

External Perception in Dogs

THE view to which Mr. Wallace gives expression in your last number had occurred also to me, and I should like, with your leave, to offer a remark or two in support of it.

That a dog shut up in a basket may through smell acquire a series of impressions so definitely marked as to be able therewith to find its way back to the place it was taken from, becomes less improbable if we think what is the part that must be played by smell in its ordinary objective experience. Our external world (whether as actually perceived or imaginatively represented) may be called a world of sights and touches, blended with and modifying each other in the most intimate way. These mutually involved sights and touches, in our consciousness, are run out into the form of a *continuum* in space (how or why it is not to

the present purpose to inquire), while all other sensations, as of hearing, smell, and taste, come before us only discontinuously and intermittently, not being had from all things nor always from the same things. But in a dog's experience touch cannot possibly co-operate with sight as it regularly does in ours. The organ of effective touch in man—touch that gets associated with vision—is in the last resort the hand, combining mobility and sensitiveness in the highest degree; and the dog has no hand. Its mobile limbs are not sensitive at the extremities, and, though it has sensitive lips, these, having no such active mobility as the human hand has, are extremely limited in the scope of their apprehension. Its touch being thus defective, what is there then in the dog to play second to sight, which as leader needs support, were it only because there is not always light to see with? Smell, I cannot but think, seeing that, while the organ is incontestably acute, it has the great advantage over the tactile surface of the lips, of receiving impressions from things already at a distance. If we only suppose—what the facts make very likely—that the dog's smell is acute enough to have some sensation from all bodies without exception, nothing more is wanting to enable a psychologist to understand that the dog's world may be in the main a world of sights and smells continuous in space. In that case a dog conveyed in a basket might by smell alone find its way back pretty much as a man blindfolded finds his way by touch alone.

To argue properly so difficult a question is impossible in a short letter, and I must be content now, for reasons like those indicated rather than stated above, with giving my adhesion to Mr. Wallace's view—so far at least as dogs are concerned, and to the extent that in smell we have a source of explanation for the phenomena which has never been sufficiently considered. That the explanation covers all the facts related even about dogs is more than I would assert; and whether it is equally serviceable for other animals like cats and horses, concerning which not less wonderful stories are told, is not so clear. Cats, however, seem to have very acute smell. What is the truth about the smell of horses?

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