CHAPTER XI.

IMAGINATION AND REALITY.

"Have you ever seen the moon?" a professor asked one of his pupils ironically.

"No, sir," answered the pupil more ironically still, "but I have heard it spoken of."

In one sense the jocose answer of the pupil might have been made by the immense majority of sublunary beings. How many people there are who have heard the moon spoken of and have never seen it--at least through a telescope! How many even have never examined the map of their satellite!

Looking at a comprehensive selenographic map, one peculiarity strikes us at once. In contrast to the geographical arrangements of the earth and Mars, the continents occupy the more southern hemisphere of the lunar globe. These continents have not such clear and regular boundary-lines as those of South America, Africa, and the Indian Peninsula. Their angular, capricious, and deeply-indented coasts are rich in gulfs and peninsulas. They recall the confusion in the islands of the Sound, where the earth is excessively cut up. If navigation has ever existed upon the surface of the moon it must have been exceedingly difficult and dangerous, and the Selenite mariners and hydrographers were greatly to

be pitied, the former when they came upon these perilous coasts, the latter when they were marine surveying on the stormy banks.

It may also be noticed that upon the lunar spheroid the South Pole is much more continental than the North Pole. On the latter there is only a slight strip of land capping it, separated from the other continents by vast seas. (When the word "seas" is used the vast plains probably covered by the sea formerly must be understood.) On the south the land covers nearly the whole hemisphere. It is, therefore, possible that the Selenites have already planted their flag on one of their poles, whilst Franklin, Ross, Kane, Dumont d'Urville, and Lambert have been unable to reach this unknown point on the terrestrial globe.

Islands are numerous on the surface of the moon. They are almost all oblong or circular, as though traced with a compass, and seem to form a vast archipelago, like that charming group lying between Greece and Asia Minor which mythology formerly animated with its most graceful legends. Involuntarily the names of Naxos, Tenedos, Milo, and Carpathos come into the mind, and you seek the ship of Ulysses or the "clipper" of the Argonauts. That was what it appeared to Michel Ardan; it was a Grecian Archipelago that he saw on the map. In the eyes of his less imaginative companions the aspect of these shores recalled rather the cut-up lands of New Brunswick and Nova Scotia; and where the Frenchman looked for traces of the heroes of fable, these Americans were noting favourable points for the establishment of mercantile houses in the interest of lunar commerce and industry.

Some remarks on the orographical disposition of the moon must conclude the description of its continents, chains of mountains, isolated mountains, amphitheatres, and watercourses. The moon is like an immense Switzerland--a continual Norway, where Plutonic influence has done everything. This surface, so profoundly rugged, is the result of the successive contractions of the crust while the orb was being formed. The lunar disc is propitious for the study of great geological phenomena. According to the remarks of some astronomers, its surface, although more ancient than the surface of the earth, has remained newer. There there is no water to deteriorate the primitive relief, the continuous action of which produces a sort of general levelling. No air, the decomposing influence of which modifies orographical profiles. There Pluto's work, unaltered by Neptune's, is in all its native purity. It is the earth as she was before tides and currents covered her with layers of soil.

After having wandered over these vast continents the eye is attracted by still vaster seas. Not only does their formation, situation, and aspect recall the terrestrial oceans, but, as upon earth, these seas occupy the largest part of the globe. And yet these are not liquid tracts, but plains, the nature of which the travellers hoped soon to determine.

Astronomers, it must be owned, have decorated these pretended seas with at least odd names which science has respected at present. Michel Ardan was right when he compared this map to a "map of tenderness," drawn up by Scudery or Cyrano de Bergerac.

"Only," added he, "it is no longer the map of sentiment like that of the 18th century; it is the map of life, clearly divided into two parts, the one feminine, the other masculine. To the women, the right hemisphere; to the men, the left!"

When he spoke thus Michel made his prosaic companions shrug their shoulders. Barbicane and Nicholl looked at the lunar map from another point of view to that of their imaginative friend. However, their imaginative friend had some reason on his side. Judge if he had not.

In the left hemisphere stretches the "Sea of Clouds," where human reason is so often drowned. Not far off appears the "Sea of Rains," fed by all the worries of existence. Near lies the "Sea of Tempests," where man struggles incessantly against his too-often victorious passions. Then, exhausted by deceptions, treasons, infidelities, and all the procession of terrestrial miseries, what does he find at the end of his career? The vast "Sea of Humours," scarcely softened by some drops from the waters of the "Gulf of Dew!" Clouds, rain, tempests, humours, does the life of man contain aught but these? and is it not summed up in these four words?

The right-hand hemisphere dedicated to "the women" contains smaller seas, the significant names of which agree with every incident of feminine existence. There is the "Sea of Serenity," over which bends the young maiden, and the "Lake of Dreams," which reflects her back a happy

future. The "Sea of Nectar," with its waves of tenderness and breezes of love! The "Sea of Fecundity," the "Sea of Crises," and the "Sea of Vapours," the dimensions of which are, perhaps, too restricted, and lastly, that vast "Sea of Tranquillity" where all false passions, all useless dreams, all unassuaged desires are absorbed, and the waves of which flow peacefully into the "Lake of Death!"

What a strange succession of names! What a singular division of these two hemispheres of the moon, united to one another like man and woman, and forming a sphere of life, carried through space. And was not the imaginative Michel right in thus interpreting the fancies of the old astronomers?

But whilst his imagination thus ran riot on the "seas," his grave companions were looking at things more geographically. They were learning this new world by heart. They were measuring its angles and diameters.

To Barbicane and Nicholl the "Sea of Clouds" was an immense depression of ground, with circular mountains scattered about on it; covering a great part of the western side of the southern hemisphere, it covered 184,800 square leagues, and its centre was in south latitude 15°, and west longitude 20°. The Ocean of Tempests, Oceanus Procellarum, the largest plain on the lunar disc, covered a surface of 328,300 square leagues, its centre being in north latitude 10°, and east longitude 45°. From its bosom emerge the admirable shining mountains of Kepler and

Aristarchus.

More to the north, and separated from the Sea of Clouds by high chains of mountains, extends the Sea of Rains, Mare Imbrium, having its central point in north latitude 35° and east longitude 20°; it is of a nearly circular form, and covers a space of 193,000 leagues. Not far distant the Sea of Humours, Mare Humorum, a little basin of 44,200 square leagues only, was situated in south latitude 25°, and east longitude 40°. Lastly, three gulfs lie on the coast of this hemisphere--the Torrid Gulf, the Gulf of Dew, and the Gulf of Iris, little plains inclosed by high chains of mountains.

The "Feminine" hemisphere, naturally more capricious, was distinguished by smaller and more numerous seas. These were, towards the north, the Mare Frigoris, in north latitude 55° and longitude 0°, with 76,000 square leagues of surface, which joined the Lake of Death and Lake of Dreams; the Sea of Serenity, Mare Serenitatis, by north latitude 25° and west longitude 20°, comprising a surface of 80,000 square leagues; the Sea of Crises, Mare Crisium, round and very compact, in north latitude 17° and west longitude 55°, a surface of 40,000 square leagues, a veritable Caspian buried in a girdle of mountains. Then on the equator, in north latitude 5° and west longitude 25°, appeared the Sea of Tranquillity, Mare Tranquillitatis, occupying 121,509 square leagues of surface; this sea communicated on the south with the Sea of Nectar, Mare Nectaris, an extent of 28,800 square leagues, in south latitude 15° and west longitude 35°, and on the east with the Sea of

Fecundity, Mare Fecunditatis, the vastest in this hemisphere, occupying 219,300 square leagues, in south latitude 3° and west longitude 50°. Lastly, quite to the north and quite to the south lie two more seas, the Sea of Humboldt, Mare Humboldtianum, with a surface of 6,500 square leagues, and the Southern Sea, Mare Australe, with a surface of 26,000.

In the centre of the lunar disc, across the equator and on the zero meridian, lies the centre gulf, Sinus Medii, a sort of hyphen between the two hemispheres.

Thus appeared to the eyes of Nicholl and Barbicane the surface always visible of the earth's satellite. When they added up these different figures they found that the surface of this hemisphere measured 4,738,160 square leagues, 3,317,600 of which go for volcanoes, chains of mountains, amphitheatres, islands--in a word, all that seems to form the solid portion of the globe--and 1,410,400 leagues for the seas, lake, marshes, and all that seems to form the liquid portion, all of which was perfectly indifferent to the worthy Michel.

It will be noticed that this hemisphere is thirteen and a-half times smaller than the terrestrial hemisphere. And yet upon it selenographers have already counted 50,000 craters. It is a rugged surface worthy of the unpoetical qualification of "green cheese" which the English have given it.

When Barbicane pronounced this disobliging name Michel Ardan gave a bound.

"That is how the Anglo-Saxons of the 19th century treat the beautiful Diana, the blonde Phoebe, the amiable Isis, the charming Astarte, the Queen of Night, the daughter of Latona and Jupiter, the younger sister of the radiant Apollo!"