhouses.

84. The Chenopodiaceae, or goosefoot family, contain the *Chenopodium album*, or fat-hen, native to Eurasia, used in salads or cooked like spinach. 85. Verne seems to be conflating two different terms. A touraco is any bird of the family Musophagidae (plantain-eaters) of Africa, and especially of the genus *Turacus* (or *Corythaix*), a large bird with brilliant plumage and prominent crest. Lories (family Loriinae) are parrot-like birds of brilliant plumage, chiefly bristle-tongued, found in southeast Asia, Indonesia, and Australia.

86. *Eugenia* is a genus of tropical trees, mostly found in America and the West Indies, of which the most important is *Eugenia pimenta* or allspice tree. *Eugenia cauliflora* is an evergreen Brazilian tree of the family Myrtaceae with clusters of white flowers and purple fruit growing directly on the trunk and branches. *Spix and Martius's Travels in Brazil* (1824) reports that a "light and agreeable wine is prepared from the fruits of the jabuticaba (*Myrtus cauliflora*)" (II, 3, 2, 85). Myrtle is the name for a family of about 3,850 species of trees and shrubs, mostly in America and tropical Asia. The Chilean guava, *Myrtus ugni* (Verne: *Aungi*"), has ovate, dark-green leaves and white flowers succeeded by glossy red or black fruit. *Eucalyptus robusta*, or swamp mahogany, is a gum-tree native to coastal eastern Australia. *Eucalyptus gunnii* (Verne erroneously wrote "eucalyptus gunei") is the Australian sugar-gum.

87. An order of mammals, including monkeys, apes, baboons, and lemurs, with four feet or hands having an opposable digit.

88. Marco Polo (c. 1254-1324) writes of the many uses for bamboo in *Il Milione* (c. 1290). Verne cites the book in *Famous Travels and Travelers* (IV, 3), speaking, however of Tibet rather than Tartary: Atravelers ... take such sticks and make a big fire of them, because when they burn with cracking noises, lions, bears, and other wild beasts run away in fright."

89. Macaco is the name applied to certain lemurs; a sapajou, a South American monkey of the genus *Cebus*, and more generally a tailed monkey, as distinct from apes, baboons, and gorillas. A guenon is any of about twenty species of African monkeys of the genus *Cercopithecus*, family Cercopithecidae. A saki is a South American monkey of the family Cebidae, of genus *Pithecia* or *Brachyurus*.

90.

The illustrations (pp. xxx, xxx, and xxx) erroneously show the orang-utan with a tail. Throughout the novel Verne makes jokes about silent and obedient servants being best, the orang-utan amongst them. In "Humbug," his racism goes further: "the Blacks ... must really curse the first of their number who was foolish enough to produce a sound; for it was from that day, so they maintain, that they became slaves, and were forced to work. According to them, monkeys are Blacks who are wise enough to keep silent, and thus avoid the heavy

exertions of slavery." ("Humbug," 36 — a passage excised by Michel Verne). The source must be an objectionable passage, probably invented by Hetzel in "his" *The Swiss Family Robinson*: AYou know what a Negro thought of a domesticated orang-utan, who had the same master as him. He regarded him as a Negro more cunning than the others and swore that, if he didn't talk, it was because he didn't want to ... 'so me not need to work." But Verne is also influenced by Rienzi, who writes of an orang-utan who served him at table, smoked, and generally resembled a mute servant (I, 28-29).

91. A kind of ape having a head like a dog; the dog-faced baboon.

92. Georges-Louis Leclerc, comte de Buffon (1707-88). His works include the widely read forty-four volumes of *Histoire naturelle* (1749-89) (Gallica) and a *Discours sur le style* (1753).

93. Jup is to Jupiter as Neb is to Nebuchadnezzar. Jupiter, or Jove for the Romans, was the ruler of the gods and the god of rain, thunder, and lightning; in French Jup is a homonym of "jupe" (skirt).

94. Verne's "rrhyomes" is a misprint in the first grand-octavo edition.

95. Verne's spelling, "onaggas," is highly unusual, probably by analogy with "couagga." An onager is a wild ass, especially the species *Equus onager* of central Asia. A quagga was a form of zebra from southern Africa exterminated in about 1873. Buffon did a famous engraving of one entitled "Le Kwagga ou couagga," although Verne may have taken the idea from Mayne-Reid's *Les Enfants des bois* (1865), translated by E. de La Bedollière (Gallica).

96. Pyroxyle is any explosive compound, such as guncotton, produced by treating vegetable fiber with nitric acid. It burns in air with a flash, though without smoke or report; but is violently explosive in a confined space. Cellulose is the essential part of the solid framework of plants, occurring to some extent in animal bodies.

97. Argalis are wild sheep that inhabit the high mountains and plateaux of Central Asia, including the long-haired subspecies the Marco Polo sheep.

98. "Abies" is Latin for "fir tree," sometimes also including the spruces.

99. Verne's French reads "spring-berr," but what is meant, given his paraphrase, is spruce beer, a fermented beverage made from the leaves and branches of the spruce. *Voyage de La Pérouse autour du monde* (Gallica) cites spruce beer as preventing scurvy.

100. The houbara, or *Chlamydotis undulata*, is a bustard found in north Africa and Asia.

101. The term "fendif" (cracked) seems to have entered written French through Verne's use here.

102. Presumably Martha's Vineyard, an island in southeast Massachusetts, at that time a whaling center.

103. Ernst (or in English Ernest) Dieffenbach (1811-55), German explorer, naturalist, author of *New Zealand, and its Native Population* (1841), and translator of Darwin's Voyage of the Beagle.

104. A mule-jenny, or mule, was a kind of spinning machine invented by Samuel Crompton (1753-1827). Verne's French text reads "self-acting" (in English) as a noun, perhaps mistakenly detached from "mule-jenny": R. A. Arnold, *Cotton Familiars* (1864), refers to "a minder and a creeler engaged in manufacturing with a self-acting mule" (32).

105. Verne wrote "Bennett" in *Captain Grant's Children* and "In the Year 2889," but "Benett" in *MI*; John (James Gordon) Bennett (Sr.) (1795-1872), Scottish-American founder and editor of the *New York Herald* (1835). The *Herald* expanded by writing lurid and scandalous pieces, became the best-selling paper from 1860, and, although known for its accurate reportage during the Civil War, was generally pro-South and anti-abolitionist.

106. Since the energy needed to separate the hydrogen and oxygen will be greater than that obtained by putting them back together, Smith's idea would be feasible only if "inexhaustible" is taken metaphorically and weight is an important factor, as on boats, trains, or aircraft.

107. Verne's "membra" (fitted), the preterite of "membrer," with strong sexual connotations, is rare in written French.

108. Containing the letters *v*, *e*, *r*, *n*, and *e*; Verne uses an Anglicized form of the theologian St. Bonaventure (c. 1217-74). Hetzel's printer in 1869 was called *Jules* Bonaventure.

109. Verne's term, "volateurs," is absent from the dictionaries and Gallica, although later adopted by Raymond Roussel.

110. The name presumably derives from the *Britannia* which crossed from Liverpool to Boston in 1840, explaining Verne's remark that it might be a (North) American ship. The Canadian Sir Samuel Cunard (1787-1865), referred to as the "British shipowner Cunard" in *Around the World* (ch. 1), was at the helm to inaugurate the first transatlantic steamship service. For the alert reader, the name refers back to *Captain Grant's Children*.

111. A slip for 19 October.

112. In fact ten or eleven days.

113. In reality November.

114. Yet five paragraphs earlier we read: ACyrus Smith and the reporter, too far away, could not hear them." Smith seems to transcend space and time.

115. The date recorded in *Captain Grant's Children* (I, 6) is 20 December 1864, the ten year discrepancy presumably being so that Ayrton can have time to repent before Glenarvan's return. Duncan I (1001-40) was king of Scotland (1034-40); in *Backwards to Britain* Verne describes a performance of *Macbeth*, including Macbeth's "murder of Duncan" (ch. 43). An explorer simply called "Duncan" is mentioned in *Five Weeks in a Balloon* (ch. 1).

In *Captain Grant's Children*, Lord Edward Glenarvan is "one of the sixteen Scottish peers who sit in the Upper House" of the British Parliament. Glenarvan is not an authentic name, but clearly derives from Lady Caroline Lamb's *Glenarvon* (1817). Its hero, Lord Glenarvon, is modeled closely on Byron, with whom the author had a scandalous love affair, describing him as "mad, bad, and dangerous to know." Glenarvan and Glenarvon are (in British English) homonyms of Glen Avon in Scotland; but Arvan is also a valley in Savoy.

116. An Irish convict, John (Sheedy) Mangles (1786/88-1835/42), was transported to New South Wales in 1824 (http://www.standard.net.au/~jwilliams/john1.htm).

117. Children of Captain Grant, whose name may be derived from the American general.

118. Dampier cites Cape Corrientes in his Voyages (1729) (I, 256).

119. The name is borrowed from Frederick Ayrton, *Mr. Ayrton on the Sources of the White Nile: Observations upon M. d'Abbadie's Account of his Discovery of the Sources of the White Nile ...* (c. 1847). Hetzel criticized the Ayrton episode as follows (22? September 1873 (*Corr.*, 205-06)): "This savagery lasts infinitely too long ... the best doctors, the physiologists like Béclard [Jules Béclard (1818-87), the influential author of *Traité élementaire de physiologie humaine* (1855)], tell me that total isolation, especially when it is aided by provisions, arms, and books ... could not explain his loss of faculties. No man re-becomes a monkey, because no man was ever one. If you had derived a very dramatic result form this animality, so be it, but no. It's more monotonous dull than interesting ... Béclard agrees that he can be supposed to have lost his speech but he will find it again ... quite quickly. He must not feel the need to absolutely continue his solitary existence, must rather fear it."

120. "Ben" means "mountain" in Gaelic; Ben Lomond is the centerpiece, and true hero, of *Backwards to Britain*.

121. This mock-editorial note refers readers forward to the note on p. xxx, which then refers them back to this one! The word "later" may also mean "when the readers are of an age to understand such adult things." While Verne is consciously and playfully deconstructing the textual conventions (especially

the interference of his editor), he eludes the problem of the many discordances of dates and other information between *MI* and *Twenty Thousand Leagues*, especially inconsistencies that serve no purpose. For instance, during Nemo's recital we are told that "during the night of the 6th of November 1866, three men were thrown upon his deck" (III, 16), namely one year before the date given in *Twenty Thousand Leagues* (I, 6). Why does Verne change the date when there is a discrepancy of twenty or thirty years between the Nemo dying from old age and the vigorous Nemo of the earlier novel?

122. Antoine César Becquerel (1788-1878), used electrolysis to isolate metals from their ores.

123. This is the only occasion where Verne uses kilometers in the main text. The speed of electricity is now known to be 300,000 kilometers per second.

124. It is not explained how the individual letters are transmitted by telegraph, rather than simply "on" and "off": such a transmission seems technologically in advance of its time.

125. Even though the term "the unconscious" ("l'inconscient") was not used before the 1890s, Verne demonstrates a clear awareness of the concept in his books. He was the first writer in the world to use the word "inconsciemment" (unconsciously). The first occurrences are in "round the World, in Passepartout's "unconsciously rocking his head from side to side" (ch. 4) and Fogg's final "day gained unconsciously" (ch. 37). In *MI*, "Almost unconsciously, they descended this ravine" appears, significantly, when the settlers are descending towards the crypt and the secret from the past. The term also occurs in *Mathias Sandorf* (1885), in the same paragraph as a reference to Jean-Martin Charcot (1825-93), the co-founder of modern neurology who taught Freud.

126. Verne seems to have invented the word "hiverneurs," which contains the letters *v*, *e*, *r*, *n*, and *e* in order.

127. In the chapter heading Verne writes "Grant Islet" (cf. Lake Grant) for what he normally calls "Safety Island."

128. Around the World in Eighty Days refers to an "Andrew Speedy, of Cardiff."

129. Bob Harvey is not mentioned in *Captain Grant's Children*, although there is a "Bob Learce."

130. In ch. 6, however, we read: "Ayrton therefore left on the 9th ... and, two hours later, the telegraph announced that he had found everything in order at the corral." If the convicts had already occupied the corral when Ayrton arrived, how could he send the signal? 131. A febrifuge is a medicine for fever; cinchona, the medicinal bark containing the alkaloid C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub> from which the drug quinine is obtained. The bark comes from the *Cinchona*, a genus of tropical evergreen trees and shrubs.

132. A bitter crystalline principle obtained from willow bark, much used medicinally.

133. In 1869, 14 February was a Sunday, but not in 1868.

134. Cassowaries are a genus of large running birds related to the ostrich, native to northern Australia and New Guinea. Grallatory means pertaining to the order Grallatores, which consists of long-legged wading birds, such as the crane, heron, etc.

135. The anniversary is in fact 24 March.

136. "féeriquement" (magically) is apparently invented by Verne, although adopted by the poet Stéphane Mallarmé in a letter of April 1886 to a Mr. Harrison in Rhodes.

137. ANemo" without a first name has the advantage of concealing any nationality; it is an allusion to many sources. First, Nemo (no one) is the Latin name Ulysses takes in the Odyssey, allowing him to use the pun "Nemo/No one is killing me" to fool the cyclops. Nemo is, secondly, the assumed name of the dead opium addict at the beginning of Dickens's Bleak House (1853). The word occurs, especially, in "Nemo me impune lacessit" (no one assails me with impunity), the motto of the Scottish Crown reproduced in the Edinburgh Coat of Arms, which Verne frequently saw during his 1859 visit; it is quoted in Poe's "The Cask of Amontillado" (1846). This derivation is in fact resoundingly confirmed by Verne's indicating Louis Enault as his primary source on Scotland (Backwards to Britain, ch. 1) in combination with Enault's citation of the motto in Angleterre, Ecosse, Irlande (1859) (ch. 2). There may also be echoes of "Nemo repente fuit turpissimus" (no man ever became very wicked all at once), of the "admirable" "floating and sweating seaweed" Nemostoma of Twenty Thousand *Leagues* (I, 20), or of the Lago di *Nem* i near Rome (cited by Byron in *Childe Har*old), ancient Lacus Nemorensis, in the crater of an extinct volcano drained by a two-mile tunnel.

The Nemo in the illustrations of *MI* is not recognizably the same as the Nemo of *Twenty Thousand Leagues*, drawn from Hetzel and Colonel Jean-Baptiste Charras (1810-65).

138. Analyses of Verne's sources on submarine navigation and of the origins of the name *Nautilus* appear in *Twenty Thousand Leagues*, trans. and ed. William Butcher (382-84 and 396-97).

139. Nemo is based on Gustave Flourens (1838-71), a French revolutionary

and close friend of Mrs. Karl and Miss Jenny Marx. Flourens fought in the Polish insurrection (1863) and Cretan uprising (1866), supported the Irish nationalists, lived in exile in London and Belgium, and wrote distinguished volumes like *Histoire de l'homme* (1863) and *Science de l'homme* (1865), as well as political works (1863, 1864). He was active in French politics from 1869 to 1871. Clear similarities exist with Nemo's scientific and revolutionary activities and his romantic rebellion. A vital clue is provided by *Paris in the Twentieth Century*, set in 1960, which describes its hero as "pass[ing] in front of the Sorbonne where M. Flourens was still giving his lectures with the greatest success, still keen, still young" (he occupied a chair at the Natural History Museum at twenty-five).

In *Twenty Thousand Leagues* Nemo was originally Polish, and his enemies Russian; but Hetzel vetoed this as he did not want to upset the Russian government. Verne protested in a series of letters: "suppose Nemo to be a *Pole*, and the ship sunk a *Russian* one, would there be the shadow of an objection to raise? No, a hundred times no! ... the first idea of the book, true, logical, complete: a Pole – Russia. But since we can not say it ... let's imagine it can be *that*" (29? April 1869; Corr., 103-04); "a Polish nobleman whose daughters have been raped, wife killed with an axe, father killed under the knout" (8 May 1869; Corr., 104); "But, to be frank, I regret my Pole, I had got used to him, we were good friends, and in addition it was more straightforward, more sincere" (Spring 1867?; Martin, 171). When Nemo says his "country, wife, children, parents — perished as I watched!" (II, 21), a European nation, most obviously Poland, is implied. It has been speculated that Nemo is Indian in *Twenty* Thousand Leagues, but there is precious little basis for such an idea. Verne himself wrote "Readers will suppose what they want, depending on their character" (11? June 1869; Corr., 113). For further information on Verne's repeated protests, see my Twenty Thousand Leagues, xvii and 437-8.

140. In his other works, Verne systematically undermines the difference between fact and fiction, perhaps to add plausibility to his own inventions. One way he does this is to have his characters cite previous fiction as though it were true. This is taken a stage further when the works cited are by Verne himself; and yet another when the fictive characters meet characters from previous works, as in the settlers' encounters with Ayrton from *Captain Grant's Children* and Nemo from *Twenty Thousand Leagues*.

141. The origin of "Dakkar" must be the authentic Indian surname Dakkar, either the Prince's surname or first name. The name was probably introduced by Hetzel. Its more common form is Thakkar, and there is an English word

"thakur" or "thakoor," meaning "Lord," used as a title or term of respect.

Bundelkhand (Verne erroneously wrote "Bundelkund") in central India, now part of Madhya Pradesh state, is where Fogg and Passepartout rescue Princess Aouda in "round the World. It was reported that Verne inserted the Aouda episode after his wife flirted with an Indian prince while the Vernes were staying at Piriac-sur-mer, near Nantes; perhaps an important source for Dakkar. Princess Aouda and Prince Dakkar do share unique characteristics. Apart from *The Tribulations of a Chinese in China* they are the only non-European heroes in Verne's works, both speak English perfectly, both appear in the early 1870s, and both rebel against the prevailing ideology and their unprincipled compatriots.

142. Tippo Sahib (or Tippo-Saïb, Tipu Sahib, or Tipu Sultan – 1749/50-99) is thus both the uncle and the model for Dakkar. Verne wrote in Famous Travels and Travelers (I, 1): "Thanks to the astute, disloyal, and cynical policy of the British governors Clive and Hastings ... the [East India] Company possessed ... an immense territory. Only the sultan of Mysore, Tippoo-Saëb [sic], fought with energy against the British, but he could not win against the coalition that Colonel Wellesley was able to unite against him." Tippo was forced to give up half his dominions and pay heavy indemnities. He did not cede; but the British marched on his capital, Seringapatam, in 1799, and Tippo fell defending the city, although apparently he could have saved his life. Additional resonance is given by the context of French ambitions, especially Napoleon's conquest of Egypt (1798-99), designed to acquire a base for an attack on British India. Tippo had sent ambassadors to Louis XVI; and Napoleon replied to the Imam of Muscat on 25 January 1799: AI write you this letter to let you know what you have probably already learned, the arrival of the French army in Egypt. / ... I beg you also to forward this letter to Tippo-Sahib on the first occasion which will arise for India [*sic*]" (Gallica).

143. In *Twenty Thousand Leagues*, Nemo's bullets are "small glass capsules, invented by the Austrian chemist Leniebroek" (I, 16).

144. In MS2 this note is in Verne's hand, although the word "several" is missing. The words A(Editor's note)," again by Verne, are appended in smaller writing.

145. Death from old age or even illness is extremely rare in Verne's works. Death is usually from suicide, especially in the early works, or as a punishment to evil-doers, like the convicts' death from Nemo's torpedo or electric rifle.

146. In Latin "Mobilis" means "nimble, lively; shifting, changeable; inconstant, or fickle," and thus "MOBILIS IN MOBILI" can be translated as "Mobile in the Mobile Element" or "Changing within Change." In *Twenty Thousand Leagues*, the successive editions show repeated corrections of the six occurrences of "Mobili" to "Mobile" (although the monogram itself continued to read "Mobili" in the 1871 edition). So it is surprising to see "MOBILI" re-emerging in *MI*, even if both the ablative noun "Mobile" and the ablative adjective "Mobili" are correct.

147. Verne's "rinfordzando" is a mis-spelling for "rinforzando," in music a sudden stress or crescendo made on a short phrase; also used figuratively. The word is much used by Balzac, for instance in *Eugénie Grandet* (1833) or *Le Père Goriot* (1835).

148. Porphyritic rocks are very hard ones composed of crystals of white or red feldspar embedded in a red ground-mass; or containing distinct crystals or crystalline particles in a compact ground-mass; or, in literature, a fine purple stone taking a high polish, such as red granite and marble.

149. "[23 January 1874] My first intention was also to have Nemo warn the settlers of the danger their island was in. If I didn't do that, it was because I wished to make the *Nautilus* Nemo's coffin, and because in case of an impending danger, it would not be understood why the *Nautilus* was made to disappear, as it was a vessel perfectly ready and available [for their escape]" (*Corr.*, 231). Since Nemo does warn Smith, Verne must have changed his mind, presumably having had the idea of blocking the *Nautilus* permanently in the cavern by changing the shape of the entrance.

150. In *Captain Grant's Children*, Major MacNabbs belongs to the Black Watch and is a cousin of Captain Grant. Major John MacNabbs, fifteenth clan chief, was in the British army but was taken prisoner at Prestonpans in the 1745 rebellion. Archibald MacNabbs, seventeenth chief, fled his debts, and obtained a grant of 81,000 acres in the Ottawa River Valley. Five hundred clan members followed, but the settlement was unsuccessful, and he died in 1860 in France.