the apparent amount of food necessary for the support of large quadrupeds are much exaggerated: it should have been remembered that the camel, an animal of no mean bulk, has always been considered as the emblem of the desert.

The belief that where large quadrupeds exist the vegetation must necessarily be luxuriant is the more remarkable because the converse is far from true. Mr. Burchell observed to me that, when entering Brazil, nothing struck him more forcibly than the splendor of the South American vegetation contrasted with that of South Africa, together with the absence of all large quadrupeds. In his Travels,[1] he has suggested that the comparison of the respective weights (if there were sufficient data) of an equal number of the largest herbivorous quadrupeds of each country would be extremely curious. If we take on the one side the elephant,[2] hippopotamus, giraffe, bos caffer, elan, certainly three, and probably five, species of rhinoceros; and on the American side two tapirs, the guanaco, three deer, the vicuna, peccari, capybara (after which we must choose from the monkeys to complete the number), and then place these two groups alongside each other, it is not easy to conceive ranks more disproportionate in size. After the above facts, we are compelled to conclude, against anterior probability,[3]

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[1] Travels in the Interior of South Africa, vol. ii. p. 207.

[2] The elephant which was killed at Exeter Change was estimated (being partly weighed) at five tons and a half. The elephant actress, as I was informed, weighed one ton less; so that we may take five as the average of a full-grown elephant. I was told at the Surrey Gardens that a hippopotamus which was sent to England cut up into pieces was estimated at three tons and a half; we will call it three. From these premises we may give three tons and a half to each of the five rhinoceroses; perhaps a ton to the giraffe, and half to the bos caffer as well as to the elan (a large ox weighs from 1,200 to 1,500 pounds). This will give an average (from the above estimates) of 2·7 of a ton for the ten largest herbivorous animals of southern Africa. In South America, allowing 1,200 pounds for the two tapirs together, 550 for the guanaco and vicuna, 500 for three deer, 300 for the capybara, peccari, and a monkey, we shall have an average of 250 pounds, which I believe is overstating the result. The ratio will therefore be as 6,048 to 250, or 24 to 1, for the ten largest animals from the two continents.

[3] If we suppose the case of the discovery of a skeleton of a Greenland whale in a fossil state, not a single cetaceous animal being known to exist, what naturalist would have ventured conjecture on the possibility of a carcass so gigantic being supported on the minute crustacea and mollusca living in the frozen seas of the extreme North?