

the paper was then instantly torn off with fury, and, at the same moment, every bird in the long row began struggling and flapping its wings. Under the same circumstances, it would have been quite impossible to have deceived a dog. The evidence in favor of and against the acute smelling powers of carrion-vultures is singularly balanced. Professor Owen has demonstrated that the olfactory nerves of the turkey-buzzard (*Cathartes aura*) are highly developed; and on the evening when Mr. Owen's paper was read at the Zoological Society, it was mentioned by a gentleman that he had seen the carrion-hawks in the West Indies on two occasions collect on the roof of a house, when a corpse had become offensive from not having been buried: in this case, the intelligence could hardly have been acquired by sight. On the other hand, besides the experiments of Audubon and that one by myself, Mr. Bachman has tried in the United States many varied plans, showing that neither the turkey-buzzard (the species dissected by Professor Owen) nor the gallinazo find their food by smell. He covered portions of highly offensive offal with a thin canvas cloth and strewed pieces of meat on it; these the carrion-vultures ate up, and then remained quietly standing, with their beaks within an eighth of an inch of the putrid mass, without discovering it. A small rent was made in the canvas, and the offal was immediately discovered; the canvas was replaced by a fresh piece, and meat again put on it, and was again devoured by the vultures without their discovering the hidden mass on which they were trampling. These facts are attested by the signatures of six gentlemen, besides that of Mr. Bachman.¹

Often when lying down to rest on the open plains, on looking upward, I have seen carrion-hawks sailing through the air at a great height. Where the country is level I do not believe a space of the heavens, of more than fifteen degrees above the horizon, is commonly viewed with any attention by a person either walking or on horseback. If such

¹ Loudon's Magazine of Nat. Hist., vol. vii.