

XIV. *An Account of Persons who could not distinguish Colours.* By Mr. Joseph Huddart, in a Letter to the Rev. Joseph Priestley, LL.D. F. R. S.

S I R,

London,  
Jan. 15, 1777.

Read Feb. 13,  
1777.

WHEN I had the pleasure of waiting on you last winter, I had hopes before now of giving you a more perfect account of the peculiarity of vision which I then mentioned to you, in a person of my acquaintance in the North: however, if I give you now the best I am able, I persuade myself you will pardon the delay.

I promised to procure you a written account from the person himself, but this I was unfortunately disappointed in, by his dying suddenly of a pleurisy a short time after my return to the country.

You will recollect I told you that this person lived at Mary-port in Cumberland, near which place, *viz.* at Altonby, I myself live, and having known him about ten years have had frequent opportunities of conversing with him.

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His name was HARRIS, by trade a shoe-maker. I had often heard from others that he could discern the form and magnitude of all objects very distinctly, but could not distinguish colours. This report having excited my curiosity, I conversed with him frequently on the subject. The account he gave was this: That he had reason to believe other persons saw something in objects which he could not see; that their language seemed to mark qualities with confidence and precision, which he could only guess at with hesitation, and frequently with error. His first suspicion of this arose when he was about four years old. Having by accident found in the street a child's stocking, he carried it to a neighbouring house to inquire for the owner: he observed the people called it a *red* stocking, though he did not understand why they gave it that denomination, as he himself thought it completely described by being called *a* stocking. The circumstance, however, remained in his memory, and together with subsequent observations led him to the knowledge of his defect. As the idea of colours is among the first that enters the mind, it may perhaps seem extraordinary that he did not observe his want of it still earlier. This, however, may in some measure be accounted for from the circumstance of his family being quakers, among whom

whom a general uniformity of colours is known to prevail.

He observed also that, when young, other children could discern cherries on a tree by some pretended difference of colour, though he could only distinguish them from the leaves by their difference of size and shape. He observed also, that by means of this difference of colour they could see the cherries at a greater distance than he could, though he could see other objects at as great a distance as they; that is, where the sight was not assisted by the colour. Large objects he could see as well as other persons; and even the smaller ones if they were not enveloped in other things, as in the case of cherries among the leaves.

I believe he could never do more than guess the name of any colour; yet he could distinguish white from black, or black from any light or bright colour. Dove or straw-colour he called white, and different colours he frequently called by the same name: yet he could discern a difference between them when placed together. In general, colours of an equal degree of brightness, however they might otherwise differ, he frequently confounded together. Yet a striped ribbon he could distinguish from a plain one; but he could not tell what the colours were with any tolerable exactness. Dark colours

in general he often mistook for black, but never imagined white to be a dark colour, nor a dark to be a white colour.

He was an intelligent man, and very desirous of understanding the nature of light and colours, for which end he had attended a course of lectures in natural philosophy.

He had two brothers in the same circumstances as to sight; and two other brothers and sisters who, as well as their parents, had nothing of this defect.

One of the first mentioned brothers, who is now living, is master of a trading vessel belonging to Maryport. I met with him in December 1776, at Dublin, and took the opportunity of conversing with him. I wished to try his capacity to distinguish the colours in a prism, but not having one by me, I asked him, Whether he had ever seen a rain-bow? He replied, He had often, and could distinguish the different colours; meaning only, that it was composed of different colours, for he could not tell what they were.

I then procured and shewed him a piece of ribbon: he immediately, without any difficulty, pronounced it a striped and not a plain ribbon. He then attempted to name the different stripes: the several stripes of white he uniformly, and without hesitation, called white: the four black stripes he was deceived in, for three of them

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he thought brown, though they were exactly of the same shade with the other, which he properly called black. He spoke, however, with diffidence as to all those stripes; and it must be owned, the black was not very distinct: the light green he called yellow; but he was not very positive: he said, "I think this is what you call yellow." The middle stripe, which had a slight tinge of red, he called a sort of blue. But he was most of all deceived by the orange colour; of this he spoke very confidently, saying, "This is the colour of grass; this is green." I also shewed him a great variety of ribbons, the colour of which he sometimes named rightly, and sometimes as differently as possible from the true colours.

I asked him, Whether he imagined it possible for all the various colours he saw, to be mere difference of light and shade; whether he thought they could be various degrees between white and black; and that all colours could be composed of these two mixtures only? With some hesitation he replied, No, he did imagine there was some other difference.

I could not conveniently procure from this person an account in writing; but I have given his own words, having set them down in writing immediately. Besides, as this conversation happened only the 10th of last month

months, it is still fresh in my memory. I have endeavoured to give a faithful account of this matter, and not to render it more wonderful than it really is.

It is proper to add, that the experiment of the striped ribbon was made in the day-time, and in a good light.

I am, SIR, &c.

