

Travels of a neuro-romantic

Chris McManus

The Island of the Colour-blind. By Oliver Sacks. Picador/Knopf: 1996. Pp. 345. £16.99, \$24.

ISLANDS are romantic and mysterious. Sacks identifies many of the obvious sources for such feelings, including *The Island of Dr Moreau*, Darwin and Wallace, Robert Louis Stevenson, Gauguin, the statues of Easter Island, the mutiny on the *Bounty*, and *Lord of the Flies*. Like most of us, Sacks could not resist the temptation of what he describes as "impulsive and unsystematic trips" to the Pacific. Not that unsystematic, though, for he made a veritable Cook's tour for neurologists.

He visited Pingelap and Pohnpei in Micronesia where *maskun*, an autosomal recessive colour-blindness (achromatopsia), affects eight per cent of people. He also went to Guam, where for 40 years the cause of the enigmatic *lytico-bodig* — a neurodegenerative disorder reminiscent of Parkinson's, motor neuron

disease and Alzheimer's — has defied identification; and it must be said that the problem is hardly elucidated further in Sacks's book.

His stated motivations for his travels are straightforward: "not part of any programme or agenda, not intended to prove or disprove any thesis, but simply to observe". Simply to observe? If we believe Popper, then that simply cannot be done. "I went," writes Sacks, "as a neurologist, or neuroanthropologist, intent on seeing how individuals and communities responded to unusual endemic conditions." One imagines a Malinowski or Pitt-Rivers, braving heat and disease, trekking through unmarked terrain and learning languages never written down. But this is actually "from the major television series", and we are disabused of any remaining romance on reading how the party arrived on Pingelap equipped not only with medical and film equipment but even with bottled water.

How successful is *The Island of the Colour-blind* as 'neuroanthropology'? Not very. With its rambling, over-romanticized style (one is tempted to say 'highly coloured'), it consists mostly of vast digressions, frequently concerning Sacks's hobby since childhood of botany, all supple-

mented by lengthy endnotes comprising a quarter of the book.

If the book has a core it has to be the colour-blindness of its title. The topic has a venerable history. In his *Remarks on Colour*, Wittgenstein asked us to "Imagine a tribe of colour-blind people, and there could easily be one". Pingelap and Pohnpei are as close as one will get, with congenital achromatopsia far more common than the typical one in 30,000. A devastating typhoon in 1775 left Pohnpei with just 20 people. The population quintupled in the next decades, and in 1820 the first of two colour-blind children was born to the *Nahnmwarki*, the leader of the island. Now eight per cent of the population is affected, and half the population carries the gene.

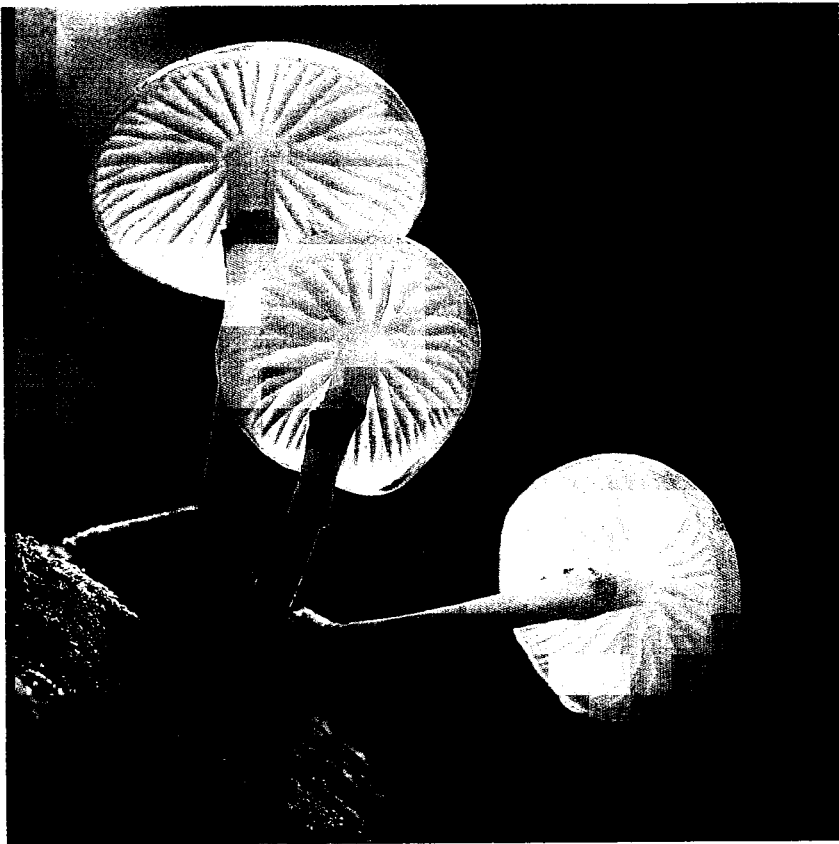
Achromatopsia is perhaps a misleading name. An absence of retinal cones, responsible for colour vision in daylight, restricts vision to that carried out by rods, which work properly only for scotopic, night-time, vision. This means that normal daylight seems blindingly intense. Absent foveal cones also disrupt fixation and produce severe nystagmus — an involuntary movement of the eye. Colour-blindness in itself is in some ways the least of the problems of those affected. It is nonetheless psychologically and philosophically the most interesting.

Needless to say, achromatopsics have no concept of colour and no real understanding of it, although they recognize that 'normals' use colour words that are learned for use metaphorically. Does Sacks go much beyond this? Not really. Ultimately he is a neuro-romantic, toying with ideas of compensation and enhanced abilities, feeling sure that achromatopsics must surely have hyperacuity for form, texture or whatever, only on the basis of anecdotal evidence. He even suggests they have "very acute auditory and tactual memories" — which would be a bit like a person with one leg necessarily having a better sense of smell.

Mysteriously, Sacks is surprised that achromatopsics can see stars at night as their "acuity is a tenth of normal". Photopic acuity, yes, but their scotopic acuity should be unaffected, and it seems to be. Sometimes a little theory is useful.

His analysis of the sociocultural implications comes to little, and one realizes he is more neurologist than anthropologist. Eventually he asks: "Was [this] an island of the colour-blind after all?" 'No' has to be the answer. Most of the population had normal vision and rapidly recognized and sometimes ostracized those who did not. Wittgenstein would not have wanted to visit Pohnpei after all. □

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THE Roman poet Horace wrote: "Meadow mushrooms are in kind the best; it is ill trusting any of the rest." This is still sound advice for any fungi fancier unable to identify species found in the wild. *The Wild Mushroom* by George McCarthy comments on which species are good to eat but it is no identification guide — rather, a photographic celebration of the beauty of the subject. Fountain, £24.95.